

ABSTRACTS OF THE 8TH  
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# Abstracts of the 8th International Academic Medical Congress of Maranhão (VIII COIMAMA) 2023

## 01. THE ADMINISTRATION OF MONOCLONAL ANTIBODIES IN THE TREATMENT OF VITREORETINAL DISEASES

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**INTRODUCTION:** Diseases that affect the vitreous, retina and choroid are common causes for the development of irreversible blindness throughout the world. Currently, the administration of vascular endothelial growth factor (VEGF) inhibitors, called monoclonal antibodies, directly into the vitreous cavity, has emerged as an important therapeutic modality in ophthalmology, especially in the treatment of retinal diseases, such as age-related macular degeneration. (AMD). In this context, it is observed that such pharmacotherapy has revolutionized the treatment of vitreoretinal diseases, as it is easily surgically accessible and has low systemic absorption, however, there are still serious risks inherent to the procedure and its toxicity. **METHODS:** Systematic review, based on the use of scientific articles on ocular pharmacology, especially the intravitreal application of monoclonal antibodies for the treatment of vitreoretinal diseases. The chosen articles were published in Portuguese and English between 2010 and 2023. **RESULTS:** Studies on the pharmacokinetics of the monoclonal antibody bevacizumab, an inhibitor of VEGF subtype A receptors, showed that this drug is capable of reducing neovascularization and decreasing vascular permeability in patients with AMD and diabetic retinopathy, and can also be applied in cases of occlusions retinal vascular disease, corneal neovascularization, neovascular glaucoma and retinopathy of prematurity. Recently, prospective clinical trials of the monoclonal antibody ranibizumab, a recombinant human antibody fragment capable of inhibiting VEGF, also proved effective in stabilizing vision in approximately 95% of patients with subretinal neovascular membrane secondary to AMD during the first year of treatment. **CONCLUSION:** The use of monoclonal antibodies in ocular pharmacology for the treatment of diseases that affect the vitreous, retina and choroid shows excellent results and prognosis. However, during this type of treatment, multiple applications are necessary, with a consequent increase in the risk of serious complications, such as retinal detachment, vitreous hemorrhage or endophthalmitis. Furthermore, the short half-life of medications and patient discomfort during intravitreal injection are the main factors that favor low treatment adherence rates. Therefore, new studies are necessary to optimize the use of these drugs in the posterior segment of the eye.

## 02. ATHEROSCLEROSIS AS A RISK FACTOR IN ABDOMINAL AORTIC ANEURYSM SCREENING

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**INTRODUCTION:** When analyzing the most recent studies on Abdominal Aortic Aneurysm (AAA), it is possible to consider that this condition has a multifactorial characteristic, involving several epidemiological and pathophysiological aspects in its pathogenesis, with atherosclerosis being an important predisposing factor. This is because the atherosclerotic process has inflammatory responses at a cellular and molecular level, which are caused by alterations in the vascular endothelium and, consequently, can cause an abnormal expansion of the aorta - definition of aneurysm. The complications of AAA are related to the rupture of vessels and bleeding from the vascular wall, factors that have a very high mortality rate, despite advances in endovascular procedures, which combined with the fact that the majority of patients with AAA are asymptomatic makes the importance of controlling the etiological mechanisms of atherosclerosis to prevent cases of AAA even more evident. **METHODS:** A bibliographic survey was carried out in September 2023 in the SciELO and PubMed databases, using the following descriptors: "Abdominal Aortic Aneurysm", "Atherosclerosis", "Risk Factors". **RESULTS:** In Brazil, the incidence of AAA is 25 patients per 100,000 inhabitants per year. A study carried out with 102 patients with AAA showed that around 30.4% were asymptomatic, with the diagnosis being made through physical examination, which reveals the importance of a good history in screening for this disease. It is also believed that the majority of aortic aneurysms caused by atherosclerosis are in the abdominal aorta. Furthermore, some studies point to atherosclerosis as a common finding in aneurysmal tissue, however there are still disagreements and few studies that confirm the relationship. **CONCLUSION:** Therefore, there is a clear need for further studies on AAA, encouraging screening for this condition, its early diagnosis, as well as monitoring patients with atherosclerosis and other risk factors, taking into account the high number of asymptomatic cases and the high risk of infection and death associated with this clinical condition.

**03. THE DISCLOSURE OF ERRORS IN SURGICAL PROCEDURES FROM A BIOETHICAL PERSPECTIVE**

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**INTRODUCTION:** Surgery is constantly evolving, but errors can occur. Surgeons have an ethical responsibility to inform patients about possible complications and to be transparent in the event of errors, while maintaining empathy and considering the legal risks. With this in mind, the aim was to analyze and discuss the disclosure of errors in surgical procedures from a bioethical perspective.

**METHODS:** A narrative literature review was carried out using the LILACS, SciELO, BVS and MEDLINE databases, searching for articles with the health sciences descriptors "medical bioethics", "surgical errors", "health communication" and "health legislation". Selection criteria were established, resulting in 58 articles. After analyzing the abstracts, 12 articles were chosen for full analysis. **RESULTS:** From a bioethical perspective, the disclosure of medical errors is essential, based on the principles of beneficence, non-maleficence, autonomy and justice. The 1988 Federal Constitution reinforces patients' right to full information and CFM Resolution No. 2,217/2019 establishes guidelines for the disclosure of medical errors. It is crucial to maintain open and honest communication with patients, although an apology should be careful. The recommended process involves prior clarification, explanation after an error and correcting it when possible, involving risk management and meetings with relatives and patients, recording everything in the medical records. **CONCLUSION:** In an ethical approach, doctors should recognize and report surgical errors, considering their impact on the patient's health and respecting their autonomy. Disclosure of errors is vital to maintaining patient trust and is an ethical responsibility. In addition, it should be seen as part of a process of continuous improvement in surgery, aimed at patient safety. Medical ethics, the Code of Medical Ethics and bioethical principles should guide the disclosure of surgical errors, promoting ethical and safe medical care.

**04. THE EFFECTIVENESS OF PELVIC PHYSIOTHERAPY IN ADDRESSING CHRONIC PELVIC PAIN IN ENDOMETRIOSIS**

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**INTRODUCTION:** Endometriosis is a chronic, estrogen-dependent inflammation that causes pelvic pain and is characterized by the presence of ectopic tissue similar to the endometrium in locations such as the intestines and pelvic area. Symptoms include pain before and during menstruation and urinary dysfunctions. Treatment involves hormonal contraceptives but may lead to side effects. The multidisciplinary treatment of pelvic floor hypertonia includes pelvic floor physiotherapy, aiming to improve muscle relaxation, vaginal elasticity, address trigger points, and alleviate pain. **METHODS:** A systematic review was conducted using various databases. The search employed the phrases "endometriosis AND pelvic floor" and "endometriosis AND chronic pelvic pain". **RESULTS:** A pain-centered approach may be more advantageous than the detection of endometriosis lesions. Studies indicate that chronic pelvic pain leads to remodeling of the central nervous system over time, resulting in central sensitization and increased sensitivity to harmful stimuli. Endometriosis, with no known cure, requires a multiprofessional approach involving clinical, surgical, and complementary therapies to suppress disease foci and control pain. Pelvic physiotherapy can promote muscle relaxation in the pelvic floor. Optimizing pelvic floor muscle function can alleviate pain. Transcutaneous electrical nerve stimulation (TENS) is a non-invasive technique that has shown a significant reduction in pain in conditions of chronic pelvic pain. Sacral nerve stimulation (SNS) is a promising treatment option for refractory chronic pelvic pain. The combination of neuromodulation with hormonal treatment may be beneficial in managing deep endometriosis. The literature suggests that interdisciplinary approaches are successful in reducing pain, doctor visits, and emergency room visits. **CONCLUSION:** Pelvic floor physiotherapy can help improve pelvic pain, urinary function, muscle function, and overall sexual and general quality of life in patients with endometriosis and chronic pelvic pain. The combination of non-invasive techniques such as biofeedback and neuromodulation supports a comprehensive approach that can promote awareness, control, and muscular strengthening of the pelvic floor while modulating nerve activity.

05. **THE EXPANSION OF ZONOTIC SPOROTRICHOSIS IN BRAZIL: A LITERATURE REVIEW**

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**INTRODUCTION:** Zoonotic sporotrichosis is a mycosis that affects the cutaneous and subcutaneous tissue, causing ulcerative lesions on the skin of the infected person. This pathology is caused by fungi of the genus *Sporothrix*, with felines being the main vectors. The scientific relevance of this publication lies in the expansion of the incidence of zoonotic sporotrichosis in Brazil and in the need to increase the number of reliable bibliographies on this fungus. The aim of this study is to analyze the increase in the incidence of animal sporotrichosis in Brazil. **METHODS:** This is a literary review based on pre-existing epidemiological analyses, of a descriptive quantitative nature. The databases used were Scielo, PubMed, and Scopus, and the following descriptors were chosen: "Animal Sporotrichosis," "Brazil," and "Zoonoses." The inclusion criteria for the selection of articles include: articles published in Portuguese and English, available in full, and published and indexed in the mentioned databases between 2019 and 2023. **RESULTS:** During 1998–2017, Brazil experienced a geographical expansion of sporotrichosis. The Southeast region had the highest occurrence of human and animal cases, but in recent years, states in Northeast Brazil, especially Pernambuco, Alagoas, and Rio Grande do Norte, detected epizootic events in the feline population, with the consequent zoonotic transmission. By 2020, all Brazilian states, except Roraima, had reported cases of human sporotrichosis. The main reference center for the treatment of this mycotic disease, the Oswaldo Cruz Foundation (Fiocruz) in Rio de Janeiro, registered ≈5,000 human cases during 1998–2015. However, these numbers represent only cases diagnosed at one institution, and the actual incidence rates are likely higher. Between 1992 and 2015, in Brazil, sporotrichosis was registered in 782 hospitalizations, in all states (except Roraima), with a median duration of 8 days, median age of 43 years, and longer hospitalization among men, in addition to being reported in 65 deaths. **CONCLUSION:** Zoonotic sporotrichosis is a public health concern, and its incidence has been increasing over time in Brazil; however, this pathology does not receive the necessary importance. Therefore, it is of utmost importance to include it in the list of nationally compulsory notification diseases, as well as to expand surveillance and control measures throughout the country.

06. **THE IMPORTANCE OF AAST CLASSIFICATION IN THE MANAGEMENT OF HEPATIC TRAUMA: A REVIEW ARTICLE**

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**INTRODUCTION:** The liver, due to its robust anatomy, is the abdominal organ most commonly affected in traumas. Injuries are classified by imaging criteria, with findings from computed tomography (CT), surgical criteria such as capsular hematoma area and hepatic laceration, and by criteria from anatomopathological analysis. Such data allows for the classification of the injury according to the American Association for the Surgery of Trauma (AAST) method, a standardization tool in trauma care. The aim of this study is to discuss the importance of AAST classification in the management of hepatic trauma. **METHODS:** This is a narrative review regarding the use of AAST classification in the management of hepatic trauma. Google Scholar and PubMed/Medline databases were used to search for articles, selecting national and international studies published between 2017 and 2023. **RESULTS:** A total of 5477 articles were identified, of which 9 were selected for the study. According to the literature, AAST classification is an effective method due to its ease of use and standardization. Its association with other techniques, such as angiography and systematic computed tomography, allows for more precise management of the traumatized patient, with a multifactorial approach being essential. **CONCLUSION:** A correlation was shown between the AAST scale and the efficacy of treatment choice for hepatic trauma, demonstrating its importance in the treatment of traumatized patients. Therefore, the importance of conducting studies like this to ratify and determine how hepatic trauma management by AAST classification should be conducted and treated is highlighted.

07. **THE IMPORTANCE OF THE CHA HOME VISIT TO POSTPARTUM WOMEN**Ana Karlla dos Santos Sousa Bezerra<sup>1</sup>, Pamella Maria Ferreira Catanhade<sup>1</sup>.<sup>1</sup> Universidade Federal do Maranhão

**INTRODUCTION:** The home visit (HV) is a way of establishing a good bond with the patient, understanding their needs and peculiarities. Thus, the puerperium, the period of 40 days after childbirth, is a time when the HV has the function of guaranteeing individualized access to both the mother and the newborn, and instructing the puerperal woman on breastfeeding, detecting and monitoring postpartum depression, as well as reducing maternal and neonatal mortality. In this context, the community health agent (CHA), a community health professional who acts as a liaison with the Basic Health Unit, is one of the professionals responsible for HV, safeguarding access to health for mothers and newborns. **METHODS:** This is a literature review, in which we searched the Google Scholar and PubMed portals, using as eligibility criteria original articles published from 2019 onwards, without language restriction, and which specifically presented the topic. The descriptors used were: "CHA"; "women's health"; "home visit". **RESULTS:** HV by CHAs to postpartum women has proven to be an effective strategy for promoting women's health and allows them to assess their physical and emotional health, promote breastfeeding by helping them to start and maintain breastfeeding, provide guidance on caring for the baby, detect and refer possible cases of domestic violence and promote the bond between mother and baby. Some studies have shown that HV by CHAs can contribute to reducing maternal and infant mortality, improving the mental health of postpartum women, increasing adherence to breastfeeding and reducing domestic violence. Therefore, HV contributes to the identification and prevention of domestic violence. **CONCLUSION:** Thus, HV by CHAs is an effective strategy for promoting women's health in the puerperium, as it is carried out by a professional trained to provide guidance and support, contributing to the physical and emotional recovery of puerperal women.

08. **THE IMPORTANCE OF REGULAR PHYSICAL EXERCISE AND SUPPLEMENTS IN PATIENTS WITH AUTISTIC SPECTRUM DISORDER**Rebeca Lima Furtado Moura de Freitas<sup>1</sup>, Bruna Isadora Nunes da Silva<sup>1</sup>, Leticia Helena Franco Matos<sup>1</sup>, Marcelo Ferreira Fortaleza Eloi<sup>1</sup>, Paula Renata Souza Vinent<sup>1</sup>.<sup>1</sup> Student of the medical course at the Maranhão University Center (CEUMA)

**INTRODUCTION:** Autism Spectrum Disorder (ASD) presents several phenotypes, in which there is a heterogeneity of presentations, intensities and combinations of symptoms. The pillars of the diagnosis of ASD are the presence of early and persistent impairments in communication and social interaction, in addition to restrictive and repetitive patterns of behaviors, interests and activities. At the same time, 70% of diagnosed patients have associated comorbidities, the most common of which are anxiety, depression, ADHD, epilepsy, sleep disorders, and eating disorders. However, in an attempt to alleviate the symptoms related to ASD and possible comorbidities, several drugs are often not prescribed to patients, generating a polypharmacy that can bring numerous adverse effects and drug interactions. **METHODS:** Bibliographic survey carried out on the SciELO, PUBMed and Google Scholar platforms, selecting published scientific articles using the following descriptors "Autism", "Autism Spectrum Disorder", "Comorbidities". **RESULTS:** Despite the range of medications used to minimize complaints related to ASD and its associated comorbidities, it was observed that physical activities in general are highly beneficial for patients. Such activities, especially when carried out in groups, can reduce stereotypical behaviors, increase levels of attention and social interaction, in addition to the important concept of belonging. Which can bring improvements to both the cognitive and social aspects of patients. At the same time, substances such as folic acid, melatonin, and methylcobalamin, to some extent, can reduce symptoms related to ASD and its comorbidities. In addition to working in a short period of time, such substances have mild or no adverse effects, while improving socialization, language, sleep disturbance and cognition. **CONCLUSION:** Although pharmacological interventions in patients with ASD provide symptom relief, they are also related with significant adverse effects and drug interactions. Therefore, physical activity and dietary supplements can be included more substantially in the therapeutic plans of patients with ASD in order to reduce symptoms and improve the quality of life of this population.

09. **THE IMPORTANCE OF BREASTFEEDING IN PREVENTING CHRONIC NON-COMMUNICABLE DISEASES**

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**INTRODUCTION:** Breastfeeding is the most important means of nutrition for child development and is able to exclusively meet all the needs of newborns and infants up to 6 months of age. Breast milk contains components such as Immunoglobulin A (IgA), B and T lymphocytes and essential fatty acids, which contribute to strengthening the infant's immune system, thus reducing the occurrence of various diseases, including chronic non-communicable diseases (CNCDs) such as hypertension, obesity and diabetes. **METHODS:** This summary is a systematic literature review. Searches were carried out in the BVMS, SciELO and BVS databases, as well as virtual repositories of higher education institutions in Brazil. The inclusion criteria were works published in Portuguese in the last 20 years. The following descriptors were also used for selection: "breastfeeding", "chronic diseases", "partial breastfeeding" and "early weaning" **RESULTS:** It was possible to observe the impact of breastfeeding on the prevention of chronic diseases in the long term. Individuals who were adequately breastfed had 1.2 mmHg lower systolic blood pressure and 0.5 mmHg lower diastolic blood pressure, as well as 0.18 mmol/L lower total cholesterol and a 37% lower risk of type 2 diabetes mellitus. In addition, a cross-sectional study of 29 individuals showed that 86% had no diagnosis of chronic diseases, of which 41.4% were breastfed for up to one year and 24% for more than one year. **CONCLUSION:** Breastfeeding incorporates factors that contribute to the infant's homeostasis. Breast milk influences metabolic regulation through anti-inflammatory components, immunological agents and growth factors, for example, which together increase resistance to infections and prevent the imbalance that leads to acute and chronic non-communicable diseases. It is therefore of the utmost importance to encourage the practice of full breastfeeding up to the age of 6 months and, subsequently, associated with healthy complementary feeding, in order to contribute to full development during childhood and, consequently, a reduction in the Brazilian morbidity rate.

10. **THE IMPORTANCE OF PRENATAL CARE IN THE DIAGNOSIS AND TREATMENT OF CONGENITAL SYPHILIS**

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**INTRODUCTION:** Congenital syphilis is characterized by an infection caused by the bacterium *T. pallidum*, which reaches the fetus through the placenta or during childbirth. This disease has a high seroprevalence in underdeveloped countries, which have greater failures in prenatal care programs. **METHOD:** This is a retrospective, descriptive, quantitative study, which was carried out by analyzing data related to the quality of prenatal care in neonates with congenital syphilis in Maranhão, through the collection of data from the Notifiable Diseases Information System - SINAN. The aim of the study was to describe the forms of vertical transmission of syphilis in order to adopt preventive, diagnostic and therapeutic measures in pregnant patients. **RESULTS:** In the period from 2010 to 2021, there was a higher notification of congenital syphilis in Maranhão during prenatal care in 2018 and 2019. The performance and result of the non-treponemal test totaled 86.9% of pregnant women. The majority of congenital syphilis diagnoses occurred during prenatal care and at the time of delivery. The municipality of São Luís, followed by Imperatriz and Timon, had the highest number of cases. **CONCLUSION:** This disease is associated with problems involving prenatal care, poor socioeconomic conditions and low schooling. When the non-treponemal test was carried out, a high level of diagnosis was found during prenatal care, but there was an increase at the time of delivery, which is not the best time, since for better prevention of vertical transmission it should be diagnosed early. There was a higher occurrence of congenital syphilis in populous cities such as São Luís and Imperatriz.



11. **THE INTRINSIC RELATIONSHIP BETWEEN PRIMARY OPEN-ANGLE GLAUCOMA AND PEOPLE OF AFRICAN DESCENT.**

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**INTRODUCTION:** Glaucoma is an acquired neurodegenerative optic neuropathy, characterized by irreversible changes in the optic nerve, progressively leading to loss of the visual field, being the main cause of irreversible blindness in the world. The most common classification of this disease is primary open-angle glaucoma (POAG), responsible for approximately 80% of cases. Epidemiological studies and clinical research have highlighted a close relationship between African ancestry and the increased risk of developing POAG. This finding is not limited only to incidence, but also to the age at onset of the disease, clinical progression, genetic factors, and anatomical changes. Therefore, given the clinical relevance of this pathology, the study aims to evaluate how POAG is distributed in the population, emphasizing the importance of knowing the groups most affected – in order to prevent irreversible ophthalmological complications.

**METHODS:** This is a descriptive study, of the integrative literature review type, with analysis of data obtained from articles available on the Scielo and PubMed websites between the years 2017 and 2022. As a basis for the study, the descriptors used were: glaucoma, prevalence, and afro-descendants, 11 articles were found and, of these, 4 were selected to prepare this written assignment. **RESULTS:** From the analysis, a considerable variation in the prevalence and type of glaucoma was observed according to the population analyzed. POAG appeared, in general, with greater frequency and severity in individuals over 40 years of age and of black race, although care for this population has not followed such prevalence. Some studies, although not conclusive, point to a statistical difference in the thickness of the cornea in people of African descent, something that may be related to the greater incidence of this population. The diagnosis is often made late, contributing to the worsening of cases.

**CONCLUSION:** It appears that ethnicity and age are among the main factors related to the development of this visual problem. Therefore, knowing the most affected groups, it is essential to intensify early diagnosis practices aimed, above all, at black and older individuals. Furthermore, the importance of expanding appropriate therapeutic interventions is highlighted, aiming to preserve eye health and prevent ophthalmological complications that can lead to blindness.

12. **LIPOFILLING IN POST-MASTECTOMY BREAST RECONSTRUCTION: EFFICACY, SAFETY, AND PERSPECTIVES**

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**INTRODUCTION:** Mastectomy in breast cancer patients significantly impacts the quality of life, driving the pursuit of reconstructive procedures. Autologous fat grafting stands out for aesthetic correction and risk reduction, but concerns arise regarding potential associations with tumor recurrence, necessitating further research. This literature review aims to analyze existing studies on the issues related to lipofilling recurrence in post-mastectomy breast reconstruction, considering the debated tumor relapse questions that lack solid evidence. **METHODS:** A qualitative, retrospective research involved reviewing 10 scientific papers published from 2012 to 2021. Databases like PubMed, PeBMed, Google Scholar, and SciELO were consulted using DeCS terms: 'mammoplasty,' 'autologous transplantation,' 'mastectomy,' and 'breast neoplasms.' **RESULTS:** Throughout the bibliographic analysis, it became evident that lipofilling yields more favorable results in male patients compared to females, emphasizing its safety. It's crucial to note that this procedure requires a specialized team, including surgeons and radiologists. However, substantial evidence linking lipofilling to tumor recurrence or breast changes has not been identified so far. **CONCLUSION:** The scope review indicates that lipofilling is a safe and effective alternative for improving self-esteem without the need for silicone prostheses, avoiding associated complications. Scientific studies highlight its appropriateness, gaining acceptance for its intrinsic aesthetic benefits and risk reduction. Concerns about breast cancer or recurrence after fat grafting in breast reconstruction lack scientific support, with no significant complications found to impede breast cancer screening. The review underscores the importance of rigorous oncological follow-up while emphasizing the need for more research to optimize technique application and ensure patient safety.

13. **THE RELATIONSHIP OF THE DEGREE OF DISABILITY AND THE TREATMENT OF PATIENTS WITH HANSEN'S DISEASE IN MARANHÃO**

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**INTRODUCTION:** According to the World Health Organization (WHO, 2023), Hansen's disease is a chronic infectious disease caused by the bacterium *Mycobacterium leprae*, which affects the skin, peripheral nerves, the surface of the mucous membranes of the upper airway and the eyes. Furthermore, it is a disease that affects any age group, but it is curable, and, if treated early and appropriately, it can prevent disability. Despite this fact, the state of Maranhão has the highest prevalence of cases in Brazil, and, in the period from 2010 to 2019, 30% developed loss of function or deformity according to the Brazilian Society of Dermatology (SBD, 2021). In this sense, this work aims to analyze the relationship between the degree of disability of Maranhão patients with Hansen's Disease and the recommended therapeutic regimen. **METHODS:** Descriptive study on the association between the degree of disability caused by Hansen's disease and the therapeutic regimen adopted, analyzing the period between 2017 and 2022. Data was collected in DATASUS, in the Notifiable Diseases Information System (SINAN). The following variables were chosen: frequency of notified disability assessment; frequency of the reported therapeutic regimen; number of doses of the therapeutic regimen. **RESULTS:** Maranhão presented a total frequency of 21.326 cases, 12.883 in the period from 2017 to 2019 and 8.443 during the pandemic years. Among these, only 18.995 were assessed for their degree of physical disability. Of this total, 42% of patients presented changes in the evaluation, 76.5% grade 1 and 23.4% grade 2. In addition, 21.105 were categorized according to the therapeutic regimen, 3,565 received paucibacillary polychemotherapy (MDT) and 17.540 multibacillary MDT. In this context, 195.409 doses were administered in the period, which corresponds to approximately 84.3% of the total required, culminating in the non-administration of 36.461 doses, 56% of which correspond to the period from 2020 to 2022. **CONCLUSION:** Therefore, it was observed that, in addition to insufficient physical assessment in individuals diagnosed with Hansen's disease, a severe rate of physical disability was found that may be related to inadequate treatment, given that many did not complete them. Therefore, there is an urgent need for more efforts to be made in diagnosis, early treatment and appropriate monitoring in the context of Maranhão.

14. **THE RELATIONSHIP OF LIFESTYLE HABITS WITH THE EMERGENCE OF GASTRITIS: A LITERATURE REVIEW**

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**INTRODUCTION:** Gastritis is an inflammation of the stomach mucosa, whose main etiological factor is *Helicobacter Pylori* (HP), which is a bacterium with the ability to adapt to gastric acidity. In addition to this relationship, some exogenous factors seem to influence the manifestation of this pathology, making treatment difficult and allowing relapses. **METHODS:** This is an integrative literature review, using the databases: Scientific Electronic Library Online (SciELO) and Latin American Literature in Health Sciences (LILASC). Considering the years 2013 to 2023, 148 articles were initially found, but only 7 articles were chosen because they covered the topic. **RESULTS:** During the course of the topic, it was evident that most authors express the association between lifestyle and the clinical occurrence of gastritis. It was found that bad lifestyle practices have been related to the occurrence of the pathology. Even though HP infection is the main cause of gastritis, other factors also play a major role due to the production of substances and changes in gastric motility that increase acid secretion and result in inflammation in the stomach cavity, such as a diet rich in nitrites, sodium and chemical additives, as well as smoking, alcoholic beverages and non-steroidal anti-inflammatories. Its manifestations are most often characterized by the presence of symptoms such as: nausea, vomiting, pain, discomfort in the upper abdomen, burning, sensation of fullness and loss of appetite. On the other hand, it has been proven that a diet rich in vegetables and fruits, abundant in antioxidants, such as vitamins E, C and carotenoids, is associated with the attenuation of gastric damage. **CONCLUSION:** It is necessary to know the causal aspects that lead to gastritis so that adequate treatment can be carried out with less chance of therapeutic failure and recurrence. **Keywords:** ipsa, consequatur, galisum.



15. **THE RELATIONSHIP BETWEEN MEDICAL BIOETHICS AND PANDEMICS: A SYSTEMATIC REVIEW**

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**INTRODUCTION:** In a world whose history has been marked by pandemics that challenge the limits of medical practice, ethics and bioethics are essential as moral compasses for clinical and political decision-making. In this sense, the aim was to explore ethical principles in medical practice during pandemics, comparing bioethical issues in different health emergency scenarios. **METHODS:** This is a systematic review of the literature, using the electronic databases of indexed journals, MEDLINE, LILACS and SciELO. The following descriptors were used: "medical bioethics", "pandemics" and "public health". Articles were selected in full, published in the last 10 years, written in English or Portuguese and relevant to the topic, and ten articles that met all the criteria were eligible. **RESULTS:** Five articles addressed the fact that measures restricting freedom, rationing/rationalizing the use of medicines and offering adequate treatment to patients are factors that influence professional ethics in a health emergency scenario. The dilemmas are further reinforced, according to three articles, by the limited access to the health system and physical resources, the risk and strain imposed on health professionals and their responsibilities towards human life. In addition, two articles emphasized the importance of equity, transparency and the power of choice in clinical research and the development of vaccines and medicines. **CONCLUSION:** The fundamental principles of bioethics face complex challenges in emergency situations such as pandemics. The allocation of limited resources creates a dilemma between justice and beneficence, restrictive measures to protect public health raise questions about individual autonomy and collective well-being, and health professionals face dilemmas in balancing saving lives, patient dignity and conducting clinical trials, with a focus on equity and research ethics. Amplified inequalities make ensuring these principles a constant challenge. The existing literature presents limitations in comparing and deepening bioethics in different pandemic scenarios. Therefore, prospective studies are needed to guide policies and practices in future global health crises, seeking to balance effectiveness and ethics in complex and dynamic situations.

16. **THE RELATION BETWEEN SLEEP DEPRIVATION AND OBESITY OCCURRENCE IN CHILDREN: A REVIEW.**

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**INTRODUCTION:** Inadequate sleep is strongly associated with deficits in well-being and health, such as obesity, in children. The rise in obesity parallels sleep deprivation and poses numerous problems for childhood, including diminished physical and mental health, often persisting into adulthood, and cardiovascular diseases. Hence, the current study aimed to investigate the relation between sleep deprivation and the occurrence of obesity in children. **METHODS:** This is a literature review based on the search of the keywords "sleep deprivation," "obesity," and "children," as well as their equivalents in Portuguese, in the PubMed database using the operator AND. Inclusion criteria were: papers published in the last 5 years; in indexed journals; in English or Portuguese. Exclusion criteria were: articles not relevant to the theme of this paper; undergraduate thesis. Thirty articles were found on the platform, of which six were selected based on the established criteria. **RESULTS:** Studies conducted with children observed that those with obesity slept fewer hours than those without the condition. While the mechanisms justifying the relationship between sleep deprivation and obesity are not yet fully understood, it is acknowledged that adequate sleep duration is crucial for the regulation of metabolic and hormonal activities. Thus, the most plausible and accepted explanation is that eating behavior is influenced by sleep duration through endocrinological mechanisms involving cortisol, insulin, ghrelin, and leptin. Therefore, disruption of the circadian rhythm may alter the levels of these hormones, affecting appetite, satiety, and energy levels, thereby favoring increased food intake, particularly high-energy-dense foods, which is one of the main factors contributing to obesity. Another associated factor may be the tendency toward sedentary habits, such as increased screen time, which also contributes to sleep delay - timing is another aspect that may promote obesity. **CONCLUSION:** There are significant associations between sleep duration and obesity in children, indicating that sleep deprivation may stimulate factors associated with the development of the disease, such as sedentary habits and, primarily, poor dietary choices. Therefore, raising awareness about adequate sleep duration is crucial as one of the preventive factors for childhood obesity.

**17. THE NUTRITIONAL TRANSITION BETWEEN OBESITY AND MALNUTRITION**

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**INTRODUCTION:** Obesity and malnutrition are extremes that stigmatize and adversely affect an individual's health. In children, the presence of these conditions serves as a warning sign, as they are responsible for bringing consequences into adulthood and serve as good indicators of a population's health. Therefore, it is crucial to understand nutritional transition in the current context as a public health issue. **METHODS:** This is a literature review, in which scientific evidence was sought through articles in multiple databases such as Google Scholar, PubMed and Scientific Journals. The words Obesity, Malnutrition and Child Development were used as descriptors. The inclusion discretion were articles with up to 5 years of publication and exclusion criteria, those with a longer period of time and which didn't directly relate the study variables. Of the 10 articles, 9 demonstrated relevance to the topic. **RESULTS:** Nine studies were included, most of which focused on the comparison of obesity and malnutrition rates, and the effects of these changes over time. For years, child malnutrition prevailed, however, with modernization, there is a trend towards a decrease in these rates and an increase in the number of cases of overweight and obesity, due to a higher consumption of hypercaloric foods. The increase in these rates is associated with a higher prevalence of chronic diseases in childhood, such as diabetes and cardiovascular diseases. The articles also highlighted significant associated psychosocial changes, such as low self-esteem, relationship problems and social interaction, which affect the quality of child development. **CONCLUSION:** This review highlights the importance of addressing both childhood malnutrition and obesity with attention and appropriate actions. It is necessary to implement strategies that promote balanced nutrition and early nutrition education, aiming not only at physical health but also at the psychological well-being of children. Additionally, it is necessary to continue researching and monitoring these health issues to develop effective approaches in prevention and treatment, ensuring that future generations have a solid foundation for a healthy life, with a reduction in the number of cases of non-communicable diseases.

**18. TUBERCULOSIS IN THE INTERVAL FROM 2013 TO 2022 IN THE HEALTH REGION OF IMPERATRIZ-MA**

Dantas Sousa Braga<sup>1</sup>; Amanda Cristine Silva Sousa<sup>1</sup>; Marcos Vinicius Soares Silva<sup>1</sup>; Maria Keren Ribeiro Sousa<sup>2</sup>; Krisnanda Ribeiro Jacome Costa<sup>2</sup>; Rafael Gomes da Silva<sup>1</sup>.

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**INTRODUCTION:** Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*. In developing countries, it is a cause of morbidity and mortality and its incidence is associated with social inequalities, aging and difficulty in accessing and performing health services. In the state of Maranhão, the case incidence coefficient was approximately 30.3 cases per hundred thousand inhabitants; in the capital, São Luís, it reached 62.3 per one hundred thousand inhabitants and in the city of Imperatriz, according to data from the State Health Plan, in the period 2016 and 2019, it was 10.2 cases per one hundred thousand inhabitants. Furthermore, TB may also be associated with infections and chronic diseases, such as Human Immunodeficiency Virus (HIV) infection and Diabetes Mellitus (DM). In this sense, epidemiological studies are necessary that portray the current reality and the need for effective interventions. **METHODS:** This is a descriptive and quantitative study, carried out using the TABNET platform of the Information Technology Department of the Unified Health System (DATASUS). The data collected referred to tuberculosis cases confirmed in the Imperatriz Health Region, in the state of Maranhão, registered between 2013 and 2022, considering the following variables: sex, age, race, education, HIV diagnosis and DM. The results were presented using tables and figures that display relative and absolute frequencies of the data. Using Excel Software, the data obtained from the TABNET system was organized using quantitative and qualitative tables. **RESULTS:** 2022 was the year with the highest number of new cases (181 notifications). Of the individuals reported with tuberculosis between 2013 and 2022, there was a prevalence mainly between 20 and 39 years old (37.85%), also among men (63.17%), mixed race (63.38%) and individuals with up to the 4th grade of primary education (21.01%). Furthermore, 5.40% were diagnosed positive for HIV and 11.08% for DM. **CONCLUSION:** Analysis of the prevalence of tuberculosis cases in the Imperatriz Health Region becomes essential for combating the disease, as it helps by offering relevant data to combat existing cases and prevent new ones, especially in endemic regions.

19. **THE URGENCY OF AMOEBIASIS IN THE BAIXADA MARANHENSE: EPIDEMIOLOGICAL ANALYSIS FROM 2013 TO 2023**

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**INTRODUCTION:** Amebiasis is a parasitic disease caused by the protozoan *Entamoeba histolytica*, capable of causing amoebic dysentery and significant extraintestinal diseases contributing to the morbidity and mortality of the population, particularly in areas with poor hygiene and inadequate sanitation education. Thus, the aim of this study was to describe the prevalence of hospitalizations due to amebiasis in the Baixada Maranhense from 2013 to 2023, compared to the national scenario. **METHODS:** This is a descriptive, cross-sectional, and quantitative study. Secondary data on hospitalizations related to amebiasis were collected from the Department of Informatics of the Unified Health System (TabNET/DATASUS). The variables amebiasis, hospitalizations, region/federal unit, health macroregion/municipality, IBGE microregion/municipality, and the period from August 2013 to August 2023 were considered in the analysis. **RESULTS:** Brazil presents 14,381 cases of hospitalizations due to amebiasis, of which 37.04% correspond to the Northeast Region (5,328 cases), ranking second after the North Region (6,273 cases), with 43.62%. In the Northeast Region, Maranhão stands out as the leader in the number of hospitalizations, ranking second nationally with 3,253 cases. In the Maranhão context, the Southern Macroregion presents the lowest number of hospitalizations (73 cases), while the Northern Macroregion leads with 2,081 cases, representing 63.97% of the state's total. The Baixada Maranhense Microregion stands out in this context, contributing 1,354 hospitalizations, which corresponds to 65.06% of cases in the Northern Macroregion, 41.62% of cases in Maranhão, 25.41% of cases in the Northeast Region, and 9.41% of cases in Brazil. **CONCLUSION:** The urgency of the situation is evidenced by the high number of cases in this microregion, representing not only a significant portion of hospitalizations in the Northeast Region and the state of Maranhão but also an alarming share of cases at the national level. The high concentration of cases in this microregion is driven by low levels of basic sanitation, precarious socioeconomic conditions, limited availability of resources, and lack of preventive education. It is essential to direct investments towards the implementation of socio-educational measures aimed at raising awareness among the population about practices to prevent contamination and promoting significant improvements in basic sanitation infrastructure.

20. **VACCINE ABANDONMENT IN THE BAIXADA MARANHENSE FROM 2018 TO 2022 AND ITS IMPLICATIONS FOR CHILDREN**

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**INTRODUCTION:** The importance of vaccination coverage is irrefutable, especially in needy regions such as the Baixada Maranhense. However, concerns about the safety and efficacy of vaccines, as well as distrust of health authorities, foster a growing refusal to immunize, a fact that is related to the return of diseases that have already been eradicated in the country. The present study aims to analyze non-immunization in the Baixada Maranhense region and expose its possible consequences for the child population. **METHODS:** This is a descriptive quantitative study based on secondary data from the Department of Informatics of the Unified Health System (DATASUS), outpatient production (SINAN/SUS) on the rate of immunization abandonment by municipality in the Baixada Maranhense region during the years 2018 to 2022, with the observation of the variables quantities of doses, difference between the application of the first dose and the second dose by age, as well as the type of immunobiological refused. **RESULTS:** Thus, there is an abyss between individuals who received both doses of the vaccines. However, when we try to detail the groups belonging to the vaccination dropout rate according to age and the type of immunobiological not applied, a failure in the record is obtained, considering that these variables were ignored for the tabulation of the information. According to the data obtained, it is noted that there was a difference of 142,976 people who took only one dose of vaccine, which makes up a total dropout rate of 18.6% in the period in question. This percentage may be higher or lower when analyzing vaccine dropout by municipalities, with the municipality of Penalva being the one with the highest dropout rate between one dose of vaccines and another, about 27.62%. This vaccine refusal increases the risk of outbreaks of vaccine-preventable diseases, such as measles, pertussis, and polio, in addition to favoring complications from diseases such as influenza, circumstances that put unvaccinated children at risk of contracting serious and life-threatening diseases. **CONCLUSION:** Therefore, after an analysis of the above-mentioned data, it is essential to have a more detailed record of the information for a better knowledge of the groups that are most hesitant about vaccination, in order to make changes to this population, in order to avoid the reappearance of diseases, as well as complications of diseases, which can mainly affect children, because they have weakened immunity.

**21. THERAPEUTIC APPROACH TO COMPLICATED BILIARY ASCARIASIS IN PRESCHOOL AGE CHILDREN**

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**INTRODUCTION:** Ascariasis is widely associated with poor sanitary conditions. Preschool age children are the most affected group by *Ascaris lumbricoides* and demonstrate higher susceptibility to complications caused by this parasite. Mechanical obstruction caused by the presence of worms in the bile ducts requires a distinct therapeutic approach from the conventional use of anthelmintic drugs. Thus, the aim of this study is to identify appropriate practice for complicated biliary ascariasis in pediatric patients, contributing to the reduction of mortality resulting from this parasitic infection.

**METHODS:** This is a qualitative study based on articles and case reports published in the last 15 years in the Scielo electronic database. The descriptors "complicated ascariasis in children," "treatment of biliary ascariasis," and "surgical treatment of obstructive jaundice" were used. **RESULTS:** The presence of *A. lumbricoides* in the bile ducts can lead to complications such as cholangitis, acalculous cholecystitis, obstructive jaundice, hepatic abscesses, pancreatitis, and their sequelae. Anthelmintics such as piperazine, albendazole, and mebendazole are often prescribed to treat parasitic infections. However, this approach is discouraged in the case of biliary ascariasis since these medications cause the persistence of the dead parasite within the bile ducts. Therefore, worm extraction through endoscopic retrograde cholangiopancreatography (ERCP) is the most recommended approach among authors. In cases where hepatic abscess is identified or endoscopic treatment is unsuccessful, surgical intervention is indicated, possibly requiring choledochotomy, choledochoduodenostomy, or cholecystectomy. After postoperative return to normal peristalsis and complete biliary duct obstruction resolution, patients may receive anthelmintic treatment combined with antibiotic therapy. **CONCLUSION:** Children aged 2 to 5 years are more susceptible to complications of biliary ascariasis due to the smaller dimensions of the common bile duct compared to the parasite's diameter. Therefore, the use of anthelmintics is not recommended, as these medications facilitate the obstruction of bile ducts by the dead parasite. Thus, treatment through ERCP is highly recommended; however, when this procedure proves ineffective, surgical intervention becomes necessary.

**22. THERAPEUTIC APPROACH OF POST-TRAUMATIC STRESS DISORDER: A REVIEW FROM THE CURRENT LITERATURE**

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**INTRODUCTION:** The post-traumatic stress disorder (PTSD) is a psychiatric condition defined by symptoms related to deep psychological suffering at least a month after exposure to a traumatic event. It is becoming very prevalent among the civilian population due to, especially, the high sexual and urban violence, interfering in the life quality of those affected. The current treatment of this disorder is based in two different paths: the non-pharmacological and the pharmacological one. However, there are countless challenges in this current approach because of the involvement of various neurobiological systems and the uncertain etiology of PTSD. This review aims to evaluate the efficacy and the difficulties of the therapeutic approach of post-traumatic stress disorder. **METHODS:** This study consists in a literature review, based on articles published in portuguese and in english on the data bases Scielo, PubMed and Scholar Google. **RESULTS:** Trauma-focused psychotherapies, such as Prolonged Exposure and Cognitive Processing Therapy, are, nowadays, the first line treatment of PTSD. They play a significant role in the cognitive restructuring of the traumatized individual, making it possible for him to re-interpret and ressignificate traumatic memories. Nevertheless, this approach may be insufficient in severe cases and is related to high dropout rates. The pharmacological treatment is associated in face of an insufficient response to the psychotherapies. It targets the monoaminergic imbalance present in the pathogenesis of the disorder by the use of Selective Serotonin Reuptake Inhibitors (SSRI) paroxetine and sertraline or Selective Serotonin-Norepinephrine Reuptake Inhibitors (SNRI) venlafaxine, which have, in general, well tolerated side effects. Nonetheless, they have a great potential for generating dependence in chronic use. Furthermore, studies demonstrate that only 25% of patients obtain good clinical response by the use of these medications. **CONCLUSION:** It is evident that the current alternatives available for treatment of PTSD have several limitations, which brings out the need of new studies willing to elucidate the actual benefits of the drugs used to treat the disorder in resistant cases. It is also important the creation of new strategies to improve the therapeutic alliance.

23. **APPROACH TO THERAPY FOR ACUTE GASTROENTERITIS IN PEDIATRIC PATIENTS: A BIBLIOGRAPHIC REVIEW**

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Miguel Ferreira Leite<sup>1</sup>, Yasmin Andrade Sampaio<sup>1</sup>, Taciana  
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**INTRODUCTION:** Acute Gastroenteritis (AGE) is defined as an inflammation of the lower intestinal tract that lasts up to 14 days and its main symptoms are abdominal discomfort, colic, nausea, vomiting and diarrhea. GEA is responsible for more than 1 million consultations, 150,000 hospitalizations and 250 deaths in children, with a higher incidence in children under 5 years old, and is related to sanitary issues such as poor personal hygiene, basic sanitation and water quality. This study aims to explore the literature that analyzes the occurrence of GEA in pediatric patients, in order to add knowledge about its treatment. **METHODS:** This is a literature review carried out in October 2023, based on a search carried out in October 2023 for the terms "gastroenteritis" and "pediatric patients" in meta-analysis articles and randomized control trials with full-text availability published from March 2021 to August 2023 and cataloged in the PubMed virtual library. Out of a total of 12 articles found, 6 were selected, and those that did not deal primarily with treatment related to gastroenteritis in pediatric patients were excluded. **RESULTS:** The possibility of treatment with probiotics such as *Lactobacillus rhamnosus* R0011/*L. helveticus* R0052 or *L. rhamnosus* GG was raised, but these did not prove to be effective in comparison with the placebo group. *Saccharomyces boulardii* CNCM and *Bacillus clausii* were also compared, and both showed improvements in secondary complications and were well tolerated, with the first group showing a significant reduction in the average duration of diarrhea. The drug ondansetron was also tested and proved effective in stopping vomiting episodes and reducing intravenous rehydration rates. In addition, treatment adherence factors were evaluated, highlighting advanced age, longer duration of vomiting, greater dehydration and hospitalization as being associated with lower adherence rates. **CONCLUSION:** Some probiotics, as well as the drug ondansetron, have been shown to be effective in treating GEA in pediatric patients. In addition, factors such as age and level of dehydration at the onset of the disease were associated with lower adherence to treatment.

24. **SPONTANEOUS ABORTION IN MARANHÃO, FROM JUNE 2020 TO JUNE 2023**

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**INTRODUCTION:** Abortion is the termination of pregnancy before fetal viability is reached, definitively and irreversibly, and can be either spontaneous or induced. Spontaneous abortion mainly occurs in the first trimester and is characterized by the involuntary loss of the fetus due to natural causes, without being elective or through medical intervention. Maternal-fetal causes include embryonic malformations, acute infection, uterine developmental anomalies, exposure to teratogens, endocrine dysfunction, among others. It constitutes a public health problem in Brazil due to its high incidence and serious consequences for women's health, causing emotional distress and triggering physical and mental illnesses. Therefore, the objective is to describe the epidemiological panorama of spontaneous abortion cases in the state of Maranhão. **METHOD:** This is a descriptive epidemiological study based on hospital morbidity data provided by the Department of Health Information System (DATASUS). The study population consisted of cases of hospitalizations in the Unified Health System (SUS) of women who had a spontaneous abortion in Maranhão from June 2020 to June 2023. **RESULTS:** During the study period, there were 14,123 hospitalizations due to spontaneous abortion in Maranhão, with women aged 20 to 29 being the most affected age group, accounting for 46.78% of hospitalizations, followed by the age group of 30 to 39 with 31.18%. In 2021, there were 5,185 hospitalizations due to spontaneous abortion, followed by a 16.68% reduction in the following year, with 1,828 hospitalizations until June 2023. Approximately 95.47% of cases were attended to in emergency services. The Northern macro-region had the highest number of patients requiring hospitalization. The total expenditure was R\$2,975,542 in this period, corresponding to a total of 24,831 hospitalization days, averaging about 1.8 days of hospitalization per patient. **CONCLUSION:** Therefore, spontaneous abortion can be considered a public health problem in Maranhão. This is because the majority of cases occur in the young age group, which could be prevented through improvements in public health services focused on family planning and prenatal care.



25. **SNAKE ACCIDENTS IN MARANHÃO: AN EPIDEMIOLOGICAL ANALYSIS BETWEEN 2018 AND 2022**

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**INTRODUCTION:** Snakebite or snakebite is poisoning resulting from snake bites. In Brazil, there are four genera of snakes of interest in public health: Bothrops (jararacas), Micrurus (corals), Crotalus (rattlesnakes) and Lachesis (surucucus). These snakes produce a venom in their venomous glands, which is capable of causing physiological and biological changes, which can result in inflammatory processes, hemorrhagic, necrotic, myotoxic, cytolytic and cholinergic manifestations. Thus, the objective is to analyze epidemiological data on snakebites in Maranhão (MA) between 2018 and 2022, considering incidence, main genera involved and percentage of mortality. **METHODS:** This study proposes to carry out a retrospective descriptive epidemiological analysis by collecting data obtained by the TABNET digital platform, from the Department of Information and Informatics of the SUS (DATASUS), on snakebites in MA in the period between 2018 and 2022. **RESULTS:** According to DATASUS, between 2018 and 2022, 25,230 cases of snakebite accidents, with or without venom, were reported. Of these, the genus Bothrops represented the main group causing accidents with 27.38% of cases, followed by the genus Crotalus with 9.54%, non-venomous snakes with 1.85%, Micrurus 0.41% and Lachesis with 0.22%. However, in 60.59% of notifications, the gender of the snakes was not specified. Another relevant data refers to the year 2021, in which 5,310 snakebites were recorded, with a fatality rate of around 0.73%. Comparatively, in 2018, 4,624 cases were recorded, of which 0.63% resulted in death. Through this information, an increase of 14.8% in the number of cases of snakebite was observed within a three-year period, as well as a 34.4% increase in fatal outcomes. It is worth highlighting that the main genera causing the accidents were Bothrops and Crotalus. Both have toxins in their venom capable of triggering important coagulation disorders and hemorrhagic events, which can lead to the patient's death, especially Bothrops venom. **CONCLUSION:** Snakebite in MA is a public health problem, not only due to the increasing numbers, especially of genera such as Bothrops and Crotalus, but also due to its clinical severity and possible unfavorable evolution. Therefore, the need to intensify prevention measures is highlighted, aiming to reduce the number of victims and, consequently, fatal complications.

26. **NEUROLOGICAL CHANGES IN PATIENTS WITH LEPROSY**

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**INTRODUCTION:** Leprosy is an infectious and chronic disease with high incidence in needy populations. The neurological changes caused by this condition are among the aspects of the disease that seek to avoid and alleviate. Thus, this study aims to describe the possible neurological sequelae in patients affected by leprosy. **METHODS:** To carry out this narrative review, a search was performed in the databases of the Scientific Electronic Library Online (SciELO), PubMed Central, and Google Scholar, using the combined and individual descriptors in Portuguese or English "Leprosy," "Neurology," and "Sequelae," covering the period from 2018 to 2023. **RESULTS:** Five articles were selected that were in line with the objective of this study. One of the main clinical signs that indicate a patient has been infected with *Mycobacterium leprae* is neurological, with sensory and motor neuropathy being the primary manifestations. Sensory neuropathy involves the progressive loss of thermal, painful, and tactile sensitivity as the disease advances. In more advanced stages, motor neuropathy leads to thickening of the affected nerves, muscle atrophy, and consequent functional impairment. The characteristic loss of sensitivity in these patients' peripheral nerves also makes them susceptible to plantar ulcerations, which can be mistaken for diabetic neuropathy, complicating early diagnosis to prevent more severe neurological complications of leprosy. **CONCLUSION:** Therefore, leprosy is a condition that requires early diagnosis to prevent infected patients from developing neurological changes and losing their quality of life. Early diagnosis is also essential to limit the spread of the disease. Hence, healthcare professionals need to be up-to-date and trained to identify individuals with the potential to contract the etiological agent. Furthermore, the community plays a crucial role in providing better care and assistance to the population affected by leprosy.



27. **COMPARATIVE ANALYSIS OF MORTALITY FROM PUERPERAL HYSTERECTOMY IN THE REGIONS OF BRAZIL**Brunna Araújo dos Santos<sup>1</sup>, Pedro Henrique Delfim Pessoa<sup>1</sup>, Caio de Brito Matos<sup>1</sup>, Adeany Yasmim Morgado Reis<sup>1</sup>, Higina Cristina da Silva Araújo<sup>1</sup>, Marcelle Teixeira e Silva<sup>1</sup><sup>1</sup> Universidade Federal do Maranhão - UFMA Campus Pinheiro

**INTRODUCTION:** The postpartum period, popularly known as "reservoir", is defined as the period in which the woman undergoes physical and psychological changes and can be divided into three phases, namely the immediate phase (1 to 10 days), late (11 to 42 days) or remote (from 43 days). This period extends until the moment when the woman's body returns to its normal state (pre-pregnancy) and begins to ovulate again. Puerperal hysterectomy refers to the surgical removal of the uterus during pregnancy, childbirth or the postpartum period, resulting from serious complications at any of these stages. This study aims to analyze mortality from puerperal hysterectomy and compare statistics according to each region of Brazil. **METHODS:** This is a descriptive cross-sectional study, with a quantitative and comparative approach, which used Hospital Production data from the SUS Hospital Information System (SIH/SUS), available on the platform of the Information Technology Department of the Unified Health System (DATASUS). The following aspects were analyzed: hospitalizations, average value per hospitalization (VMI), deaths and mortality rate (MT) in each region of the country in the period from 2013 to 2022. **RESULTS:** In the analyzed scenario, it was recorded in the Southeast region (SE), the highest number of hospitalizations (2,450), IMV (R\$1,552.04) and deaths (139), in addition to a MT of 5.67. In the North region (N), 243 hospitalizations were observed, VMI of R\$1,050.09, 9 deaths and MT of 3.70, being the lowest values recorded during the period in all variables when compared to other Brazilian regions. The Central-West region (CO) had the highest MT among the regions, reaching 7.53, while the number of hospitalizations was 385, the VMI was R\$1,515.52 and a total of 29 deaths. **CONCLUSION:** The data suggest that the CO region, despite having the second lowest number of hospitalizations, has the highest mortality rate in the group, while the SE region - which has the highest number of hospitalizations, which is expected as it also has the largest population in the country - has the third smallest MT. Therefore, a more detailed study of this procedure and its regional involvement is necessary, as well as the implementation of health strategies aimed at early diagnosing the complications that culminate in puerperal hysterectomy and understanding which aspects are present in cases that progress to death, in order to reduce the resulting mortality.

28. **COMPARATIVE ANALYSIS OF DEATHS FROM BRONCHIAL AND LUNG CANCER IN BRAZIL IN 2016 AND 2021**Maria Kéren Ribeiro Sousa<sup>1</sup>, Maria Denise Andrade Sousa<sup>2</sup>, Maria Aline Soares Sousa<sup>1</sup>, Krisnada Ribeiro Jácome costa<sup>1</sup>, Igor Vitor Oliveira da Graça<sup>1</sup>, Dantas Sousa Braga<sup>3</sup>, Flaviano Ribeiro Pinheiro Neto<sup>1</sup><sup>1</sup> Faculdade Pitágoras de Bacabal<sup>2</sup> Universidade Federal de Sergipe<sup>3</sup> UEMASUL

**INTRODUCTION:** Mortality from bronchial and lung cancer, although considered a preventable cancer, was 28,632 in Brazil in 2018, representing 12.74% of all cases, followed by breast cancer with 17,763 (7.9%) and prostate cancer with 15,576 (6.93%). In 2020, bronchial and lung cancer was considered the world's leading preventable cause of cancer death, causing 29.7 million deaths. However, in the same year in Brazil, lung cancer was also the leading cause of cancer death, which was responsible for 35,160 deaths, mainly in males. **METHODS:** This is an ecological time series study carried out using information from DATASUS, available on SIM, for the period 2016-2021. The study population was made up of deaths registered due to malignant neoplasms of the bronchi and lungs (ICD 10-C34). The variables were: gender and Brazilian regions. They were analyzed using descriptive statistics. **RESULTS:** In Brazil, the number of deaths from neoplasms between 2016-2021 was 1,345,252, of which 170,265 (12.65%) were caused by lung and bronchial cancer. Males accounted for 96,793 (57%) of deaths and females 73,472 (43%). When analyzing by region, the North registered the lowest number, 7,780 (4%), followed by the Midwest with 11,366 (6.68%). The Southeast showed the highest number of deaths with 77,646 (45.56%), followed by the South with 40,236 (23.63%) and the Northeast with 33,237 (19.52%). **CONCLUSION:** This study showed that bronchial and lung cancer is more common in young women, but the incidence of death is higher in men, since lifestyle habits can influence the onset of the disease. As for the regions, in 2021 there was an increase in cases compared to 2016, explained mainly by the appearance of COVID-19, since the disease mainly affected the respiratory tract. It is therefore urgent to create public policies that facilitate the reduction of exposure to the main risk factors, such as tobacco consumption (any form), alcohol consumption, environmental and occupational risks and infectious agents. In addition, it offers advanced treatment in view of the lack of investment which leads to a major barrier to access, given that treatment for advanced lung cancer is greater than the amount disbursed by the SUS.

**29. ANALYSIS OF ESTIMATED INCIDENCE OF OVARIAN CANCER IN MARANHÃO AND IN BRAZIL (2020-2023)**

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**INTRODUCTION:** Ovarian cancer is the second most common gynecological neoplasm, with high prevalence and mortality rates in the general population. The origin of ovarian malignancy is multifactorial, with aging, genetic and environmental conditions being among the main risk factors. Due to the lack of specific initial symptoms of the disease, associated with poor scientific evidence that recommends its screening, most of its diagnoses are made in advanced stages, which gives it a poor prognosis, highlighting the importance of this thematic. This study aims to analyze estimates of the occurrence of ovarian cancer at national, regional and state levels, in order to emphasize the relevance of that topic. **METHODS:** This is a descriptive epidemiological study made on data made available by Brazil's National Institute of Cancer (INCA), regarding the estimated incidence of ovarian cancer from 2020-2023 period. Used data is referring to Brazil, its Northeast region and the state of Maranhão, in order to carry out a comparative study. **RESULTS:** In Brazil, 7,310 new cases of ovarian malignancy are expected for 2023, representing a crude rate of 6.62 for every 100,000 inhabitants. This represents an increase of 9.9% from the year of 2020. It is the eighth most common cancer in women (3% of cases), and the second most common malignant gynecological tumor, second only to cervical carcinoma (7%). For the state of Maranhão, 140 new cases are expected for the same year, meaning approximately 1.51% of the incidence of all neoplasms in women in the Federation Unit, excepting non-melanoma skin cancer. This rate is much lower than that of the Northeast region (3.5%), so the state has the lowest incidence in the area. There was an increase of around 16% in the northeastern incidence between the periods, while Maranhão rate remained stable. **CONCLUSION:** The study revealed a significant rate of ovarian cancer in Brazil, so this must be a latent public health concern in this country. The Northeast region appears to have the lowest incidence, with a rate much lower than the national rate. In Maranhão, despite having the lowest rate in its region, ovarian neoplasia is still present and lethal, so the state also deserves to be highlighted in the scope of public measures to prevent that neoplasm.

**30. ANALYSIS OF POST-MASTECTOMY RECONSTRUCTIVE MAMMOPLASTY WITH PROSTHESIS IN BRAZIL (2019-2020)**

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**INTRODUCTION:** Many cases of breast cancer, when treated and diagnosed properly, have a good prognosis, and treatment options range from chemotherapy to surgery. In a radical surgery (mastectomy), the entire breast is removed, and the procedure can bring numerous negative changes, such as damage to self-image. Thus, post-mastectomy prostheses become beneficial to the female public, being an alternative for the improvement of body image and quality of life. This work aims to outline the Brazilian epidemiological profile of reconstructive mammoplasty, done post-mastectomy and with the use of a prosthesis. **METHODS:** This is a descriptive, cross-sectional, retrospective epidemiological study, constructed through secondary data collected from the SIH/DATASUS. Data was collected about the number of hospitalizations for the procedure of reconstructive breast plastic surgery post-mastectomy with prosthesis implantation, analyzing region, year of service, nature of the service, and average length of stay. **RESULTS:** In the analyzed period, there were 4,355 post-mastectomy reconstructive breast surgeries with prosthesis implantation, with the Southeast region responsible for about 50% of the number of hospitalizations, followed by Northeast, South, Midwest, and North, which concentrates only 2.9% of the cases. Regarding the nature of the service, there was a majority of elective cases, with about 12% of emergency cases. All cases were considered of medium complexity. The national average hospital stay was 1.7 days, with the highest rate in the North region (2.4 days) and the lowest in the South region (1.1 days). There was no death record. The total cost of the procedure was R\$4,476,390.47, of which 50.5% were spent in the Southeast region. The national hospitalization cost had a median of R\$991.30, with an average cost of R\$1027.87, with the South region being the only one above average (R\$1195.24) and the North region obtaining the lowest value (R\$732.54). **CONCLUSION:** Mammoplasty is a procedure of medium complexity, low number of complications and can bring great benefits to mastectomized patients, however, it is not equally widespread across the country. This reality is the result of disparities in hospital infrastructure among the regions of Brazil and denounces failures in public health policies, in addition to demonstrating the importance of outlining an epidemiological profile to understand the needs of affected patients.

31. **ANALYSIS OF CHILDHOOD MORTALITY DUE TO PREVENTABLE CAUSES IN MARANHÃO BETWEEN 2017 AND 2021**

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**INTRODUCTION:** The Infant Mortality Rate (IMR) measures the number of deaths in children under 5 per 1,000 live births annually. Within the Northeast region of Brazil, Maranhão ranks second highest in preventable IMR. This indicates a lack of effective public policies mitigating this issue. Consequently, this study aimed to analyze preventable IMR rates in children under 5 residing in Maranhão from 2017 to 2021. **METHODS:** This ecological, descriptive study employed a quantitative approach, analyzing data from the Mortality Information System (SIM/DATASUS) on variables including "preventable causes," "age group," "color/race," and "municipality." The study population encompassed children under 5 in Maranhão who succumbed to preventable causes (International Classification of Diseases [ICD-10] codes) between 2017 and 2021. **RESULTS:** During the study period, Maranhão reported 9,445 preventable child deaths, with a peak of 2,095 in 2017 followed by a gradual decline, reaching a minimum of 1,717 in 2020. Notably, the five leading preventable causes were: "other causes" (28.66%, not entirely preventable); "improper pregnancy care" (22.26%); "inadequate newborn care" (16.28%); "insufficient childbirth care" (10.83%); and "deficient diagnosis and treatment" (8.81%). Age-wise, 47.07% of deaths occurred within 0-6 days, followed by 24.93% within 28-364 days. Regarding ethnicity, brown children comprised 66.64% of cases, while white, Black, Asian, and Indigenous children accounted for only 19.31%. Among the 217 municipalities, São Luiz (13.68%), Imperatriz (3.58%), and São José de Ribamar (3.46%) reported the highest death tolls, aligning with their higher population densities. **CONCLUSION:** Our findings underscore the necessity for comprehensive healthcare interventions targeting pregnancy, childbirth, and neonatal care to decrease preventable IMR. Additionally, evidence suggests limitations in healthcare strategies within larger cities, particularly pertaining to diagnosis and treatment, disproportionately impacting the brown and socioeconomically disadvantaged population.

32. **ANALYSIS OF MORTALITY DUE TO ISCHEMIC HEART DISEASE IN THE NORTHEAST OVER A DECADE**

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**INTRODUCTION:** Ischemic Heart Disease (IHD) is characterized by insufficient blood flow to meet the heart's demand for oxygen, resulting in irreversible structural changes in the myocardium. IHD is the leading cause of death among cardiovascular diseases in Brazil, with alarming numbers over the years. Thus, this study aims to analyze the mortality panorama of IHD in the Northeast region of the country from 2012 to 2021, in order to establish priorities for public health interventions. **METHODS:** This research is an epidemiological study of a descriptive and cross-sectional nature, with a quantitative approach. Secondary data were collected from the Mortality Information System (SIM), provided by the Department of Health Informatics of the Unified Health System (DATASUS). The variables used were death, state/federal unit, year, gender, age group, color/race, and education level. **RESULTS:** During the study period, the Northeast region recorded 291,192 deaths from IHD, accounting for 26% of the country's total, which reached 1,120,270. Regarding deaths by state in the region, 22% (n=63,099) occurred in Pernambuco, 19% (n=55,821) in Bahia, 16% (n=45,976) in Ceará, and 11% (n=33,002) in Maranhão. There was an increase in deaths from 2015 (n=29,142) to 2018 (n=30,579), with the highest number recorded in 2019 (n=31,315). Also noteworthy are the values in 2020 (n=29,386) and 2021 (n=30,161), a period that encompasses the peak of the COVID-19 pandemic. The male population is the most affected (57%), as well as the age group of 60 to 80 years or older (78%), data consistent with the epidemiological profile of IHD. Mortality is most observed among the brown ethnicity with 176,613 (61%) deaths, followed by white, which recorded 77,068 (26%). Mortality was considerably higher in individuals with no education, reaching 32% (n=91,936). **CONCLUSION:** It is evident that the increase in mortality accompanies the increase in age groups, and the highest records are observed in the most populous states of the region. The percentage increase in mortality occurred steadily over the years, with a slight increase in the number of deaths from 2019 onwards. Additionally, there is a shortage of current and relevant data on the variables studied regarding recent years, highlighting the need to update the platform and further direct public policies aimed at reducing mortality from IHD.

**33. ANALYSIS OF THE OCCURRENCE OF TUBERCULOSIS CASES IN THE STATE OF MARANHÃO**Priscila Praseres Nunes<sup>1</sup>; André Everton Facundes<sup>2</sup><sup>1</sup> Universidade Federal do Maranhão<sup>2</sup> União das Faculdades dos Grandes Lagos – UNILAGO

**INTRODUCTION:** Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*. Transmission is via the respiratory route, through the inhalation of aerosols produced by the cough, speech or sneeze of a patient with active TB, with the pulmonary form being the most common and of greatest relevance to Public Health. In Brazil, it is still an endemic and compulsory notifiable disease. Therefore, the objective of this work is to outline the cases that occurred in Maranhão in the last five years. **METHODS:** This is a descriptive and retrospective study whose data are included in DATASUS and the Notifiable Diseases Information System (SINAN), from 2018 to 2022, in Maranhão. The following aspects were addressed: municipality with the highest notification, closure situation, age group and gender. **RESULTS:** 13,895 cases of TB were reported in Maranhão in the period analyzed, with the highest rate in 2022 (3,198 notifications), with no significant differences in the number of cases between the years studied. Although, in 2020, the year of the Covid-19 pandemic, there was a small drop in notification numbers compared to previous years. The municipality with the highest notification was São Luís with 6,509 cases. The most affected age group was between 20 and 39 years old, in terms of gender, men are the most affected population with 9,394 cases. In conclusion, 8,191 cases resulted from a cure for TB and 650 cases resulted in deaths from the disease. **CONCLUSION:** Tuberculosis is still very common today, making it necessary to intensify prevention, diagnosis and control strategies for the disease, so as to minimize its occurrence in the State of Maranhão.

**34. ANALYSIS OF HOSPITALIZATIONS OF CHILDREN AGED 1 TO 4 YEARS DUE TO EXOGENOUS POISONING IN MARANHÃO**Anna Beatriz Costa Azevedo<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>2</sup>, Gustavo Bender Hendges<sup>2</sup>, Míriam Joyce Pereira Raposo<sup>2</sup>, Poliana Sousa Rapozo<sup>1</sup>, Lorrany Fontenele Nascimento<sup>1</sup><sup>1</sup> Universidade Federal do Maranhão<sup>2</sup> Universidade Estadual da Região Tocantina do Maranhão

**INTRODUCTION:** Exogenous intoxication refers to the set of harmful effects represented by clinical or laboratory manifestations revealing the organic imbalance produced by the interaction of one or more toxic agents with the biological system. During their growth and development, children - in a constant phase of exploration - are attracted to anything within their reach. Thus, they are frequently exposed to the risk of intoxication by exogenous agents. This study aims to analyze the profile of hospitalizations of children aged 1 to 4 years who fell victim to exogenous intoxication. **METHODS:** This is a descriptive cross-sectional study of an exploratory nature conducted through data from the DATASUS's Notification of Diseases Information System from 2013 to 2022, with no need for Ethics Committee approval. The analyzed age group corresponds to children aged 1 to 4 years, and the considered variables were gender, race, toxic agent, and circumstance. Data were tabulated and organized using Microsoft Excel 2019. **RESULTS:** From 2013 to 2022, 1,415 cases of exogenous intoxication in children aged 1 to 4 years were recorded in the state of Maranhão. There was a predominance of hospitalizations in males (54.7%) compared to females (45.3%). The toxic agent responsible for the highest number of hospitalizations was medication (45.37%), followed by household products (14.84%) and food and beverages (4.73%). The main circumstances leading to intoxications were accidental (975 cases), therapeutic use (161 cases), and ingestion of food (48 cases). Regarding race, the number of brown was higher, summing 1,178 out of the 1,415 recorded. The second place, with 103 occurrences, was occupied by the white race. **CONCLUSION:** The high number of hospitalizations due to exogenous intoxication in children aged 1 to 4 years, when associated with the main toxic agents and circumstances responsible for these hospitalizations, underscores the need to educate parents/guardians about basic daily preventive measures to reduce the incidence of such cases in the state.

35. **ANALYSIS OF HOSPITAL ADMISSIONS FOR PNEUMONIA IN CHILD PATIENTS IN MARANHÃO**

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**INTRODUCTION:** Pneumonia is an inflammation of the parenchyma of one or both lungs, usually caused by infections (bacterial, viral, fungal, and parasitic). Respiratory difficulties mostly affect children in the first 5 years of life, commonly between the ages of 6 and 24 months. Therefore, this study aims to analyze pediatric hospitalizations for pneumonia in Maranhão from 2013 to 2022.

**METHOD:** This is an ecological, cross-sectional analysis with a quantitative approach, using data from the Department of Informatics of the Unified Health System (DATASUS). Data regarding the number of hospitalizations, gender, race, age range from 0 to 19 years, deaths, and mortality rate were collected. **RESULTS:** During the evaluated period, a total of 218,061 pneumonia-related hospitalizations were observed in Maranhão, with a mortality rate of 8.6%. The majority of hospitalized patients were male (51.23%), with 111,724 admissions in the specified period. In the pediatric population, the age group of 1 to 4 years - for both males (27,985) and females (23,600) - had the highest number of disease-related hospitalizations. In the age group of 5 to 9 years, for females, and in 10 to 19 years, for males, the lowest number of hospitalizations was observed, with 7,632 and 7,787 cases, respectively. Regarding race, the highest number of cases occurred in the brown category (108,311), followed by yellow (9,156), white (6,829), and black (2,556).

**CONCLUSION:** This study highlights the high rate of pneumonia hospitalizations in children in Maranhão over a decade, predominantly in males, especially between 1 and 4 years. It also points out racial disparities, emphasizing the need for more equitable public health approaches. These findings underscore the importance of strategies to reduce the impact of childhood pneumonia in the state.

36. **ANALYSIS OF HOSPITALIZATIONS FOR SPONTANEOUS ABORTION IN THE NORTHEAST REGION BETWEEN 2013-2022**

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**INTRODUCTION:** Abortion is the termination of a pregnancy, which can be spontaneous or induced. Spontaneous abortion occurs when the loss of the fetus is due to natural causes, without any external intervention or intervention by the pregnant woman herself and, in order to fit into this classification, it must occur between the 20th and 22nd week at the latest. It is common for this type of abortion to result in hospitalizations, which is why this study analyzed hospital data in order to understand the prevalence, demographic characteristics and trends surrounding these hospitalizations in the Northeast region. **METHOD:** This was a descriptive epidemiological study, quantitative in nature and cross-sectional in approach. The data used was collected through the Hospital Information System (SIH/DATASUS) regarding hospitalizations in the ICD-10 category "spontaneous abortion" in the Northeast region, between 2013 and 2022. The variables analyzed included the number of hospitalizations, age group, color/race, total value and average value per hospitalization. **RESULTS:** In the period analyzed, there were 36,844 hospitalizations due to miscarriage in the Northeast, the second largest region in terms of population. This figure represents 40% of the total number of cases of the same cause in Brazil. The most affected age group was between 20 and 29 years old (n=159168). With regard to the color/race variable, there was a great disparity, with the brown population being the most affected (n=194181) and the indigenous population the least affected (n=557). The state of Bahia had the highest number of hospitalizations (n=90793), while Piauí had the lowest number (n=14724). The highest number of hospitalizations was recorded in 2014 (n=41089) and the lowest in 2022 (n=28332), showing a downward trend over the years. **CONCLUSION:** There is a significant burden of hospitalizations due to miscarriage in the Northeast region of Brazil, representing a significant public health challenge. The majority of hospitalizations occur in the state of Bahia, in the 20-29 age group and among the brown population. Although there is a downward trend in the number of hospitalizations over the period analyzed, it is essential to continue monitoring and developing health policies aimed at preventing miscarriage and supporting women who go through this situation, and this study is crucial for guiding these practices.



37. **ANALYSIS OF ADMISSIONS FOR CUTANEOUS LEISHMANIASIS IN MARANHÃO FROM 2018 TO 2023**

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**INTRODUCTION:** Leishmaniasis is an infectious disease caused by a protozoan of the genus *Leishmania* and transmitted to humans by female hematophagous insects. The cutaneous form, in Brazil, is the most common and its clinical presentation is characterized by ulcerated lesions on the skin and/or mucous membranes, with well-defined borders, infiltrated and which may present exudate. It is an endemic disease in tropical regions, treatable and with low mortality, but it can leave consequences, generating social and psychological repercussions. Therefore, the objective of the work is to understand the epidemiological profile of leishmaniasis in the state of Maranhão, since its high incidence has already been proven in Brazil. **METHOD:** This is an epidemiological, retrospective, quantitative and descriptive study based on data made available by the Department of Informatics of the Unified Health System (DATASUS). The studied population consisted of cases of hospital admissions due to cutaneous leishmaniasis, in the state of Maranhão, from July 2018 to July 2023. The correlated variables were: number of hospitalizations, year of care, sex, age group, deaths, average number of days of hospitalization. **RESULTS:** During the analyzed period, 103 hospitalizations were observed due to cutaneous leishmaniasis, of which 78.64% were urgent. The highest incidence was in the North macro-region with 53 cases (51.45%). The most affected population was between 40 and 59 years old, totaling 38 cases (36.89%). The highest hospitalization rates in the period studied were in 2022 with 26 hospitalizations (25.24%) followed by 2020 with 20 hospitalizations (19.41%). Males were more affected with 66 hospitalizations (64%) and mixed-race individuals had 63 cases (61.16%). The average length of stay during the studied period was 10.1 days with the highest stay rate in 2020 with 12.5 days followed by 2021 with 12.3 days. The only death recorded in this period was of a woman in 2020. In relation to public cost, an expenditure of more than 52 thousand was observed. **CONCLUSION:** Based on the data above, the need to adopt measures to prevent cases of leishmaniasis in Brazil is clear, given the possible complications, despite the low mortality. In this sense, vector control and screening of reservoir hosts, as well as vaccination of healthy dogs are important measures to minimize this public health problem.

38. **ANALYSIS OF HOSPITALIZATIONS AND MORTALITY RATE FROM BRONCHIECTASIA IN MARANHÃO (2018-2023)**

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**INTRODUCTION:** Bronchiectasis is an irreversible change in bronchial architecture, whose pathological course tends to progressively worsen, as the disease both favors new infections and is also aggravated by inflammatory processes. When experiencing this vicious cycle, the patient requires hospitalization. The objective of this study was to evaluate characteristics of hospitalizations due to this condition, comparing data at different geographic levels to understand the scenario in Maranhão. **METHODS:** This is an epidemiological study, based on a descriptive analysis of data from DATASUS (Ministério da Saúde), covering the period from February 2018 to July 2023. Data were analyzed at three geographic scales: Brazil (BR), Northeast (NE) and Maranhão (MA). The characteristics studied regarding bronchiectasis were number of hospitalizations, mortality rate (MT), age and sex. **RESULTS:** During the period investigated, there were 6,084 hospitalizations due to bronchiectasis in the country. Of these, more than 1/3 occurred in the NE (2,392), with greater frequency in children under 1 year of age (370). Females were hospitalized more often, 51.54% in BR; 50.71% in NE; 61.94% in MA. From an age perspective, there were two peaks in hospitalizations. The first in age up to 4 years (21.67% in BR; 25% in NE; 23.88% in MA and 75.6% hospitalizations from January to July 2023 in MA). The second was from 40 to 69 years old (36.85% in BR; 35% in NE; 34% in MA). In Maranhão, hospitalizations in children up to 4 years of age in the first 7 months of 2023 correspond to 52.54 hospitalizations in this age group since 2018. The MT increased with advancing age, reaching a maximum above 80 years: 12.5% in BR; 13.71% in NE; 10% in MA. The MT for bronchiectasis in the NE was 4.01%, therefore higher than the national rate of 3.57%. In addition to having the 2nd largest MT in the country, the NE accumulated the highest number of deaths (96). The MT in MA was lower than the national rate, at 2.83%, and in this state there were no deaths due to bronchiectasis in individuals under the age of 39. **CONCLUSION:** The study suggests the need for greater discussion about bronchiectasis in NE, given the unfavorable profile of hospitalizations and mortality exposed. The atypical increase in hospitalizations in children up to 4 years of age, between January and July 2023, in the state of Maranhão, requires special attention and intervention. Although the mortality rate in this age group is low, it is noteworthy that the disease is chronic and compromises the patient's quality of life.



39. **RISK ANALYSIS OF PATIENTS WITH LEUKEMIA: CONTRIBUTIONS TO THE STUDY OF ONCOLOGICAL PROGNOSIS**

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**INTRODUCTION:** Leukemias are a group of diseases that share a common proliferative pathogenesis and occur within vascular beds. Typically, leukemia can be of myeloid or lymphoid lineage and classified as acute or chronic in nature. From this perspective, leukemias are acute and potentially fatal if not treated. The objective is to evaluate the factors that may be related to hospitalizations and deaths from leukemia within the Brazilian public health network through a retrospective documentary study. **METHODS:** This is a retrospective study with an analytical approach, carried out on data accessed via the access to information law (Law nº 12,527, sanctioned on November 18, 2011). The data were obtained from official records of hospitalizations resulting from Leukemia in the last five years (August 2017 to August 2022). Data were processed by Gaph Pad Prism software (GaphPad Software for Science, San Diego CA). Second Pearson coefficient and Odds Ratio Analysis. **RESULTS:** The analysis of hospitalizations in the last five years shows that there is a tendency towards a negative correlation, ( $r^2 = -0.8589$ ) showing that a greater number of leukemia cases affect younger people ( $p < 0.001$ ) (children between 1 and 4 years makes up the most significant age group), the group of age groups from 1 to 12 years old accounts for 44.34% of cases. The findings are corroborated by the study by Brayley et al., (2019), which points out that leukemia is the most common cancer in children with wide manifestations, from a relatively well child to life-threatening complications. In relation to deaths, the Pearson correlation is positive ( $r^2 = 0.8566$ ), showing that there is a strong positive correlation between deaths and age ( $p > 0.001$ ). In this context, 56.33% of deaths are of patients aged 50 and over, even though this age group accounts for only 23.58% of cases. The data show that males have a slight but significant higher risk of death from leukemia, the risk varies from 1.086 (1.047 to 1.126) times higher for men compared to women, considering  $p < 0.05$ . **CONCLUSION:** The data allow us to conclude that there are particular profiles that predispose to a poor prognosis related to increasing age, despite the majority of cases occurring in young people. Furthermore, it is worth mentioning that the risk of death is slightly higher in males, an important finding to be taken into consideration.

40. **ANALYSIS OF TEMPORAL TRENDS IN THE PNEUMONIA MORTALITY RATE IN THE STATE OF MARANHÃO**

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**INTRODUCTION:** Pneumonia is an acute inflammation of the lung parenchyma, triggered by microorganisms or inhalation of toxic substances. It is the leading cause of death in children under 5 years old and a significant factor in the mortality of the elderly, with a substantial impact in Maranhão. Therefore, this study aims to analyze temporal trends in the mortality rate due to pneumonia in the state of Maranhão. **METHODS:** This is an ecological, cross-sectional analysis with a quantitative approach, using data from the Department of Informatics of the Unified Health System (DATASUS). Data related to the number of hospitalizations, gender, race, age group, deaths, and mortality rate were collected. Prais-Winsten regressions were used to analyze the trends in incidence rates, considering autocorrelation in time series. Annual Increment Rates (AIR) and their confidence intervals were calculated. Statistical analysis was performed using SPSS 25.0 for Windows, adopting a significance level of 5%. **RESULTS:** From 2013 to 2022, 218,061 cases of pneumonia were recorded in Maranhão, with 111,724 cases in males and 106,337 in females. Additionally, approximately 245,461 hospitalizations and a total of 4,913 deaths for males and 4,499 deaths for females were reported. The age group of 1 to 4 years old in males had the highest number of hospitalizations (31,584), while in females, the age group of 50 to 79 years old had the highest (27,745). The mortality rate showed a growing trend, increasing from 2.44% (2013) to 5.18% (2022) in males and from 2.2% (2013) to 5.63% (2022) in females. Regarding race, the highest number of cases occurred in the "parda" category (113,893), followed by "amarela" (9,156), "branca" (6,829), and "preta" (2,556). The Prais-Winsten method demonstrated an increasing trend in pneumonia mortality cases in Maranhão for both males, with an AIR of 20.2 (15.3; 26.6;  $p < 0.001$ ), and females, 23.1 (17.8; 29.1;  $p < 0.001$ ). **CONCLUSION:** It is inferred that monitoring and temporal tracking of pneumonia in Maranhão are essential to assess improvements in access to healthcare services and the effectiveness of prevention actions over the years, representing a fundamental strategy for epidemiological surveillance.

41. **ANALYSIS OF THE HOSPITALIZATION PROFILE BY HEART FAILURE IN THE NORTHEAST BETWEEN 2018 AND 2022**

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**INTRODUCTION:** Heart Failure (HF) is a complex condition in which the heart becomes inefficient for the proper pumping of blood into the body, generating a reduction in cardiac output or increased pressure when trying to reach its filling. This syndrome is characterized by the inability of the patient to perform usual activities and may have the presentation of symptoms (dyspnea, fatigue, edema, among others) even at rest. Therefore, it is a clinical condition that brings limitations to the individual's living standards. In addition, HF has various causes, such as coronary artery disease, acute myocardial infarction and arterial hypertension, which are diseases conditioned by aging sometimes. **METHODS:** This is a time series study regarding hospitalization data by Heart Failure in the Northeast, has been presented in the form of absolute and relative frequency. The variables adopted were: sex, age group and race/color and the data collected were in the period from 2018 to 2022, from secondary data extracted out of DATASUS. **RESULTS:** In the period analyzed by the research, the profile outlined in the Northeast presents a total of 208,532 cases, with Bahia (31.42%) as the state of highest prevalence, followed by Pernambuco (20.13%). Of all the cases in the region, there is a higher occurrence in males (113,188), with a corresponding age group between 70 and 79 years (51,087), with the predominant race being brown (118,103). **CONCLUSION:** Through the analysis of the profile of hospitalization for Heart Failure in the Northeast, among its states, it was observed that Bahia had a higher prevalence. In addition, there was a predominance in males, in the age group of 70 to 79 years and in the brown color/race over all number of cases. However, the aforementioned results do not coincide with the existing literature regarding Brazilian statistics, despite converging regarding the male sex, the highest rate of cases is in the age group of 80 years or more and in the white color/race. In short, the conclusions of this study can direct future research and improve public policies related to early diagnosis and prevention of a limiting disease. Investments in these areas are essential to promote a better quality of life and effectively face this public health challenge.

42. **ANALYSIS OF THE EPIDEMIOLOGICAL PROFILE OF MATERNAL DEATHS IN MARANHÃO FROM 2012 TO 2021**

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**INTRODUCTION:** Maternal deaths are those that occur during pregnancy, childbirth, or during the 42 days of postpartum. These numbers are important indicators regarding women's living conditions and health care, since, in developing countries, social and economic obstacles affect the population's health. The objective of this study was to analyze the epidemiological profile of maternal deaths, as well as understand who are the women who die most during the pregnancy-puerperal cycle. **METHODS:** This is a cross-sectional and retrospective study, analyzing secondary data on maternal deaths in the state of Maranhão from 2012 to 2021, coming from health information systems (DATASUS). Variables such as race, education, marital status, and age group were used. **RESULTS:** In the period described, 1,035 maternal deaths were recorded, with 2021 being the year with the highest number of deaths recorded (146 deaths). The majority of maternal deaths (74,7%) occurred due to direct obstetric death. Black women were the biggest victims (82,8%) and the most affected age group was 20 to 29 years old (32,6%). Only 21% of women were married and the majority (82,2%) had less than 12 years of education. Of the 1,035 deaths, 88% occurred in hospitals, 4,5% occurred at home and 2,8% occurred on public roads. Regarding the period of death, 29,6% of deaths occurred during pregnancy, childbirth, or abortion, 40,8% occurred during the postpartum period (up to 42 days) and 5,8% did not occur during pregnancy or the postpartum period. **CONCLUSION:** In Maranhão, the majority of victims of maternal deaths are black, single women without higher education and the majority of deaths occurred during the postpartum period (up to 42 days). Furthermore, socioeconomic factors influence this problem, as socially vulnerable individuals have more difficulty accessing health services. Therefore, it is important to know the profile of women who die as a result of the pregnancy-puerperal cycle, to promote healthcare policies that reach these women.

**43. ANALYSIS OF THE EPIDEMIOLOGICAL PROFILE OF GESTATIONAL TOXOPLASMOSIS IN THE STATE OF MARANHÃO**

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**INTRODUCTION:** Toxoplasmosis is a zoonosis caused by the intracellular protozoan *Toxoplasma gondii* (*T. gondii*) that affects humans and other warm-blooded animals. *T. gondii* infection is generally considered to pose a major risk of miscarriage, prematurity, and low birth weight. The transplacental passage of the parasite depends on several factors, such as the gestational period in which the infection occurs. The detect for this pathology during prenatal care is important, because the infection can occur without clinical manifestations. Therefore, this study have to identify the epidemiological profile of gestational toxoplasmosis in the state of Maranhão in the period from 2019 to 2022. **METHODS:** This is a descriptive epidemiological study based on data about gestational toxoplasmosis that are available in the Department of Informatics of the Unified System of Health (DATASUS). The population studied were pregnant women in the state of Maranhão, who have gestational toxoplasmosis between 2019 and 2022. The keywords used in the study were: "year of processing", "confirmed cases", "age group" and "education". **RESULTS:** During the analysis, there were 1,204 case notifications by pregnant women infected with toxoplasmosis in the state of Maranhão. Over the years, there has been a progressive increase in infection, so that in 2022 there was the highest number (n = 390, 32.39%), while in 2019 the lowest (n = 243, 20.18%). Regarding the cases confirmed throughout the study, there were a total of 777, with the majority of these cases being confirmed during the second trimester of pregnancy (n = 380, 48.91%). According to age group, 70.35% (n=847) of reported cases are aged 20-39, representing the majority, while only 1.58% (n=19) of reported cases are aged 40-59. years. About education, 38.21% (n=460) completed high school, 14.78% (n=178) did not complete high school and 0.58% (n=7) were illiterate. **CONCLUSION:** As a result, this study highlights the increase in the number of women infected with toxoplasmosis during pregnancy in the state of Maranhão. Similarly, it was found that the prevalence of cases in pregnant women occurs in the age group of 20 to 39 years, during the second trimester of pregnancy and that the majority of those infected have completed high school. Moreover, the identification of the most vulnerable groups makes it possible to urgently target intervention actions seeking the prevention, diagnosis and treatment of gestational toxoplasmosis in the state.

**44. ANALYSIS OF THE EPIDEMIOLOGICAL PROFILE OF AIDS CASES IN MARANHÃO FROM 2018 TO 2022**

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**INTRODUCTION:** Acquired Human Immunodeficiency Syndrome (AIDS) is an immunodepressant infectious disease caused by the Human Immunodeficiency Virus (HIV). HIV is an emerging infectious agent with high transmissibility and morbidity when not adequately treated, being one of the main public health problems globally. Therefore, this study seeks to better understand the epidemiological profile of AIDS in Maranhão. **METHODS:** This is a quantitative and retrospective cross-sectional study resulting from the survey of AIDS epidemiological data in Maranhão from 2018 to 2022. The data were obtained through the Information and Notifiable Diseases System (SINAN) and made available by the Information Technology Department of the Unified Health System (DATASUS). For the epidemiological analysis, the variables gender, race, age group and municipality of residence were evaluated. The information obtained was statistically analyzed to identify patterns and epidemiological trends related to AIDS in the state. **RESULTS:** In the period from 2018 to 2022, according to SINAN data, 1,860 cases of AIDS were diagnosed in Maranhão. Among these, a higher frequency was found in males, equivalent to 64.6%, and in the age groups of 35-49 years and 20-34 years, representing respectively 39.5% and 37.5% of total AIDS cases. in the period analyzed. Regarding race, the highest frequency of the disease was observed in brown individuals, with 71.8%. Furthermore, São Luís had the highest number of cases diagnosed per municipality (58.8%), followed by Imperatriz (13.1%) and Caxias (6.2%). **CONCLUSION:** In view of the above, there is a high frequency of new cases of AIDS in Maranhão, especially in the urban environment due to the strong relationship between the disease and the degree of development and population size. It is also possible to observe that the population group made up of men, mixed race and young adults is the most frequently affected by the disease. This epidemiological trend may be related to risky sexual behaviors or a deficit in sexual education, frequently observed in this group. Therefore, health education measures focusing on groups at risk for HIV infection, in the long term, are important for reducing cases of the disease.

45. **ANALYSIS BETWEEN BCG VACCINE APPLICATIONS IN THE TARGET POPULATION, IN THE NORTHEAST, FROM 2018 TO 2022**

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Claudio de Azevedo Gonçalves Junior<sup>1</sup>, Higina Cristina da  
Silva Araújo<sup>1</sup>, Laina Luiza Pitombeira Rocha<sup>1</sup>, Katarin Costa  
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**INTRODUCTION:** The BCG vaccine, so called because it is composed of the Calmette-Guérin bacillus, protects against serious forms of tuberculosis, a contagious disease, which, if not properly treated, can cause serious damage, such as respiratory conditions, and even lead to death. Thus, the vaccine is the form of immunization to prevent the disease and needs to be applied in a single dose, to the target population, all of whom are born alive, preferably on the day of birth. Therefore, the objective of this work is to analyze the number of doses of BCG applied, by state in the northeast region, from 2018 to 2022.

**METHODS:** This is an epidemiological, quantitative, descriptive study on BCG vaccination, with secondary data from the tabnet-DATASUS-Immunizations and tabnet-DATASUS-Vital Statistics, period from 2018 to 2022 in the northeast region of Brazil. The vaccination coverage indicator was calculated (total doses vaccinated, divided by the target population) for each state in the period analyzed.

**RESULTS:** 3,528,974 BCG applications were carried out in northeastern Brazil from 2018 to 2022. There was an oscillating trend in the period, with a decline from 2018 to 2021 and an increase in 2022. Bahia was the state with the highest number of vaccinations (n=803,652), followed by Pernambuco (n=626,228), Ceará (n=549,560), Maranhão (n=464,630), Paraíba (n=252,346), Alagoas (n=231,135), Piauí (n=225,172), Rio Grande do Norte (n=215,839) and, finally, Sergipe (n=160,412). As for vaccination coverage, Sergipe and Rio Grande do Norte lead with approximately 97% vaccinated target population, followed by Pernambuco (n≅96%), Alagoas (n≅95%), Piauí (n≅92%), Paraíba (n≅90%), Ceará (n≅88%), Maranhão (n≅87%) and, finally, Bahia (n≅85%). **CONCLUSION:** BCG vaccination is an important means of preventing worrying forms of tuberculosis. Therefore, it was observed that, in the Northeast, the states that administered the most vaccines were Sergipe and Rio Grande do Norte, with emphasis on Ceará, Maranhão and Bahia which, in a period of 5 years, did not reach 90% of vaccination coverage, which is the goal established by the National Immunization Program. In view of this, it is necessary to increase vaccination coverage in these states, through immunization campaigns, with the help of community agents in the active search for newborns, in addition to establishing vaccination in the maternity ward as a criterion for receiving hospital discharge, to reach the designated target and expand tuberculosis prevention.

46. **EPIDEMIOLOGICAL ANALYSIS OF MORTALITY CAUSED BY SICKLE CELL ANEMIA IN NORTHEAST OF BRAZIL IN THE LAST 10 YEARS**

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Beatriz Ferreira Cardoso<sup>1</sup>, Pedro Lucas Baía Paixão<sup>1</sup>, Larissa  
de Sousa Miranda<sup>1</sup>, Johnatha de Sousa Oliveira<sup>1</sup>, Wellysson  
da Cunha Araújo Firmo<sup>1</sup>

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**INTRODUCTION:** Sickle cell anemia (SCA) is an autosomal recessive hereditary disease, in which there is a substitution mutation in the  $\beta$ -globin gene that causes abnormal hemoglobin type S (HbS). In this context, deficient red blood cells are susceptible to the sickling process, which induces inflammation and causes clinical repercussions that can lead to death, such as cerebral infarction and acute chest syndrome. Therefore, this work aimed to evaluate the epidemiological profile of SCA mortality in the Northeast region between 2012 and 2021. **METHODS:** It consists of a descriptive epidemiological study, with a quantitative approach, based on data provided by the platform of the Department of Informatics of the Unified Health System (DATASUS). Information on mortality due to Sickle Cell Disorders (ICD code D57) was gathered from 2012 to 2021. The variables addressed were: sex, race/color, age group, education and place of death. **RESULTS:** During the period studied, the Northeast region occupied the second place with the highest number of deaths (1564), behind only the Southeast region, which had 2023 records. Regarding sex, there was a slight predominance of males, with 829 cases, that is 12% more than females. The most affected race/color was brown, with 971 occurrences, followed by black, with 371. In relation to age group, adults aged 20 to 24 and adolescents aged 15 to 19 stood out, with 176 and 169 cases, respectively. There was also a significant prevalence in children aged zero to ten years with 355 deaths (22.6%). About the education, among the applicable cases, only 81 people completed primary education, that represents 7.3%. 82% of deaths occurred in the hospital environment (1286 records). This situation is explained by the successive hospitalizations faced by patients with SCA, since the complications generated by sickling crises, if not properly prevented, become recurrent. **CONCLUSION:** The study carried out proves the need for further discussions regarding the prevention of mortality caused by sickle cell disorders, as it affects different age groups, including children. The risk factors stand out as male individuals, aged 20 to 24, with incomplete primary education and who required hospitalization due to the disease.

47. **EPIDEMIOLOGICAL ANALYSIS OF SYPHILIS ACQUIRED IN MARANHÃO BETWEEN THE YEARS OF 2018 AND 2021**

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**INTRODUCTION:** Syphilis is one of the most common sexually transmitted infections (STIs) in the world, with an alarming incidence of six million cases annually. Caused by the bacterium *Treponema pallidum* and classified as congenital or acquired (transmitted sexually or blood transfusion), syphilis can present different clinical manifestations. Although it is an easily treatable disease, when not treated properly, it can evolve into serious forms that can affect the central nervous and cardiovascular systems, leading to death. The high number of cases of acquired syphilis still reported over the years emphasizes the need to prioritize the quality of health care, as it is essential to plan control, prevention and surveillance actions related to this issue. With this perspective, the present study aims to analyze the epidemiological profile of people diagnosed with acquired syphilis in Maranhão between 2018 and 2021. **METHODS:** This is a descriptive, quantitative and retrospective epidemiological study with secondary data from syphilis cases acquired in Maranhão. The data were extracted from the Information Technology Department of the Unified Health System (DATASUS), with the following variables listed: age group, sex, race and education. **RESULTS:** During the period, 5,450 cases were reported, with 2018 (n=1,787) being the year with the highest number of infections (32.78%) and 2021 (n=674) the lowest (12.36%). Regarding age group, adults aged 20 to 39 years were the most infected, corresponding to 52.78% of cases (n=2,877), followed by the age group 40 to 59 years: 28.12% (n=1,533). Regarding sex, 56.09% (n=3,057) of infections were registered among men and 43.90% (n=2,393) among women. Furthermore, 68.89% (n=3,755) of those infected were brown. With regard to education, the majority had completed high school, recording a total of 1,275 (23.39%) occurrences. The outcome for the majority of those infected was cure: 2,030 (37.24%). **CONCLUSION:** In this analysis of the epidemiological profile of the population with acquired syphilis in Maranhão, the seriousness of the situation is evident. The high number of reported cases, especially among young adult men, highlights the need for preventive and awareness measures to be adopted by health authorities, aimed at this population. Therefore, improving notification and epidemiological surveillance is essential for more effective public health management.

48. **EPIDEMIOLOGICAL ANALYSIS OF MELANOMA IN MARANHÃO BETWEEN 2018 AND 2022**

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**INTRODUCTION:** Malignant melanoma is caused by damage to the DNA of melanocytes due to excessive and unprotected exposure to ultraviolet (UV) rays. Melanoma manifests itself in the form of spots and nodules, with characteristics of asymmetry and irregularity. Malignant melanoma is the most serious type of skin cancer due to its high potential for metastasis, which highlights the need to detect the cancer at an early stage and thus enable a good prognosis for the disease. In addition, preventive measures that are accessible to the population are essential to avoid an increase in cases. Therefore, this study aims to identify the epidemiological profile of melanoma in Maranhão and compare its incidence in relation to the Northeast. **METHODS:** This was a descriptive, comparative and analytical study between 2018 and 2022, based on data provided by the Cancer Information System (SISCAN). The parameters used were age group, gender, year of diagnosis and treatment, and therapeutic modality used. **RESULTS:** Between 2018 and 2022, the Northeast quantified 3,364 diagnoses of malignant melanoma 152 of which were in Maranhão, which represents approximately 4.5% of cases. In terms of age group, 60 to 64 year olds were the most affected in the state, while the prevalence in the region was 80 years and over. Males predominated in both analyses, accounting for 55.2% of cases in Maranhão and 50.3% in the Northeast. The year with the most diagnoses in the state and the region was 2022, which was also the year with the most treatments in Maranhão (35). However, 2019 was the year with the most treatment in the Northeast (418). Finally, with regard to the therapeutic modality, chemotherapy was the method most used in the state, in 62 cases. Surgery, on the other hand, was the intervention most adopted at regional level, in 822 cases. As for the lack of treatment information in Maranhão and the Northeast, the rate was 26.3% and 47.3%, respectively. **CONCLUSION:** Between 2018 and 2022, Maranhão was one of the states with the lowest rate of diagnosis of melanoma, with the male population being the most affected. In addition, the data shows that the prevalent age group for this cancer is younger in Maranhão when compared to the Northeast. Furthermore, chemotherapy is the most common treatment for patients with malignant melanoma in the state, while surgery was the most common technique in the region.



49. **EPIDEMIOLOGICAL AND VACCINATION ANALYSIS OF PERTUSSIS IN CHILDREN IN BRAZIL FROM 2011 TO 2022**

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**INTRODUCTION:** Pertussis refers to an acute infectious disease caused by the *Bordetella pertussis* bacillus, with high transmission potential, worldwide significance, and being a major cause of infant morbidity and mortality, characterized by respiratory symptoms that can progress to paroxysms of dry cough and wheezing. As prophylaxis, the Ministry of Health establishes vaccination for children at the second, fourth, and sixth months of life. Thus, an epidemiological analysis is necessary based on recent data indicating a decrease in childhood vaccination in Brazil. **METHODS:** This is an epidemiological and descriptive study of pertussis cases in pediatrics in Brazil between 2011 and 2022, and childhood pertussis immunizations between 2011 and 2022 in Brazil, extracted from DATASUS, from the Ministry of Health, to evaluate the correlation between the data. **RESULTS:** There were a total of 30,037 cases of pertussis in patients aged 0 to 19 years in Brazil between 2011 and 2022, with the highest number of occurrences in 2014 (7,638). The most affected population was children under one year old, representing 65.74% (N= 19,746) of the number of cases. In addition, regarding the quantity of immunizations in the Brazilian infant population between 2011 and 2022, 548,529 doses of the Acellular Pertussis vaccine (DTPa) were administered, with the highest number of doses in 2012 (117,109) and the lowest in 2022 (9,509). The population that received the vaccine the most were children under one year old, totaling 52.93% (N= 290,353). A significant reduction of 91.88% in the number of doses administered was observed comparing 2012 to 2022. **CONCLUSION:** The epidemiological scenario points to a decrease in the number of pertussis cases per year, while also revealing a sharp decrease in vaccinated children against the disease. Concurrently, there is an increase in the spread of unsubstantiated speeches and campaigns promoting vaccine hesitancy, generating a continuous trend where future statistics continue to reveal a decrease in the number of vaccinated children, allowing diseases like pertussis to increase in incidence and return to prominence. Furthermore, it is evident that the population under one year old is both the most affected and the most vaccinated. From this, the need for immunization policies to prevent Brazil from suffering from an increase in these cases in the future is highlighted.

50. **ANALYSIS BY AGE GROUP OF COLORECTAL CANCER DIAGNOSES IN BRAZIL FROM 2012 TO 2022**

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**INTRODUCTION:** Colorectal cancer is one of the most common neoplasms in Brazil. It affects portions of the colon up to the rectum and has no symptoms in the early stages. Its prevalence is mostly in the 50 and over age group. However, recent research in developed and developing countries has reported an increase in cases in adults under the age of 50. Therefore, this study aimed to describe the prevalence of colorectal cancer by age group in Brazil from 2013 to 2022. **METHODS:** This was a descriptive, retrospective and quantitative study. Secondary data was collected on the number of colorectal cancer diagnoses, by age group, in Brazil from 2013 to 2022, through the Cancer Information System (SISCAN), on the platform of the Department of Informatics of the Unified Health System (DATASUS), with the data tabulated by the TABNET application. **RESULTS:** In 2013, there were 13,953 cases of colorectal cancer in Brazil, of which 2,801 were in the 30-49 age group and 7,613 in people aged 50-69. In 2018, the total number of registrations was 23,116 (an increase of 65.6%), of which 4,042 were people aged 30 to 49 - an increase of 44.3% compared to 2013 - and 11,757 diagnoses in the 50 to 69 age group. In 2022, the total number of cases amounted to 35,361 (52.9% more than in 2018), of which 5,625 were in the 30 to 49 age group - an increase of 39% - and 19,269 represented people aged between 50 and 69. In addition, colorectal cancer cases among adolescents and young adults (10 to 29 years old) rose from 237 cases in 2013 to 1,245 diagnoses in 2022. **CONCLUSION:** Although colorectal cancer is still more prevalent in people over the age of 50, an increasing number of diagnoses can be seen in all age groups over the last 10 years. Thus, the increase in incidence among adults under the age of 50 is a wake-up call for investigation into the possible causes influencing the early development of colorectal cancer, with a view to understanding these reasons and generating health promotion strategies for all age groups.



51. **PROGNOSTIC ANALYSIS OF PATIENTS WITH PANCREATIC ADENOCARCINOMA: A LITERATURE REVIEW**

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**INTRODUCTION:** Pancreatic adenocarcinoma (PAD) holds the worst prognosis among common solid malignancies, with a 5-year overall survival of only approximately 10%. Despite its high prevalence, early diagnosis remains challenging, often resulting in advanced-stage diagnoses and limiting curative treatment options. The objective is to emphasize the importance of conducting a literature review to assess prognostic factors, aiming to enhance perspectives and the quality of life for affected patients. **METHODS:** This literature review on the prognosis of patients diagnosed with PAD was constructed from publications found in the Pubmed, SciELO, and BVS databases. Scientific productions were selected using the descriptor "Prognosis of pancreatic adenocarcinoma." Eight articles in Portuguese and English, published between 2018 and 2023, were chosen. **RESULTS:** Selected articles indicate that treatment and prognosis are guided by staging. It was observed that the presence of nodal or distant metastases, poorly differentiated tumors, and patient characteristics such as advanced age and male gender are associated with an unfavorable prognosis and increased morbidity and mortality in PAD cases. Additionally, patients with elevated preoperative levels of CA19-9, a high modified Glasgow prognostic score, and positive peritoneal cytology were more likely to experience early postoperative recurrence, resulting in a reserved prognosis. While surgical resection remains the only potentially curative approach for PAD, the use of perioperative adjuvant therapy and neoadjuvant chemotherapy, particularly gemcitabine-based, gradually improves outcomes. Furthermore, the impact of early detection on outcomes is highlighted, as patients with PAD smaller than 1 cm, diagnosed through endoscopic ultrasound, had higher 5-year survival rates. **CONCLUSION:** Despite significant advances in understanding recurrent and complicating factors of PAD, the disease's prognosis remains challenging, partly due to late detection and therapeutic limitations in advanced cases. This underscores the need for studies establishing earlier diagnostic strategies, enabling disease control, either curatively or by alleviating patient symptoms in palliative care.

52. **REGIONAL ANALYSIS OF HOSPITAL ADMISSIONS FOR CROHN'S DISEASE AND ULCERATIVE COLITIS IN BRAZIL (2013-2023).**

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**INTRODUCTION:** Inflammatory Bowel Diseases (IBD) have exhibited a significant incidence in recent years, potentially rising to the status of a global epidemic. IBD is recognized as a chronic inflammation affecting the digestive tract, with the small and large intestines being the primary sites of involvement. The predominant pathologies encompass Crohn's Disease (CD) and Ulcerative Colitis (UC), which manifest in genetically predisposed individuals. These conditions manifest with a variable clinical spectrum, encompassing manifestations from intestinal symptoms to extraintestinal symptoms such as abdominal pain, recurrent diarrhea, hemorrhagic evolution, anemia, and nutritional deficiencies. Therefore, the study aimed to analyze the incidence of hospital admissions for IBD across different regions of Brazil from 2013 to 2023. **METHODS:** Data were extracted from the Hospital Information System of the Unified Health System (DATASUS), focusing on the Hospital Morbidity of SUS dataset, specifically targeting Chapter XI - Diseases of the Digestive System, and the morbidity list related to CD and UC. The assessment period spanned from January 2013 to August 2023. Regions were categorized according to Brazil's official division into North, Northeast, Southeast, South, and Midwest. For each region, the Absolute Difference in Admissions ( $\Delta N$ ) between 2023 and 2013, as well as the Average Annual Growth Rate (AAGR), were calculated using the formula for obtaining the geometric mean of the annual growth rate over the ten analyzed years. Subsequently, data tabulation and descriptive analysis were conducted using the Microsoft Office Excel program. **RESULTS:** The regions that exhibited reductions in both  $\Delta N$  and AAGR were the North ( $\Delta N$ : 128/AAGR: 8.83%), South ( $\Delta N$ : 130/AAGR: 2.61%), and Midwest ( $\Delta N$ : 23/AAGR: 1.11%). Conversely, those demonstrating an increase in admissions were the Northeast ( $\Delta N$ : 197/AAGR: 1.66%) and Southeast ( $\Delta N$ : 286/AAGR: 1.31%) regions. In comparison across all regions, there was an increase of 202 admissions, equating to an average annual growth rate of 0.49% over ten years. **CONCLUSION:** The results reveal significant variations in the trends of hospital admissions for CD and UC throughout the analyzed period. This regionalized analysis provides valuable insights for healthcare policy management and resource planning for the early diagnosis and treatment of these conditions in Brazil.

53. **OROLINGUAL ANGIOEDEMA AFTER ALTEPLASE INFUSION IN ISCHEMIC STROKE**

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**INTRODUCTION:** Ischemic stroke (IS) is often treated with the administration of recombinant tissue plasminogen activator (rtPA), such as Alteplase, aiming to restore cerebral blood flow. However, orolingual angioedema, a potentially severe complication associated with rtPA therapy, although underestimated, is characterized by a sudden and severe edema of the soft tissues of the oral cavity and oropharynx, which can lead to airway obstruction. This review aims to examine orolingual angioedema following the use of Alteplase in the management of IS, covering its clinical manifestations, predisposing factors, and management strategies. **METHODS:** A literature review was conducted in the PubMed database using the descriptors "Angioedema" and "Alteplase" linked by the boolean operator AND. Initially 47 articles were found. Filters were applied to select only articles published in the last 5 years, with full text available for free and written exclusively in English. After applying the filters, 14 articles remained that were selected for full reading and subsequent analysis. Of these 14 articles, 3 were excluded for not being directly related to the theme of this review and 1 for being partially written in Japanese. In the end, 10 articles were included in this review. **RESULTS:** Studies show that orolingual angioedema after thrombolysis with alteplase in ischemic stroke occurs in 1.3-5% of patients. Risk factors include previous use of ACEI, insular cortex infarction, and female sex. It manifests ipsilaterally to the lesion, between 30 minutes and 4 hours after the start of infusion. Its pathophysiology involves bradykinin accumulation due to the action of alteplase. The recommended management is to discontinue the fibrinolytic and administer corticosteroids, antihistamines, and epinephrine, with reports of use of icatibant and C1 inhibitors. With proper treatment and monitoring, most cases show complete resolution. **CONCLUSION:** Orolingual angioedema is a rare but potentially severe complication of rtPA administration for the treatment of IS. It is important that physicians be aware of this complication and know how to recognize and treat it properly. Further research is needed to better understand the underlying mechanism of angioedema after rtPA administration and to develop effective preventive strategies.

54. **LAPAROSCOPIC VERSUS OPEN APPENDECTOMY: A COMPARATIVE ANALYSIS**

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**INTRODUCTION:** Acute appendicitis is an inflammatory abdominal disease. It is the most common emergency with 17 patients/1,000 inhabitants, affecting mainly young people. Characterized by inflammation and infection of the vermiform appendix, acute appendicitis requires surgical intervention in its treatment, with appendectomy being the gold standard for treatment, through the laparotomic or laparoscopic approach. The laparoscopic technique has been shown to be superior, associated with shorter hospital stays, better aesthetic results and a reduction in the number of surgical wound infections when compared to the laparotomic technique. However, this route depends on an adequate structure and trained surgeons, making this technique more expensive. The aim of this study was to carry out a comparative study of the techniques used in the five regions of Brazil, in order to improve knowledge about the health services available in the country, comparing the number of laparoscopic and laparotomic surgeries performed. **METHODS:** Cross-sectional analytical study comparing the number of conventional and laparoscopic appendectomies performed in the five regions of the country between 2018 and 2022, with data obtained from **DATASUS** and processed in the Microsoft Excel® program for descriptive statistical analysis. **RESULTS:** Between 2018 and 2022, a total of 580,675 appendectomies were performed in Brazil. Of these, 536,792 were performed by laparotomy, representing approximately 92.5% of the total. On the other hand, only 43,883 procedures were carried out using the laparoscopic technique, corresponding to around 7.5% of all appendectomies performed. The number of laparoscopic appendectomies by region was as follows: a total of 18,332 procedures in the South, 17,518 in the Southeast, 2,652 in the Midwest, 5,192 in the Northeast and 189 in the North. **CONCLUSION:** The comparative analysis revealed that the conventional route accounts for over 90% of the number of procedures carried out. The South concentrates the largest number of video surgeries, while the North concentrates the smallest proportion. Thus, corroborating findings in the literature, it was found that the laparoscopic approach is still the least used due to its high cost.

55. **CLINICAL-EPIDEMIOLOGICAL ASPECTS OS TUBERCULOSIS CASES IN MARANHÃO FROM 2013 TO 2023**

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**INTRODUCTION:** Tuberculosis is a chronic infectious disease caused by *Mycobacterium tuberculosis* and spread through the air. The infection transmitted through aerosol droplets from bacilliferous patients can remain in a state of latency, occurring most of the time, or develop pulmonary and, less frequently, extrapulmonary manifestations. Therefore, the objective of the study is to characterize the clinical-epidemiological profile of tuberculosis in Maranhão over 10 years. **METHODS:** This is a cross-sectional and retrospective study of confirmed cases of Tuberculosis between the years 2013 and 2023 in the state of Maranhão. Data from the SUS Information Technology Department (DATASUS) were used, with analysis of the variables: age group, sex, race and clinical form. **RESULTS:** Between the years 2013 and 2023, the state of Maranhão recorded a total of 26,441 confirmed cases of tuberculosis, with 2022 being the year with the highest number of cases (n=3,222). In relation to age group, the most affected was 20 to 39 years old 42.8% (n=11,321), followed by 40-59 years old 31% (n=8,079), and the least affected was in children under 1 year old 0.04% (n=11). Regarding race, brown people represented 71.6% (18,943), while in terms of gender, men represented the majority of cases with 66% (n=17,530). The most common clinical form diagnosed was Pulmonary, recording 90% (n= 23,818) of all cases. **CONCLUSION:** Through epidemiological data taken from the DATASUS platform, it was possible to observe that the economically active population is the most affected. In this sense, it is concluded that Tuberculosis is a serious public health problem, as well as a constant challenge to be eradicated in the state of Maranhão.

56. **CLINICAL ASPECTS AND COMPLICATIONS OF HYDATIDIFORM MOLE: A LITERATURE REVIEW**

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**INTRODUCTION:** Hydatidiform mole (HM) is part of a group of diseases that develop from abnormal proliferation of the trophoblast and are classified as gestational trophoblastic disease (GTD). The two distinct types of HM, complete mole and partial mole, have different karyotypes, macroscopic and microscopic histopathology, clinical presentations, and prognoses. The aim of this study is to describe the clinical presentation and complications of HM. **METHODS:** This is an integrative literature review on HM, conducted through scientific articles from Scielo, Pubmed, BVS, and LILACS databases, in English, Spanish, and French languages from 2020 to 2023. The descriptors "molar pregnancy", "hydatidiform mole", "complications" were used. **RESULTS:** GTD refers to a group of tumors characterized by abnormal trophoblastic proliferation. This pathology has a frequency of 1-3.72 cases per 1000 pregnancies, with complete mole being the most prevalent type (65.2-66.6%). Risk factors include a history of molar pregnancy, pregnancies at reproductive extremes, low parity, and a history of abortion. Diagnosis involves clinical data, beta-hCG levels, abdominal and transvaginal ultrasound evaluation, and histopathological study, with the latter being the gold standard examination. Regarding beta-hCG, which is produced in large quantities by the hyperplastic trophoblast, it often presents values above 100,000 mIU/L. Clinically, these patients present with vaginal bleeding, hyperemesis, uterine enlargement for gestational age, hyperthyroidism, hypertension, proteinuria, and early preeclampsia. On ultrasound, the complete mole is easily visualized, while the diagnosis of partial mole occurs later, as changes are only visible from the 12th week of gestation. Treatment involves uterine evacuation through uterine aspiration and hysterectomy if the patient has completed childbearing and is hemodynamically stable. Additionally, post-molar follow-up with serum beta-hCG measurement is essential to detect possible progression to gestational trophoblastic neoplasia. **CONCLUSION:** According to the literature analyzed, it is essential to detect anomalous pregnancies early and understand their evolution, as early diagnosis and treatment are crucial to avoid complications.

**57. GENERAL ASPECTS OF REFEEDING SYNDROME: A LITERATURE REVIEW.**

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**INTRODUCTION:** Refeeding Syndrome (RS) is defined as a severe hydroelectrolytic complication, with the potential risk of death, that happens shortly after the reintroduction of a diet, whether through oral, enteral, or parenteral means. Various factors contribute to the occurrence of RS, classified as moderate, high, and very high risk. Hypophosphatemia is the most crucial alteration in RS, but individuals may also present other metabolic changes affecting various systems (cardiovascular, respiratory, hematological, muscular, and neurological). Getting worse, cardiac arrhythmia, the main cause of death, can occur. Therefore, the objective of this review is to describe the general aspects of refeeding syndrome. **METHODS:** This is a literature integrative review study, conducted through data extraction from the LILACS database, in Portuguese and English languages, between the years 2012 and 2021. For the selection of publications, the following descriptors were used: Refeeding Syndrome; Protein-Energy Malnutrition; Hypophosphatemia. **RESULTS:** Regarding the pathophysiology of this syndrome, we have main conditioning is prolonged starvation leading to the depletion of glycogen energy reserves. Proteins they become redirected for structural and enzymatic functions within cells, what conditions the consumption of fat stores as an energy source. The volume of muscle fibers, hepatic cells, and brain cells decreases due to energy deficiency, hypophosphatemia occurs, leading to leads to clinical manifestations such as coagulation disorders, neuromuscular dysfunction, as seizures, for the commitment of the ventilatory muscles, mental confusion, and coma induced by neurological alterations. Adds up to the exposed, the changes metabolic, hypomagnesemia, hypokalemia, hyperglycemia, thiamine deficiency, water retention, vitamin deficiencies, and edema. **CONCLUSION:** RS is a condition that requires vigilance, since, they exist failures in early identification of the patient's nutritional status since there are often shortcomings. This is directly linked to unintentional weight loss, as well as to an increased risk of morbidity and mortality. Addressing the general aspects of RS proves to be important in professional conduct, given in view of impact on the prognosis of the hospitalized patient.

**58. ASPECTS RELATED TO THE PROGNOSIS OF PEDIATRIC PATIENTS WITH BILIARY ATRESIA**

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**INTRODUCTION:** Biliary atresia is a neonatal condition characterized by complete obstruction of intrahepatic and extrahepatic bile ducts, leading to chronic inflammation, fibrosis and cirrhosis in most patients. Clinical findings in a child with cholestasis typically include prolonged jaundice, scleral icterus, acholic stools, coluria and hepatomegaly, and early diagnosis is important to provide a better prognosis. Therefore, the aim of this study is to analyze the main factors related to a better prognosis in pediatric patients with biliary atresia. **METHODS:** A literature review was conducted, selecting articles published in the PubMed database from August 2018 to August 2023. Studies within the proposed period, available in English, and provided in full text were included. Duplicate articles, case reports, theses, dissertations, reviews and preclinical studies were excluded. **RESULTS:** After analysis, 2 articles were selected. It was identified that prognostic factors positively influenced jaundice treatment after portoenterostomy and long-term survival, including gestational age at term, normal delivery type, age at admission, age at diagnosis, and age at Kasai procedure. Initial prothrombin time (INR) was considered an independent prognostic factor for native liver survival in non-transplanted biliary atresia patients, as increased INR raised the risk of mortality. **CONCLUSION:** The results were promising in identifying factors for better prognosis, positively influencing jaundice treatment and long-term survival. On the other hand, the only predictor of surgical success was age, highlighting the importance of early diagnosis and timely surgical intervention in establishing a new biliary drainage system for patients with biliary atresia.

59. **ONCOLOGICAL CARE IN MARANHÃO: SURGICAL ADMISSIONS FROM 2017 TO 2022**Guyherme Fernando Fernandes Ferreira<sup>1</sup>, Déborah Lima Lopes Araújo, Denise Nascimento Carvalho<sup>1</sup>, Iasmim Bianca Melo Passos de Oliveira<sup>1</sup><sup>1</sup> Universidade Federal do Maranhão

**INTRODUCTION:** Among existing diseases, cancer is one of the illnesses with the greatest capacity for morbidity and mortality as it can cause various morphological, functional and metabolic changes, which compromises quality of life. According to the World Health Organization (WHO), around 80% of cancer patients require some surgical procedure. However, with the start of the spread of the SARS-CoV-2 virus, health services became overwhelmed, which may have impacted the outcome of treatment. Therefore, there is a need to determine whether there was any harm in execution of oncological surgeries during the COVID-19 pandemic in Maranhão. **METHODS:** Descriptive study on the number of hospitalizations related to surgical procedures in oncology in Maranhão, comparing the period from 2017 to 2019 with that of 2020 to 2022. Secondary data from the Hospital Information System were examined and the variables chosen were: oncology surgeries, hospitalizations, federative units and year/month of care. **RESULTS:** Maranhão recorded 21,125 hospitalizations for oncological surgeries between 2017 and 2022. In 2017, 2,867 oncological procedures occurred, with an upward trend until 2019, an average of 10.9% per year. In 2020, there was a drop of approximately 16% compared to the previous year. However, in 2021, there was an increase of around 35.5% compared to 2020, which recorded only 2970 procedures compared to 4024 the following year. The growth in the number of oncological procedures continued in 2022, maintaining the same growth trend as in the years before the pandemic. **CONCLUSION:** Therefore, it was found that, during the COVID-19 pandemic, there was a decrease in the number of hospitalizations for oncological surgeries in the first year. However, despite the Brazilian health system being oversaturated during the pandemic period, the state of Maranhão managed to reorganize oncological care in a timely manner, allowing the treatment of these patients to be carried out. Despite this, further studies are needed to assess the impact of the initial reduction in this treatment on the quality of life of affected patients.

60. **PRENATAL CARE AND ITS IMPACT ON NEONATAL INDICATORS IN MARANHÃO (2017-2021)**Gildean Pereira Costa<sup>1</sup>; Miriam Santos Nunes<sup>1</sup>; João Pedro Lima Dos Santos<sup>1</sup>; Débora Cardoso De Oliveira<sup>1</sup>; João Pedro Oliveira Da Silva<sup>1</sup><sup>1</sup> Universidade Federal do Maranhão

**INTRODUCTION:** Prenatal care plays a crucial role in promoting maternal and neonatal health, allowing for the early detection of problems and enabling timely interventions to ensure a healthy pregnancy. However, the quality of this care remains a challenge, with significant regional disparities. The aim of this study is to describe the relationships between the number of prenatal consultations and neonatal indicators in the state of Maranhão. **METHODS:** This is a descriptive, cross-sectional, quantitative study, using data obtained from the Department of Health Information of the Unified Health System (DATASUS) for the period from 2017 to 2021 in the state of Maranhão. Data on live births were examined, focusing on the number of prenatal consultations, Apgar score at the 5th minute, birth weight, and duration of gestation, excluding records with incomplete or missing data. **RESULTS:** An increase in the number of prenatal consultations from <4 consultations to ≥7 consultations is associated with a reduction in the frequency of live births with Apgar at the 5th minute ≤7 (from 4.02% to 2.06%), low birth weight (<2500g) (from 11.96% to 5.46%), and prematurity (from 18.94% to 7.54%). Out of 13,498 pregnancies with babies with Apgar ≤7, 21.77% had <4 prenatal consultations, while 39.98% received ≥7 consultations. Conversely, pregnancies with babies with Apgar >7 (506,195) had more consultations, with only 13.88% having <4 consultations and 50.59% having ≥7 consultations. Out of 476,620 newborns with normal weight (2500 to 3999g), 14.28% had <4 prenatal consultations and 50.20% had ≥7 consultations. On the other hand, out of 6,729 live births with very low birth weight (<1500g), 35.27% received <4 consultations, while only 22.05% had ≥7 consultations. Additionally, among the 7,884 newborns born at <32 weeks, 39.29% received <4 consultations, and only 17.30% had ≥7 consultations. In comparison, out of 454,355 term babies (37 to 41 weeks), 12.48% received <4 consultations, while 52.38% had ≥7 consultations. **CONCLUSION:** There was a significant association between a lower number of prenatal consultations (<4) and a higher incidence of premature births, as well as babies with low birth weight and lower Apgar scores at the 5th minute. These indicators were mitigated in pregnant women who received adequate prenatal care. These findings emphasize the importance of adequate prenatal care in reducing complications during pregnancy and ensuring good neonatal health.

**61. ASSOCIATION BETWEEN ADHD, HYPERSEXUALITY AND PARAPHILIAS: A REVIEW**

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**INTRODUCTION:** Attention deficit hyperactivity disorder (ADHD) is the most common neuropsychiatric disorder in childhood and adolescence, often persisting into adulthood, and is characterized by inattention, hyperactivity and impulsivity, including lack of self-control, impacting psychological, social and behavioral functioning. In this way, the greater the impulsivity, the less self-control, favoring undesirable results due to the behavior, such as financial losses or physical injuries, whether due to alcoholism, smoking, substance abuse, traffic violations or risky sexual behavior. Therefore, patients with ADHD are more susceptible to hypersexuality, sexual compulsion and paraphilias. **METHODS:** This is a literature review, in which we searched the Google Scholar and PubMed portals, using as eligibility criteria original articles published from 2019 onwards, without language restriction, and that specifically presented the theme. The descriptors used were: "ADHD"; "hypersexuality"; "paraphilias". **RESULTS:** It is clear that the hyperactivity and impulsivity of ADHD, especially the inattentive subtype, are associated with hypersexuality, currently called compulsive sexual behavior disorder, which is characterized by a persistent pattern of failure to control impulses or intense sexual urges, resulting in repetitive sexual behavior that causes harm or distress. As such, some ADHD patients have increased sexual desire, greater frequency and less sexual satisfaction than the general population. Because of this, some studies claim that there is also a relationship between ADHD and a higher prevalence of paraphilias, which are recurrent sexually arousing fantasies, urges, or sexual behaviors usually involving non-human objects, suffering or humiliation of oneself or one's partner, or of children or other people without consent. Paraphilia is differentiated from paraphilic disorder in that it does not threaten the well-being of other individuals. So, it can be seen that paraphilic symptoms are more common in adults, in the third decade of life, so it is more related to ADHD that persists into adulthood. **CONCLUSION:** Therefore, although there are studies associating ADHD, hypersexuality and paraphilias, there is still a need for more studies correlating the themes.

**62. SERVICES TO THE VARICOSE VEINS OF THE LOWER EXTREMITIES IN MARANHÃO FROM 2018 TO 2022.**

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**INTRODUCTION:** Varicose veins are dilated and tortuous veins that develop due to the malfunction of their valves, which causes the blood to return and stagnate inside the veins, causing dilation and reflux. Varicose veins are a severe consequence of varicose veins, which can result in prolonged hospital stay, time off work and surgical intervention. Therefore, the clinical and surgical importance of this venous disorder lies in the impact it causes on the physiological health, aesthetics and social life of patients, which can progress to serious stages with systemic repercussions. **METHODS:** The study in question is an epidemiological analysis, whose general objective is to evaluate the profile of care for varicose veins of the lower limbs in Maranhão between the years 2018 and 2022. The sociodemographic characteristics of the patients treated were investigated, the information was collected at the Information Technology Department of the Unified Health System (DATASUS) and several variables were analyzed. **RESULTS:** There were 1,603 elective hospitalizations, with the municipality of Timbiras having the highest percentage of cases (45.3%), followed by São Luís (31.5%), Imperatriz (6%) and Caxias (5.5%). The year 2019 had the highest number of hospitalizations of the period, totaling 449 cases (28%). Analyzing the profile of elective hospitalizations, it is clear that: women are responsible for around 82% of the cases, 71,8% are mixed race and the most affected age group was 40 to 49 years old (30,7%). There were 803 emergency admissions, 57,7% of whom were female and 47,4% were mixed race. There were 26 deaths from the disease, 69,2% of which were female, with emphasis on the state capital, responsible for 30,7% of deaths. The cost of medical care for varicose veins of the lower limbs total R\$414,307.18 in Maranhão, with Timbiras responsible for 43,5% and São Luís, for 34,7%. **CONCLUSION:** Thus, the Maranhão epidemiological profile outlined revealed a higher incidence among female, mixed-race people, between 40 and 49 years old, which highlights the need for public health strategies aimed at this group, aiming to guarantee prevention and combat the increase in rates of varicose veins in the lower limbs in Maranhão, based on the reduction in costs with medical services in the municipalities of São Luís and Timbiras, where the highest rates in the state were concentrated.



63. **ACADEMIC ASSIGNMENTS AND THE MENTAL HEALTH OF MEDICAL STUDENTS: A NARRATIVE REVIEW**

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**INTRODUCTION:** Extensive study hours, rigid curriculum and competitiveness are realities in the lives of medical students. Due to a multifactorial process, medical students have shown higher rates of sleep deprivation, symptoms of anxiety and depression, and suicidal ideation than the general population. In addition, these students often have difficulty recognizing their own mental disorder. Therefore, this study aims to address the main impacts of academic assignments on the mental health of medical students. **METHODS:** This is a literature narrative review based in the SciELO and Pubmed databases. Articles were selected with the descriptors "medical students", "mental health" and their equivalents in Portuguese, written in Portuguese and/or English, published between 2019 and 2022 and that answered the theme question of this work. At the end of the research, 8 articles were selected, from which relevant information was taken for the preparation of this review. **RESULTS:** The analysis of the articles corroborated that the medical school requires an intense workload and dedication of the students, which, added to the pressure imposed by the process of becoming a doctor, can trigger symptoms of anxiety and depressive disorders. However, the impact on the mental health of this group is a multifactorial issue that includes sleep deprivation and interpersonal and socioeconomic issues, and was also aggravated during the COVID-19 pandemic. In addition, it was noted, in 3 studies, that the female sex is the most affected by psycho-emotional disorders and the most interested gender in research related to this subject. In addition, 4 articles report harmful actions practiced by university students that aim to mitigate these conflicts, such as drug and alcohol consumption noted as the most prevalent actions. **CONCLUSION:** Medical education, through a multifactorial process, causes a psychological disorder in students, accentuated in females, which extends from minor effects, such as sleep disorders, to the establishment of psychiatric diseases. The socio-economic profile remains a modulator of perception and action in relation to mental illness. Thus, there is a need for more organized care networks accessible to listening, in order to reduce the harm caused by academic life during medical education.

64. **INCREASE IN CASES OF HERPES ZOSTER DURING THE COVID-19 PERIOD: A LITERATURE REVIEW**

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**INTRODUCTION:** Herpes Zoster (HZ) is a dermatological disease, caused by the Virus Varicella-Zoster (VZV), the same that cause varicella, aka chickenpox. After transmitting chickenpox, this virus still inactive in the body, may have its activity resumed as an adult or people who have low body defenses, such as those with chronic illnesses, such as hypertension, diabetes, AIDS or cancer. Thus, giving rise to HZ. After the start of the COVID-19 pandemic, studies reveal that SARS-CoV-2 infection often leads to immunosuppression of those infected. Given this context, the objective of all this was to verify the increase in the number of HZ cases during the COVID-19 period and establish the relationship between SARS-CoV-2 infection and HZ. **METHODS:** This is an intriguing review of the literature based on data collected in platform Google academic, between 2020 and 2023. The descriptors used were "COVID-19" and "Herpes zoster" or "Varicella zoster" and "Aumento" and "Pandemia". Articles that were not in Portuguese or English, duplicate articles, incomplete articles and articles that did not establish a relationship between HZ and COVID-19 were excluded. **RESULT:** 34 articles were identified, 10 of which met the established inclusion criteria. Of the selected articles, five highlight a low immune system as one of the main factors in the appearance of HZ, one of the studies mentions the disease affecting all age groups and the other four works address other aspects also related to the topic, such as, emotional stress, COVID-19 vaccine, and lack of exposure to chickenpox. Furthermore, a study cites the frequency of clinical cases of HZ in large Brazilian regions, comparing the period before the COVID-19 pandemic. And it was observed that in the first moment the proportion of cases was 30.2 for 1 million inhabitants, while in the second moment it was 40.9 cases for the same population, demonstrating the growth of this situation during the COVID-19 period. **CONCLUSION:** The correlation between the increase in HZ cases and COVID-19 is evident. Therefore, a more in-depth study of the immunological mechanisms that may be linked to the increase in HZ cases during the pandemic period is necessary to better understand these clinical results.

65. **INCREASE IN THE NUMBER OF INFECTIOUS MENINGITIS CASES IN THE POST-PANDEMIC PERIOD**

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**INTRODUCTION:** Meningitis is the inflammation of the membranes that cover the brain and spinal cord, called meninges. It is usually caused by bacteria and viruses. Taking into account the prevalence and severity of this problem, as well as verifying the increase in the number of cases in the post-pandemic period, an analysis of the topic is necessary in order to understand which factors influenced this observation. **METHOD:** An epidemiological, descriptive and quantitative study was carried out, based on secondary data from the Department of Informatics of the Unified Health System (DATASUS). These data refer to the period between 2019 and 2023. The variables researched were: year of first symptoms, region of notification, age group, race, sex, etiology and criteria for confirming the diagnosis. **RESULTS:** During the period analyzed, a total of 47,276 confirmed cases were observed, the majority in the Southeast region (52.09%), which may be the result of environmental factors, such as large population concentrations and the circulation of people in closed environments, facilitating the spread of the disease. The year with the highest number of cases was 2019 (n=16,552), with the pandemic and protective measures there was a drop of 45% in 2020 and 41% in 2021. In 2022, there was a significant increase (n =12,494) when compared to the previous year. Individuals between 20 and 39 years old were most affected. This may be related to the fact that, during adulthood, there is a loss of immunity acquired through vaccination in childhood, making individuals in this age group more susceptible. Regarding sex and race, there was a predominance of men, self-declared white and mixed race. This finding can be explained by the greater exposure of males to activities that facilitate the transmission of infectious diseases. Regarding etiology, viral meningitis was predominant (43.89%), possibly due to rapid spread, and the most used confirmation criterion was the chemocytological examination. **CONCLUSION:** Infectious meningitis is an important public health problem, listed in the group of diseases whose notification is compulsory. Therefore, the present work found that there was an increase in cases in 2022, mainly in the age group of 20 to 39 years old, demonstrating the need for new studies to promote the elucidation of this increase. The hypothesis for this phenomenon is due to the loss of immunity and being the most exposed population.

66. **EVALUATION OF DEPRESSION IN PATIENTS AT A BASIC HEALTH UNIT IN SÃO LUÍS, MARANHÃO**

Ana Clara Silva de Alencar<sup>1</sup>, Ana Clara Mota Gonçalo<sup>1</sup>, Giulia Germano de Azevedo Silva<sup>1</sup>, Mariana Azevedo Nunes<sup>1</sup>, Amanda Alves Cardoso da Silva<sup>1</sup>, Maria Eduarda Couto de Melo dos Santos<sup>1</sup>, Maria Eduarda Mendes Gomes<sup>1</sup>

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**INTRODUCTION:** Depression is a chronic psychiatric illness that affects mood, sleep and appetite, differing from common sadness by persisting without improvement. With more than 300 million people affected globally, depression is a common condition among patients treated in Basic Health Units (UBS), especially as this is the first line of care accessible to the population. However, less than half of those affected receive help, as obstacles such as lack of resources and social stigma associated with mental disorders make this support unfeasible. Therefore, the objective of this research is to investigate the prevalence of depression among UBS patients, aiming to understand the extent of the problem and identify areas of intervention to improve mental health care. **METHODS:** This is an analytical and cross-sectional study carried out with 30 adult patients, of both sexes, treated from June to September 2023 at the Parque Vitória UBS, in São Luís-Maranhão. As a collection instrument, a socioeconomic questionnaire was used, in addition to the Beck Depression Inventory, whose cutoff point for interpretation was summarized as: score 0-13: absence, and between 14-63: presence of depression. The project was approved by the UniCeuma Ethics and Research Committee with an opinion substantiated by CEP N° 5,330,886. **RESULTS:** The research revealed that there is a significant probability of depression in the individuals evaluated, indicating a prevalence of 30%, of which 66.6% are female, which can be justified by the fact that women seek preventive medical assistance more than men.; 88.9% do not currently work, suggesting that feelings of sadness and despair caused by unemployment encourage the emergence of typical characteristics of depressive disorder. Furthermore, 44.4% of those interviewed live alone, which reflects directly on the relevance of the family support network for minimizing factors associated with the disorder, while those who share a house with family members seem to present fewer symptoms of depression. **CONCLUSION:** In this context, it is possible to state that factors such as gender, income and marital status can influence both beneficial and harmful behaviors for the mental health of individuals, in addition to reflecting the lack of demand for professional help and adherence to treatment, making it necessary to prepare UBS and train professionals to recognize and treat patients with depression.

67. **EVALUATION OF SUICIDE CASES IN MARABÁ AND IMPERATRIZ BEFORE AND DURING COVID-19**

Vanessa Gonçalves de Sousa Vidal<sup>1</sup>, Carla Cristine Gonçalves de Souza<sup>2</sup>, Luís Augusto Marinho de Lucena<sup>2</sup>, Thalita de Cássia Silva de Oliveira<sup>1</sup>, Leonardo Magalhães Santos<sup>1</sup>

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**INTRODUCTION:** Social distancing, economic uncertainty and concerns about health were factors that worsened mental health during the pandemic years. Thus, there was a significant increase in suicide cases during this period. Furthermore, the overload on the health system, due to the high number of cases and deaths from COVID-19, has made access to health professionals more difficult. Therefore, this summary aims to analyze the number of suicide cases in the cities of Marabá and Imperatriz by comparing the period 2018-2019 with the years 2020-2021. **METHODS:** This is a retrospective study, carried out using data available in DATASUS. Information was collected about notifications of deaths caused by intentional self-harm that occurred in the cities of Marabá (PA) and Imperatriz (MA) between 2018 and 2021. Such information served as analysis variables for the study in question. **RESULTS:** In the pre-pandemic years, there were 50 deaths in the two municipalities, 21 in Marabá and 29 in Imperatriz. In the pandemic years, there was a 64% increase in cases compared to the previous two years, with 82 deaths, 40 in Marabá and 42 in Imperatriz. It was noticed that, in both cities, suicide affected more men aged between 30 and 39 years, mixed race, single and with 8 to 11 years of education in the two periods analyzed. **CONCLUSION:** Although the profile of patients with death caused by self-harm remained the same before and during the pandemic, in 2020 and 2021, there was an increase in cases of suicide in females of all ages and in white races and black from both cities. There were no records of suicide among the yellow and indigenous races in any of the years analyzed. The period of social isolation could have major consequences for the mental health of Brazilians, especially in regions least supported by functioning psychology and psychiatry services, such as the North of the country. Added to this, psychophobia and the association of mental illness with asylum hospitalization mean that people do not assume they need help of shame and do not seek mental health services out of fear. Therefore, mental health policies must be intensified in poorer regions, especially in those where access to mental health services does not occur in its entirety, guiding the population and addressing the issue with its due importance.

68. **EVALUATION OF THE BALANCE OF ELDERLY PEOPLE PARTICIPATING IN AN EXTENSION PROJECT**

Míria Joyce Pereira Raposo<sup>1</sup>; Poliana Sousa Rapozo<sup>2</sup>; Anna Beatriz Costa Azevedo<sup>2</sup>; Gustavo Bender Hendges<sup>1</sup>; Antônia Márcia Dutra Rabelo<sup>1</sup>; Maria Clara Gadelha Lopes da Silva<sup>1</sup>; Luciana Oliveira dos Santos<sup>1</sup>

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**INTRODUCTION:** Imbalance is defined as the sensitivity of decreased or postural inconstancy<sup>3</sup>. Thus, mobility depends on three systems: sensory (visual, vestibular and proprioception), Central Nervous System (CNS) and musculoskeletal<sup>4</sup>, as well as temporary factors such as acute illnesses and medication use. In addition, aging generates changes in the vestibular system, loss of muscle mass, reduction of reflexes and cerebellar function. Therefore, the elderly population suffers from loss of balance even in the absence of previous pathology<sup>3</sup>. Consequently, the aim of this study was to assess the balance of elderly people taking part in an extension project. **METHODS:** Before data collection, all individuals read and signed the informed consent form and the research was approved by the research ethics committee of the University of Tocantins State with CAAE: 63326022.7.0000.8023. An interview was carried out to verify the inclusion and exclusion criteria and the elderly people's interest in participating in the research. Next, the Minibest Test was performed, which assesses static and dynamic balance. The maximum test score is 28 points divided between 14 items that vary between 0 (unable to perform), 1 (performed with assistance) and 2 (performed alone). **RESULTS:** In the present study, 18 elderly volunteers were evaluated, 5 were male, the average age was 68.05±6.6 years. The average score of elderly individuals in the test was 22.05±3.7. For this age group, a value of 26 points would be expected. This shows that these individuals have a deficit in static and dynamic balance. The loss of balance in this population is due to the reduction in basal metabolism, comorbidities and lack of exercise<sup>2</sup>. Accordingly, in an evaluation, physically active elderly women showed more independence in carrying out activities of daily living (ADL) when compared to sedentary women<sup>1</sup>. In line with this finding, Vieira et. al. observed that physical exercise is relevant to reduce the risk of falls in the elderly<sup>5</sup>. **CONCLUSION:** The group of elderly people participating in the extension project in the assessment of balance using the Minibest Test scored 22.05. This result infers that individuals have a deficit in static and dynamic balance, since the expected value for this age group would be 26 points.

69. **ASSESSMENT OF THE RISK OF POOR EVOLUTION FOR DIABETIC FEET IN PATIENTS WITH TYPE 2 DIABETES MELLITUS**

Débora Gonçalves de Oliveira<sup>1</sup>, Larissa de Sousa Miranda<sup>1</sup>, Ana Clara Tavares Dantas Nogueira<sup>1</sup>, Ana Beatriz Paixão Rodrigues<sup>1</sup>, Luana Donato Primo Costa<sup>1</sup>, Aarão Filipe Ataídes Lima<sup>1</sup>, Sheila Elke Araújo Nunes<sup>1</sup>

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**INTRODUCTION:** Diabetic foot represents one of the most severe complications of Diabetes Mellitus (DM), with its progression to Diabetic Foot Ulcers (DFU) being associated with increased morbidity, mortality, and healthcare costs. Preventive actions are essential to mitigating adverse clinical outcomes. Therefore, this study aimed to screen for complications and risk factors associated with diabetic foot among patients attending a Primary Health Care Unit (PHCU) in Imperatriz, MA. **METHODS:** The study included individuals diagnosed with type 2 DM, aged 18 and above, who consented to sign the Informed Consent Form. Anamnesis and physical examination of the feet were conducted, comprising medical history assessment, neuropathy symptoms, capillary glycemia, dermatological evaluation, and sensitivity alterations assessment using the Semmes-Weinstein Monofilament 10g, pinprick, and 128 Hz tuning fork. The research was approved by the Brazil Platform, Hospital Carlos Macieira Research Ethics Committee, under opinion number 5,360,789 and CAAE: 55572722.8.0000.8907. **RESULTS:** The study group (33 individuals) primarily consisted of elderly women with other comorbidities and glycemic control issues (54.5%). Several conditions associated with increased risk of ulceration were identified: calluses (60.6%), xeroderma (39.4%), improper nail cutting (48.5%), lack of awareness and/or non-use of appropriate footwear (60.6%), absence of foot assessments (84.8%), and absence of foot care instructions from healthcare professionals (87.8%). Sensitivity alterations were absent in 66.6% of participants, while 3%, 18.1%, and 18.1% presented loss of protective, painful, and vibratory sensitivity, respectively. Neuropathic signs and symptoms in the Lower Limbs (LL) included recurrent neuropathic pain (54.5%), cramps (51.5%), paresthesia (30.3%), and hypoesthesia (12.1%). **CONCLUSION:** High percentages of dermatological manifestations, neuropathic signs, and symptoms in the LL associated with poor evolution to diabetic foot were observed, despite the preservation of vibratory, painful, and protective sensitivities in many individuals. Additionally, there was a clear lack of access to information regarding foot self-care and a reduced number of patients who had their feet previously assessed by a healthcare professional.

70. **SCIENTIFIC ADVANCEMENTS FOR THE REPOSITIONING OF PROPRANOLOL: A REVIEW**

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**INTRODUCTION:** The repositioning of a drug is relevant for reducing the high costs of the traditional process of developing new pharmaceuticals, as well as optimizing the average development time. Repurposing a low-cost, off-patent drug is ideal for ensuring greater patient accessibility. In this context, propranolol, initially prescribed for hypertension, irregular heart rate, essential tremor, and anxiety, has shown increasing evidence of its pharmacological properties for other diseases over the last decade. The objective of this work, therefore, is to gather updates on the repositioning of propranolol, through the evaluation of different types of clinical studies with this medication. **METHODS:** This is a systematic review, using the PubMed database. The descriptors "propranolol" and "clinical trials" were chosen and used, combining them with the Boolean operator "AND". Among the 713 studies found, 6 articles were selected for the composition of this work based on the following criteria: being a clinical study, addressing the theme; being in English; having been published between 2022 and 2023. **RESULTS:** Two studies addressed the use of propranolol in adult patients of both sexes for migraine prophylaxis, but they contribute little to better elucidate the mechanism of action of propranolol in this pathology, in order to establish an optimal therapeutic dose for patient management. A recent clinical study demonstrates the efficacy of propranolol use in cases of infantile hemangioma in a 5% topical gel, capable of reducing lesion discoloration after the proliferative phase. This efficacy may indicate promising prospects for propranolol studies for use in cases of infantile hemangioma, suggesting a positive repositioning of this drug for this context. Another field for propranolol repositioning was its use in patients with severe traumatic brain injury within the first 48 hours, although the authors emphasize that its use is very challenging in terms of treatment and prognosis. **CONCLUSION:** Further studies are needed to corroborate the elucidation of the mode of action of propranolol in migraine across different populations and age groups, as well as in infantile hemangioma, in order to establish more precise clinical management in these pathologies and contribute to the repurposing of this drug.

71. **ADVANCES AND LIMITATIONS IN MINIMALLY INVASIVE APPROACHES IN FETAL SURGERY**

Rebeca Leticia Moucherek do Nascimento Cutrim<sup>1</sup>, Victoria de Menezes Sá Lazera<sup>1</sup>, Maria Fernanda Sales Campos<sup>1</sup>, Isadora Cristine Ferreira Oliveira<sup>1</sup>, Andressa Silva de Carvalho Barreto<sup>1</sup>, Mariana Silva Regadas<sup>1</sup>, Rakell Almeida Soares<sup>1</sup>  
<sup>1</sup>Universidade Ceuma.

**INTRODUCTION:** Fetal medicine is characterized as the science that studies fetal development, arising from the need to intervene in lesions that may lead to progressive damage to the fetus in the intrauterine environment. Surgeries are thus performed during gestation to increase the chances of fetal survival and reduce developmental impairments. This study aims to analyze minimally invasive approaches involving fetal surgery and their impact on patient prognosis. **METHODOLOGY:** A bibliographic review was conducted using articles published between 2014 and 2022, indexed in SciELO, PubMed, and Google Scholar databases. Articles in the Portuguese language with keywords such as "fetal surgery," "myelomeningocele," and "fetal treatment" were included. **RESULTS:** The analysis reveals a lack of consensus on a term defining all fetal interventions, ranging from ultrasound-guided punctures to more complex open procedures (maternal laparotomy followed by hysterotomy and direct fetal exposure). Fetal interventions include placental vessel coagulation with laser, cardiac interventions, procedures for lower urinary obstruction, fetal tracheal occlusion with inflatable balloon, and myelomeningocele correction (MMC). Some procedures, like valvoplasties and ultrasound-guided cardiac septostomies, are still in the study phase but have raised high expectations. Fetal tracheal occlusion with an inflatable balloon in congenital diaphragmatic hernia (CDH) aims to assist fetal lung growth by preventing fluid leakage into the amniotic cavity. Fetal surgery has become the gold standard for MMC correction, either open or through fetoscopy. However, both techniques carry the risk of premature membrane rupture, leading to the exploration of endoscopic correction variations to reduce the risks of open surgery. **CONCLUSION:** Fetal surgeries are invasive procedures associated with maternal and fetal mortality risks. Nevertheless, they contribute to revolutionizing the natural history of various diseases, fostering fetal development, and preventing permanent damage.

72. **ADVANCES IN THE PREVENTION AND TREATMENT OF PRE-ECLAMPSIA IN PREGNANT WOMEN.**

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<sup>1</sup>CEUMA

**INTRODUCTION:** Pre-eclampsia is a complex and potentially serious medical condition that affects pregnant women around the world, representing a significant challenge for contemporary obstetrics. In this literature summary, we explore recent advances in the understanding, prevention, and treatment of preeclampsia, a condition characterized by hypertension, proteinuria, and organ dysfunction, which can have serious consequences for the mother and fetus. Based on recent research and findings, we highlight innovative strategies that promise to improve the clinical management of this condition, reduce complications, and improve obstetric outcomes. This summary offers a comprehensive overview of current trends and future perspectives in the management of preeclampsia, providing important insights for clinical practice and maternal-fetal health. **METHODS:** This is a summary of literature, where databases such as PUBMED, SCIELO and GOOGLE ACADEMICO were used, using the keywords: pregnant woman, advances, prevention, treatment and pre-eclampsia. **RESULTS:** As a result of the research, it was proven that adequate prevention of pre-eclampsia (PE) is carried out through a good anamnesis and a well-performed physical examination, thus enabling the identification of risk factors that will guide proven methods for preventing this condition. Therefore, the use of acetylsalicylic acid (ASA) and calcium supplementation should be recommended if there is one high risk factor or two moderate risk factors present in the evaluation of these patients. Therefore, the appropriate treatment in the prior identification of pregnant women with PE would be referral to a specialized unit, blood pressure and laboratory monitoring associated with the use of antihypertensive drugs if necessary. The studies also showed that ratios between biomarkers such as sFlt-1/PIGF > 38 can be used to make decisions regarding clinical management. **CONCLUSION:** It is concluded that the use of protocols by health professionals is flawed and for this reason the institution of prevention and adequate and early treatment is lacking. Therefore, to optimize the care of these patients, it would be ideal to apply innovative methods such as the use of biomarkers to help with therapeutic decisions, the provision of guidelines in primary care, which must be collected and monitored, as well as referral to specialized care with the aim of reducing maternal-fetal mortality.



**73. THE NUTRITIONAL TRANSITION BETWEEN OBESITY AND MALNUTRITION**

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**INTRODUCTION:** Obesity and malnutrition are extremes that stigmatize and adversely affect an individual's health. In children, the presence of these conditions serves as a warning sign, as they are responsible for bringing consequences into adulthood and serve as good indicators of a population's health. Therefore, it is crucial to understand nutritional transition in the current context as a public health issue. **METHODS:** This is a literature review, in which scientific evidence was sought through articles in multiple databases such as Google Scholar, PubMed and Scientific Journals. The words Obesity, Malnutrition and Child Development were used as descriptors. The inclusion discretion were articles with up to 5 years of publication and exclusion criteria, those with a longer period of time and which didn't directly relate the study variables. Of the 10 articles, 9 demonstrated relevance to the topic. **RESULTS:** Nine studies were included, most of which focused on the comparison of obesity and malnutrition rates, and the effects of these changes over time. For years, child malnutrition prevailed, however, with modernization, there is a trend towards a decrease in these rates and an increase in the number of cases of overweight and obesity, due to a higher consumption of hypercaloric foods. The increase in these rates is associated with a higher prevalence of chronic diseases in childhood, such as diabetes and cardiovascular diseases. The articles also highlighted significant associated psychosocial changes, such as low self-esteem, relationship problems and social interaction, which affect the quality of child development. **CONCLUSION:** This review highlights the importance of addressing both childhood malnutrition and obesity with attention and appropriate actions. It is necessary to implement strategies that promote balanced nutrition and early nutrition education, aiming not only at physical health but also at the psychological well-being of children. Additionally, it is necessary to continue researching and monitoring these health issues to develop effective approaches in prevention and treatment, ensuring that future generations have a solid foundation for a healthy life, with a reduction in the number of cases of non-communicable diseases.

**74. ADVANCES IN THE TREATMENT OF ALZHEIMER'S DISEASE: A LITERATURE REVIEW**

Wanderson Fortes De Sousa<sup>1</sup>, Clemenson Sousa Dos Santos<sup>1</sup>, Paulo Victor De Aguiar Ribeiro<sup>1</sup>, Erwalber Mendes Dos Santos<sup>1</sup>, Italo Kauan Ribeiro De Carvalho Martins<sup>1</sup>, Rachel Melo Ribeiro<sup>1</sup>

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**INTRODUCTION:** Alzheimer's disease (AD) is a neurodegenerative disease and the most prevalent form of dementia among individuals over the age of 65 years caused by the progressive loss of mental functions from degeneration of brain tissue, involving b-amyloid plaques, neurofibrillary tangles cells, neuritic plaques and a significant increase in tau protein levels. Current treatment has not been successful in the slow and gradual progression of AD, which highlights the need for more scientific research to develop new therapies. **METHODOLOGY:** This is a systematic review, carried out in August 2023, selecting scientific articles published in the PubMed database, with the descriptors: "Neurodegenerative diseases", "Alzheimer's disease", "treatment" or "drug", combined using the Boolean operator AND, in accordance with the recommended PRISMA guidelines. 2231 articles were found, of which 15 met the selection criteria and, therefore, are included in this study. **RESULTS:** It is observed that the main advances in the literature include the use of anti-amyloid treatment, monoclonal antibodies and tyrosine kinase inhibitors. UB-311, an active immunotherapeutic anti-amyloid vaccine, demonstrated to be well tolerated and to have a durable response in a randomized phase 2a study, the results of which suggest the continued development of UB-311. Masitinib, a tyrosine kinase inhibitor that targets activated cells of the neuroimmune system (mast cells and microglia), in a phase 3 clinical study, proved to be potentially useful as an adjuvant to cholinesterase inhibitor and/or memantine in patients with mild dementia moderate associated with AD, where 4.5 mg/kg/day/12 weeks brought significant benefit in the 182 patients included in the study, with general improvement in cognition. More recently, a phase 3 study of 578 patients ages 65 to 85 showed that solanezumab, which targets monomeric amyloid in people with high levels of brain amyloid, did not slow cognitive decline compared with placebo over a period of 240 weeks in people with Alzheimer's disease. **CONCLUSION:** There is a growing increase in pharmacotherapeutic innovation for AD, where new therapeutic targets have been investigated. Also noteworthy is the repositioning of the drug masitinib, which can benefit people with mild to moderate AD. More studies need to be conducted to substantiate these data.



75. **PHRENIC NERVE-SPARING BLOCKS: A REVIEW OF LITERATURE**Raphael de Matos Lima<sup>1</sup>, Bruna de Oliveira Montes do Rosário<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Shoulder surgeries are common procedures in which regional anesthesia plays an important role. In this scenario, interscalene block is the most used technique, but it causes paralysis of the phrenic nerve and diaphragm. Therefore, the use of this method in individuals with pulmonary dysfunction has disadvantages, so that strategies that spare this structure are important. Therefore, this work aims to point out these alternative techniques. **METHODS:** This is a narrative review of the literature on sparing phrenic nerve blocks. To this end, works were selected on the MEDLINE and PubMed research platforms, totaling 25 articles. Next, the production abstracts were analyzed, excluding those considered not relevant to the topic. Finally, a sample of 10 articles was obtained, which are the basis for this review. **RESULTS:** The first of these is the upper trunk block, which originates in the C5 and C6 region and corresponds to a good target, due to the distance of the phrenic nerve in relation to the brachial plexus at this level. Studies indicated that pain scores and opioid consumption in the first 24 hours were not significantly different. The same was observed in the blockage of the erector spinae plane, accessed in the transverse process below the erector spinae muscles. It is also worth mentioning the suprascapular and axillary techniques, which showed better results when used together. The first can be performed in the suprascapular fossa or in the root of the distal neck, while the second in the posterior region of the humerus. Its use resulted in better pain scores in the first 24 hours, but less immediate pain control and greater opioid consumption. Costoclavicular block was another technique treated, being performed at the junction of the three fascicles of the brachial plexus within the costoclavicular space, however studies have shown greater slowness in complete motor paralysis and immediate pain control compared to interscalene block. All strategies discussed showed better action on the phrenic nerve, which resulted in less diaphragmatic dysfunction. **CONCLUSION:** Upper trunk and erector spinae plane blocks had better results, while the suprascapular plus axillary technique had caveats. Finally, the costoclavicular block pointed to an unfavorable scenario when compared to the interscalene block.

76. **TRACHEA, BRONCHI, AND LUNG CANCER: EPIDEMIOLOGICAL PROFILE IN MARANHÃO FROM 2018 TO 2022**Francisca Erika Ferreira Sousa<sup>1</sup>; Bruno Luiz de Paula Pereira<sup>1</sup>; Beatriz Cardoso Ferreira<sup>1</sup>; Cácio Laylson Lira Silva<sup>1</sup>; Johnatha de Sousa Oliveira<sup>1</sup>; Wellyson da Cunha Araújo Firmo<sup>1</sup><sup>1</sup>Universidade Estadual da Região Tocantina do Maranhão

**INTRODUCTION:** Lung cancer ranks 5th among the most frequent cancers in Brazil, intricately linked to smoking—a preventable risk factor. However, the high rate of underdiagnosis and underreporting, attributed to limited access to diagnostic methods in the public healthcare system, often leads to an underestimation of these numbers. Thus, this study aims to identify the epidemiological characteristics of patients hospitalized for malignant neoplasms of the trachea, bronchi, and lungs in the state of Maranhão. **METHODS:** This is a cross-sectional and descriptive epidemiological study with a quantitative approach, covering the period from 2018 to 2022. Data were obtained from the Hospital Information System of the Unified Health System (SUS), provided by the Department of SUS Informatics. The variables analyzed included the number of hospitalizations, sex, age group, race or ethnicity, and number of deaths. **RESULTS:** Between the years analyzed, there were 2,250 hospitalizations for trachea, bronchi, and lung cancer. Of these, 2020 had the lowest rate (381), while 2021 had the highest (513). Regarding sex, there was a higher incidence among males (1,134), accounting for 50.4% of total hospitalizations, a value very close to females (49.6%), possibly related to increased smoking prevalence among this demographic. The age range analyzed included individuals from under 1 year to over 80 years old. The age group between 60 and 69 years recorded the highest numbers (678), consistent with literature indicating the peak incidence of lung cancer between 65 and 70 years old. Analysis by race or ethnicity showed a higher number of hospitalizations among individuals of mixed race (1,172). Additionally, 668 deaths were recorded during the study period, with higher rates among men (50.7%) aged 60 to 69 years (31.4%). **CONCLUSION:** Respiratory tract cancer exhibits significant hospitalization rates in Maranhão, primarily affecting men in their sixth and seventh decades of life. Thus, the study underscores the need for the development of strategies for early diagnosis and treatment in this population. Furthermore, due to its strong association with modifiable factors, a more assertive approach to preventive measures is imperative.

**77. CHARACTERIZATION OF THE MANAGEMENT OF POPULAR RESTAURANTS IN BRAZIL**

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**INTRODUCTION:** Popular Restaurants (PR) are one of the oldest public facilities aimed at guaranteeing the Human Right to Adequate Food (HRAF). Initially, promoted by Josué de Castro and, later, combined with a political agenda that prioritized issues related to food security, it generated a support and integration network in search of guaranteeing the HRAF. Therefore, this work aims to characterize the management of restaurants that make up the Popular Restaurants Program in the five macro-regions of Brazil from the perspective of public managers. **METHODS:** Application and analysis of a questionnaire adapted from the methodology of Oliveira et al. (2019), composed of questions related to the Popular Restaurants Program, through interviews with 15 program managers in seven municipalities in the five macro-regions of the country, with approval from the Research Ethics Committee under opinion no. 31197720.8.00005087. The analysis of numerical variables occurred using means and standard deviations and of categorical variables using raw and relative frequencies. The R Studio® program was used for the analyses. Pearson's Chi-square test was used to make comparisons between proportions. Statistical significance was set at 5%. **RESULTS:** A large portion of the restaurants were opened between 2002 and 2020, have outsourced public management, operate on weekdays, follow the recommendations by the rules for creating the program regarding location and physical structure. All public facilities evaluated required adaptations to the meal offering model during the COVID-19 pandemic. Low frequency of health promotion and food and nutritional education actions, articulation with other policies and social control within the scope of the program, were identified. **CONCLUSION:** The performance in the management of Popular Restaurants configures them as important instruments for guaranteeing Food and Nutritional Security and the Human Right to Adequate Food for the portion of the Brazilian population in situations of social and economic vulnerability, although there are still challenges to be faced.

**78. CHARACTERIZATION OF BURN HOSPITALIZATIONS IN MARANHÃO BETWEEN 2012 AND 2022**

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**INTRODUCTION:** Burns are traumatic injuries that can cause serious damage to the skin and underlying tissues, often requiring intensive hospital treatment. Maranhão faces specific challenges related to this type of injury due to socioeconomic, climatic, and cultural factors, representing a reality that demands attention and action. This study aims to highlight the characteristics of hospitalizations for burns and corrosions in Maranhão between 2012 and 2022. **METHODS:** This is an ecological study analyzing hospitalizations for burns and corrosions in Maranhão between the years 2012 and 2022. Data were collected through the SIH/SUS and tabulated using the TABWIN and TABNET systems. The variables observed were: hospitalizations by municipalities, type of care, age group, sex, race/ethnicity, length of hospital stay, deaths, mortality rate, total value, and average value. **RESULTS:** During the analyzed period, a total of 4,854 hospitalizations for burns and corrosions were observed in Maranhão. There was an average annual of 441.27 hospitalizations and a median of 444. The three municipalities with the highest occurrence were, respectively, Imperatriz (29%), São Luís (27%), and Presidente Dutra (4%). The majority of cases were treated as emergencies (97%). The most affected age group was 1 to 4 years old with approximately 27% of hospitalizations, while the least affected was the 70 years and older group, with nearly 3%. Males accounted for 65% of cases. Regarding race/ethnicity, 61% of the data were not tabulated, and 27% self-declared as mixed race. The average length of hospital stay in days was 6.1. The number of registered deaths was 99, reflecting a mortality rate of 2.03%. The total expenditure on hospitalization for burns was R\$5,879,107.87, resulting in an average cost of R\$1,211.18 per hospitalization. **CONCLUSION:** Through the analysis of the data, it is noted that the number of hospitalizations for burns and corrosions in Maranhão is relevant and has remained stable over the years. The hospitalization profile is characterized by emergency cases, in patients aged 1 to 4 years, male, self-declared mixed race, with an average length of stay of 6.1 days, a mortality rate of 2.03% (lower than the national rate of 4.57%), and an average cost per hospitalization of R\$1,211.18. Thus, the identification of this information is of utmost importance in the development of public health policies to minimize hospitalizations for burns.

79. **CHARACTERIZATION OF DEATHS FROM CHILD MALNUTRITION IN BRAZIL FROM 2012 TO 2021**

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**INTRODUCTION:** Child malnutrition is a pathological condition characterized by a lack of essential nutrients for the human body, with repercussions on physical, psychomotor and social development, often associated with the socioeconomic conditions of the population. In the last year, with Brazil's return to the UN Hunger Map (2022), the rates of infant deaths due to food deficits have caused a public health alert. In this context, the aim of this study is to analyze data on deaths from child malnutrition in Brazil between 2012 and 2021. **METHODOLOGY:** This is an ecological, quantitative, cross-sectional and time-series study. Data was collected from the Mortality Information System of the Unified Health System (SIM/DATASUS) from 2012 to 2021, using the ICD-10 category "child malnutrition", with the following parameters for analysis: number of deaths per household, age group, sex, color/race and place of death. **RESULTS:** In the period analyzed, there were 2,876 deaths due to malnutrition in children between 0 and 9 years of age, representing 5% of the total for the same cause in Brazil. The Northeast, the second most populous region, stands out among the rest of the country, with 39.2% - the states of Bahia (n=281) and Maranhão (n=237) having the highest rates - followed by the North with 31.2% the Southeast with 16.4%. There was a predominance of deaths among children under the age of 1 (62.7%), males (52%) compared to females, and people of brown color/race (48%). Regarding the place of occurrence, the highest number of deaths was in hospital units (77%), followed by the home (12.8%). Looking at the time period, there were slight fluctuations, with a downward trend in the numbers: in 2013 there were 396 deaths, the highest number since then. **CONCLUSION:** The regions with the lowest Human Development Indexes (HDI), the North and Northeast, have a higher number of deaths, especially among children between 0 and 1 year old, males, of brown color/race and in hospitals. Thus, the importance of this research is based on the urgent need to establish public health strategies and measures aimed at combating malnutrition and its impact on the child population, with a view to seeking a promising and healthier future for generations to come.

80. **CAUSES AND CONSEQUENCES OF A LATE DIAGNOSIS OF AUTISTIC SPECTRUM DISORDER**

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**INTRODUCTION:** The Autistic Spectrum Disorder (ASD) consists in several symptoms that interfere in the patient's neurologic development. It can be classified as level one, two or three, according to the neurological damage. Among those, the first level is usually the hardest to diagnose for its similarity to other conditions, being constantly underdiagnosed. The person who has ASD presents a triad of symptoms, like behavior issues, low social abilities and lack of communication skills. The early diagnostic leads to a more efficient treatment, which improves the chances of having a high quality of life. However, the late diagnostic makes getting good results harder, as the ASD interferes in cognition and can result in humor and anxiety disorders. In conclusion, due to the damages of this delay, a literature review is necessary to comprehend the causes and consequences of the ASD's late diagnostic. **METHOD:** A literature review was carried out in 11 articles of two databases: Scielo and Pubmed, between 2018 and 2023, and of the portals of the World Health Organization and the Brazilian Pediatric Society. The research's descriptive terms were autistic spectrum disorder, late diagnostic and autism. **RESULTS:** It was concluded that ASD's signs can be noticed since patient with two years old, but many circumstances can have influence over the ASD's recognition, as singularities of each person, lack of family awareness and difficulty of access to specialists. Therefore, the late diagnostic can deepen inappropriate behaviors and the development of social relations, which can cause consequences as anxiety and depression. However, even late, the right diagnostic and following therapy is important for self- knowledge and for a better quality of life. **CONCLUSION:** The late diagnostic can be related to the level of the family's knowledge and access to proper health care, and can cause a negative e impact to the patient's cognitive and psychological development.

**81. CERVICAL CYTOLOGY IN MARANHÃO: INCIDENCE OF HIGH-GRADE INTRAEPITHELIAL LESIONS 2020-2022**

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**INTRODUCTION:** High-grade Squamous Intraepithelial Lesions (HSIL) are identified in the cervix region by cervical cytology examination, also called preventive examination. They are precursor lesions of invasive squamous cell carcinoma of the cervix, with unquestionable potential for evolution and invasion of the cervicovaginal tissue. According to the Brazilian Group of Gynecological Tumors (EVA), Maranhão has a prevalence of 21.71 cases of this cancer for every 100 thousand women and leads the cases in the Northeast region. **METHODS:** A descriptive time series study was carried out, with the purpose of analyzing the incidence of HSIL in the reports of cervical cytology exams carried out between the years 2018-2022 in Maranhão. Data was collected through the DATASUS platform, in the National Cancer Information System (SISCAN) – cervix and breast, selecting the cervical cytology options by patients and the state of Maranhão. The variables considered were: age group, cytopathological report and year of result 2018-2022, being allocated in an Excel spreadsheet. Secondary data was used and submission to the Research Ethics Committee was not necessary. **RESULTS:** A total of 651,438 cytopathological reports were obtained in the period 2018-2022, among which 627,186 were negative reports and 7,139 were unsatisfactory reports. In total, 16,611 reports with cytopathological changes were found, and of these, 3,429 with positive findings for HSIL, representing 20.64% of the total cytopathological changes between the years of the study. The predominant age group was between 35 and 39 years old, comprising 15.13% among all age groups with HSIL. The year with the highest number of cases detected was 2022, with around 1,034 cases of HSIL, on the other hand, the year with the lowest detection of cases was 2020, with around 348 detections. **CONCLUSION:** Studies that evaluate the incidence of HSIL show promise from the point of view of secondary health prevention in Maranhão. The results of this work point to the significant detection rate of HSIL (20.64%), when compared to the more than 11 possible changes in the cytopathological reports. In this sense, the relevance of early detection of HSIL is highlighted by carrying out preventive examinations regularly and assertively, and it is essential to guide women regarding the need for investigation and, eventually, treatment.

**82. CHLORTHALIDONE AND HYDROCHLOROTHIAZIDE IN ANTIHYPERTENSIVE TREATMENT: UPDATES**

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**INTRODUCTION:** Systemic arterial hypertension (SAH) is recognized worldwide as one of the leading causes of mortality, being frequently associated with other cardiovascular diseases with atherothrombotic characteristics, whose pharmacological treatment includes the use of thiazide and thiazide-like diuretics, represented by hydrochlorothiazide (HCTZ) and chlorthalidone (CTD), respectively. The report aims to compare the efficacy of the therapeutic use of chlorthalidone and hydrochlorothiazide in antihypertensive treatment. **METHODS:** An integrative literature review was conducted in July 2023, using the PubMed database. In order to maximize the scope of the bibliographic research, from a search in the Health Science Descriptors (DeCS), the descriptors "chlorthalidone" and "hydrochlorothiazide" were chosen and used, combining them with the boolean operator "AND". Among the 36 studies initially found, 06 articles were selected for the composition of the present work based on the following criteria: original articles, dealing with the topic addressed; be in English; have been published between 2021 and 2023. **RESULTS:** The results show that the use of CTD reduces the blood pressure (BP) of hypertensive patients to desired optimal levels, while HCTZ promotes BP reduction, however depending on the magnitude of reduction needed to be achieved, it could not be more indicated in clinical practice, when compared to CTD. In contrast, most studies highlight a greater hypokalemia associated with the use of CTD. In black patients, both diuretics showed proportional efficacy in reducing blood pressure levels to normotensive values, however HCTZ was associated with the lowest incidence of hypokalemia and hyperuricemia. Similarly, in patients with renal impairment and alteration in glomerular filtration rate, HCTZ showed greater benefit and reduction of adverse effects. **CONCLUSION:** In view of the observed results, it can be concluded that more clinical studies are needed to determine the efficacy of these diuretics in SAH, since the data reported in the scientific literature still remain controversial.

83. **HEPATITIS B VACCINATION COVERAGE IN NEONATES IN THE SOUTHEAST REGION BETWEEN 2017-2022**

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**INTRODUCTION:** Hepatitis B is considered a public health problem. Worldwide, more than 250 million people are chronically infected. In Brazil, the hepatitis B vaccine has been recommended for all age groups since 2016, and doses are made available free of charge by the Unified Health System (SUS). The aim of this study is to analyze hepatitis B vaccination coverage in children up to 30 days old (neonates) in the Southeast region. **METHODS:** This is a retrospective epidemiological study using information from DATASUS on vaccination coverage against hepatitis B in neonates from 2017 to 2022 in the Southeast region. **RESULTS:** In the Southeast, the highest vaccination coverage against hepatitis B in children up to 30 days was observed in 2017 (89.71%), followed by 2018 (88.94%). In 2019, a vaccination coverage rate of 73.59% was identified, around 17.25% lower than the previous year. In subsequent years, coverage rates were lower than 77%, reaching a minimum in 2020 (57.91%), followed by 2021 (60.48%). Rates below 61% occurred in the years of the SARS-Cov 2 pandemic. In 2022, vaccination coverage increased from 60.48% in 2021 to 76.19% in 2022, with an increase of approximately 26% in 2022 compared to 2021. In none of the years analyzed did the Southeast region come close to the target of 95% vaccination coverage against hepatitis B for neonates recommended by the Ministry of Health. **CONCLUSION:** The study reveals a low level of protection against hepatitis B in children up to 30 days old in the Southeast. The vaccination coverage observed in the period analyzed was below 90% in all years, reaching minimum levels of 57.91%. Vaccination in the Southeast region in relation to hepatitis B in the group studied demonstrates the urgent need for interventions to enable parents to adhere to vaccination, so that the target recommended by the PNI - National Immunization Program - can be reached (90%), since an inverse relationship is observed between the number of vaccinated and the incidence rate of hepatitis B infections.

84. **PNEUMOCOCCAL VACCINATION COVERAGE IN IMPERATRIZ: ANALYSIS OF PERCENTAGE VARIATION FROM 2014-2022**

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**INTRODUCTION:** The 10-valent pneumococcal vaccine (PCV10) of Brazil's National Immunization Program (PNI), established in 2010, has been highlighted as a crucial tool in protecting children against pneumococcal diseases. Comprising ten serotypes of *Streptococcus pneumoniae*, the vaccine covers both invasive and non-invasive manifestations of the disease. Since its inclusion in the Brazilian vaccination schedule twelve years ago, PCV10 immunization aims to reduce mortality and hospitalization rates in children up to five years old. In addition to decreasing cases of pneumonia and pulmonary diseases, PCV10 also contributes to reducing penicillin-resistant variations. Therefore, the study aims to analyze vaccination coverage in the municipality of Imperatriz, Maranhão, over a span of nine years. **METHODS:** Relevant data were obtained from the Information System for Immunization Program Evaluation, available on the electronic portal of the Department of Health Informatics of the Unified Health System (DATASUS). To ensure precise analysis, the sample was restricted to the Maranhão State, Imperatriz Municipality, and pneumococcal vaccination coverage from 2014 to 2022. Data organization was carried out using Excel software. Subsequently, the concept of percentage variation was applied, consisting of subtracting the current year's vaccination coverage from the previous year's, divided by the previous year's vaccination coverage, multiplied by 100. **RESULTS:** The analysis of pneumococcal vaccination coverage in Imperatriz revealed differing coverage profiles. It was observed that in 2016, there was an 11.8% increase compared to 2015, while in 2022, there was a 4.6% increase compared to 2021. Conversely, during the COVID-19 pandemic period from 2020-2021, a notable reduction of 11.3% was observed compared to the non-pandemic period, where the reduction was only 2.2%. **CONCLUSION:** The data indicate notable fluctuations during the analyzed period. While some years showed significant increases, others recorded significant reductions, which may correlate with the period of social isolation during the coronavirus pandemic. These results provide crucial insights to enhance vaccination efforts and underscore the importance of maintaining constant vigilance over vaccination coverage to ensure community protection against pneumococcal bacteria.

85. **CO-INFECTION BY LEISHMANIASIS AND NEUROTOXOPLASMOSIS IN PATIENTS WITH AIDS: CASE REPORT**

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**INTRODUCTION:** Toxoplasmosis is an infection caused by *Toxoplasma gondii*, an obligate intracellular protozoan with worldwide distribution. Neurotoxoplasmosis (NT) is the main cause of damage with mass effect on the central nervous system (CNS) in patients with Acquired Immune Deficiency Syndrome (AIDS). Visceral Leishmaniasis (VL) is a systemic and chronic disease caused by the parasite *Leishmania* spp, and the diagnosis can be made using immunological and parasitological techniques. These diseases can lead to fatal complications if left untreated. This case report describes the management and evolution of a patient with these concomitant conditions. This report was submitted for evaluation by the Research Ethics Committee (CEP), in accordance with the guidelines and regulatory standards for research involving human beings, approved according to Certificate of Presentation for ethical assessment no. 54533521.0.0000.5084. **CASE DESCRIPTION:** 35-year-old male patient, diagnosed with AIDS 2 years ago, on irregular antiretroviral treatment, with CD4 cell count of 100 cells/mm<sup>3</sup> and detectable HIV viral load. The patient reported having lived in an area endemic for Leishmaniasis, presenting ulcerated skin lesions for 2 months. He did not seek care until systemic symptoms, including recurrent fever, anorexia, weight loss and progressive weakness, led to his hospitalization. He was diagnosed with VL based on pancytopenia, splenomegaly, hepatosplenomegaly and myelogram with amastigote forms of *Leishmania* spp. Therefore, he was treated with Amphotericin B. During hospitalization, he developed intense headache, hemineglect of the left upper limb and deviation of the right lip rhyme. He performed a computed tomography of the skull, confirming multifocal lesions compatible with TN and positive serology for Toxoplasmosis. Treatment began immediately with sulfamethoxazole and trimethoprim. The patient was referred to the infectious diseases reference hospital to continue clinical treatment. **CONCLUSION:** This case highlights the importance of clinical surveillance and management of opportunistic infections in patients with AIDS, especially when serious conditions such as Visceral Leishmaniasis and Neurotoxoplasmosis are present simultaneously. Timely diagnosis and treatment can improve the quality of life and survival of these patients.

86. **COMPARISON OF HOSPITAL MORBIDITY FROM MALARIA BETWEEN THE NORTH AND NORTHEAST FROM 2013 TO 2022**

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**INTRODUCTION:** Malaria is an infectious disease, transmitted by the female *Anopheles* mosquito and caused by the *Plasmodium* parasite, which is prevalent in tropical and subtropical areas, such as the Amazon. The objective of this work is to present the relationship between hospital morbidity due to this infection and places with different levels of dissemination: North and Northeast of the country, considering the tropical and subtropical characteristics of the regions. **METHODS:** This is an ecological and retrospective epidemiological study on hospital morbidity due to malaria, when comparing the North and Northeast regions of the country. Secondary data were collected from epidemiological bulletins made available by the Department of Informatics of the Unified Health System (DATASUS) and tabulated by TABNET, between the years 2013 and 2022. **RESULTS:** 16,211 malaria hospitalizations were recorded in the North region from 2013 to 2022, and there was no relevant difference related to sex. In the Northeast region, 1,012 hospitalizations were documented, with a higher incidence in men (around 740 patients) and the most affected age group was 20 to 29 years old in both regions. According to censuses by the Brazilian Institute of Geography and Statistics (IBGE) from 2013 to 2022, the population of the North region varied between 17 and 19 million, while the Northeast region varied between 55 and 58 million. Therefore, the number of hospitalizations should be higher in the Northeast region, however, the data showed the opposite. **CONCLUSION:** Given the above, it is possible to infer that, in the period between 2013 and 2022, the North region of the country had more than fifteen times the number of hospitalizations for malaria, when compared to the Northeast, which may be even more significant, due to the possibility of there being even more hospitalizations that were not registered in DATASUS, configuring a study limitation. The numbers of hospitalizations relate the need to combat malaria in specific areas with operational solutions according to each region, considering that prevention brings positive impacts to the SUS. For this reason, it is essential to carry out measures to reduce the prevalence of malaria in the North of Brazil, through campaigns that promote individual prevention measures, in addition to the need to carry out collective prevention, such as sanitation works to eliminate breeding sites for the vector. and improving housing and working conditions.



87. **THE IMPACT OF VENEZUELAN REFUGEES ON HEALTH SPENDING IN TWO RORAIMA CITIES**Elder Teles Teixeira<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** According to data from the Federal Police's International Traffic System (STI), Brazil is currently home to more than 477,000 Venezuelan refugees. Most of the immigrants enter through the north of the country, in the state of Roraima (RR), and are initially concentrated in the cities of Boa Vista and Pacaraima. In these cities, refugees are welcomed, sheltered and receive health care. The aim of this study is to analyze the impact of spending approved for health care in two cities in Roraima. **METHODS:** This is a comparative study of the amounts approved for outpatient care in two cities in RR with a high number of Venezuelan refugees, between the periods 2011 to 2016 (1st period) and 2017 to 2022 (2nd period). The figures for care were obtained from DATASUS, the Ministry of Health, and the number of refugees in Brazil from STI. As this is a study using secondary data, approval by the Research Ethics Committee is not required. **RESULTS:** In the first period, the municipalities analyzed had a total of R\$257,679,943.08 approved for outpatient care. In the 2nd period, the amounts approved increased by 23% compared to the previous 6 years. This increase did not occur evenly over the years, with a lower amount approved in 2020 than in almost all the years of the 1st period. 2020 also saw the lowest number of Venezuelan refugees entering the country (47,661). The highest amounts approved for outpatient care occurred in 2022, 2018, 2017 and 2019, respectively, coinciding with the years with the highest influx of Venezuelan refugees. **CONCLUSION:** The results suggest a correlation between the influx of Venezuelan refugees and the increase in the amounts approved for health care in the municipalities that primarily receive them. Further research should be carried out to prove this hypothesis.

88. **NEUROLOGICAL COMPLICATIONS ARISING FROM LEPROSY: THE SITUATION OF MARANHÃO IN THIS CONTEXT**Samia Raysa Sales Rodrigues<sup>1</sup>, Murilo Freitas e Silva Filho<sup>1</sup>, Enzo Matheus Mathias Pereira Raiol<sup>1</sup>, Luis Miguel Moraes Araujo<sup>1</sup>, Lanna Marry Silva de Morais<sup>1</sup>, Wanderson Fortes de Sousa<sup>1</sup>, José Alberto Pereira Pires<sup>2</sup><sup>1</sup>Universidade Federal do Maranhão<sup>2</sup>Hospital Universitário da UFMA

**INTRODUCTION:** Leprosy is an infectious disease, whose etiological agent is the bacterium *Mycobacterium leprae*, transmitted through airway. Its clinical presentation is manifested by skin lesions and, notably, impacts on the peripheral nervous system that can lead to atrophies, paresis, changes in sensitivity and even permanent physical disabilities. It is classified as grade I of functional disability when it affects eyes, hands and feet with decreased or loss of sensitivity, and grade II when these lesions are more severe (lagophthalmos and/or ectropion, trichiasis, visual impairment, hands and feet with visible damage). The state of Maranhão has a high endemicity for the disease, implying the need for studies on its impact in the region. **METHODS:** A descriptive epidemiological study was conducted using a database available at the Information Technology Department of the Unified Health System (DATASUS) regarding the number of cases with neurological complications due to leprosy. The studied population consisted of leprosy cases classified as grade I and II, at the level of functional disability registered in Maranhão between the years 2020 and 2023. **RESULTS:** During the analyzed period, there were 3,881 notifications of functional disabilities of grades I and II in Maranhão – 2,968 (76.5%) grade I and 913 (23.5%) of grade II –. 2022 had the highest number of registrations. In terms of gender, 1,928 (64.95%) were male with grade I disability, also being the majority for grade II disability (77.33%). Regarding race, the majority, 2,633 (67.8%), were mixed race. Finally, concerning health macro-regions, a higher number of registrations were observed in the North Macro-region, 2,283 (58.8%), consisting of the municipalities of São Luís, Rosário, Pinheiro, Viana, Santa Inês, Bacabal, Chapadinha, Itapecurú Mirim and Zé Doca. **CONCLUSION:** Neurological involvement due to leprosy should be evaluated more carefully, given its high prevalence in the state, demonstrating the intimate relationship between the quality of healthcare offered and the complications of the pathology. Furthermore, grade I neurological involvement had the highest number of registrations, with brown men being the majority, highlighting the need for studies that can clarify the increased occurrence in this group.

**89. POSTOPERATIVE COMPLICATIONS IN WHIPPLE SURGERY: A LITERATURE REVIEW**

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Oliveira<sup>1</sup>, Jordson Henrique Campos Silva<sup>1</sup>, Daniela Almeida  
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**INTRODUCTION:** Whipple surgery or pancreaticoduodenectomy is a complex and high-risk surgical intervention involving the removal of the pancreatic head, duodenum, part of the bile ducts, and the gallbladder. This procedure is of paramount importance and represents the curative treatment for the fourth leading cause of cancer death worldwide, pancreatic cancer. Given its complexity and relevance, this study aims to understand and identify postoperative complications attributed to Whipple surgery. **METHODS:** This is a systematic literature review of complications and mortality after the Whipple procedure, constructed from publications found in the "Pubmed" and "SciELO" databases using the descriptors "Whipple," "complications," and "mortality." Five studies published between 2010 and 2023 were selected, excluding those outside the mentioned period. **RESULTS:** Based on the literature review, Whipple surgery is a complex and high-risk intervention, with an intra-hospital or within 30 days postoperative mortality rate of 15.8%. Complications can lead to unfavorable clinical conditions, including sepsis, pneumonia, pulmonary thromboembolism, vascular thrombosis, and multiple organ failure, with septic shock being the most prevalent cause of death. Additionally, a relevant association between cardiac arrests and mortality was observed. The need for blood transfusion during surgery was associated with a worse prognosis. Furthermore, postoperative pancreatic fistula represents an important determinant outcome post-pancreaticoduodenectomy, potentially resulting in hemorrhagic and septic complications. **CONCLUSION:** Despite advances in surgical techniques, operative management, and intensive care therapy, along with a concurrent reduction in postoperative mortality, Whipple surgery still presents a high prevalence of postoperative complications. There is a need to improve surgical techniques and teams so that postoperative complications and operative morbidity and mortality decrease over time, thereby enhancing the outcomes and quality of life of patients undergoing this surgery.

**90. POSTOPERATIVE COMPLICATIONS AFTER LATE BARIATRIC SURGERIES BY GASTRIC BY-PASS**

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de Freitas Carvalho Filho<sup>1</sup>, Mariana Carvalho Feitosa  
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**INTRODUCTION:** The most widely performed procedure in the field of bariatric surgery today is gastric bypass, considered the most effective treatment for obese patients with various metabolic disorders and related pathological conditions. However, the procedure is not without postoperative complications, which can manifest with varying degrees of morbidity and mortality, categorized as early or late onset with diverse causes, mostly influenced by intrinsic patient factors as well as the technique used. The research aims to describe the late surgical complications of bariatric surgeries by gastric bypass. **METHODS:** This is an integrative review of an exploratory and qualitative nature, conducted based on articles found in the PUBMED and SCIELO databases. The research was carried out using Health Science Descriptors (DeCS/MeSH): "Bariatric surgery" and "Postoperative complications," combined with the boolean operators "AND" and "OR." 101 studies were found in accordance with the inclusion criteria used: full text, available for free access, published between 2019 and 2023. Among these, 6 articles were selected that fit the purpose of this research. **RESULTS:** Late postoperative complications of gastric bypass surgeries vary in incidence from 1.8% to 25%, as indicated by studies. Among the possible complications, the most recurrent are anastomotic stenosis, gastric and duodenal ulcers, internal hernias, fistulas, and dumping syndrome. To prevent such complications, regular patient follow-up and early identification of signs and symptoms associated with these adverse events are important for timely surgical intervention. Furthermore, late complications may also include nutritional deficiencies and long-term weight gain. **CONCLUSION:** Gastric bypass is a bariatric surgery technique considered the gold standard but may present late complications. In addition to the inherent risks of the procedure, it is important to consider the individual risk factors of each patient. To ensure the best results in terms of health and quality of life, it is crucial for the surgeon to comprehensively and individually assess the risks and benefits of gastric bypass for each patient.

91. **BIRTH CONDITIONS OF NEWBORNS IN BRAZIL, FROM 2019 TO 2021**

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**INTRODUCTION:** The study of maternal and child health is crucial for understanding the development and physical well-being of both the pregnant woman and the baby, being linked to disease prevention and health promotion. In this sense, the Unified Health System (SUS) created in 1990, from the Live Birth Information System (SINASC), the Declaration of Live Birth (DNV), a document for registering maternal and child conditions, such as the Apgar score, birth weight, and gestational age; important indicators for defining appropriate birth parameters. Thus, the present study aims to analyze the birth conditions of newborns in Brazil from 2019 to 2021. **METHODS:** The study is an analytical observational cross-sectional study, using data obtained through SINASC for all newborns in the years 2019, 2020, and 2021, considering Apgar scores at 1st and 5th minutes, birth weight, and gestational age. Newborns were classified as being born in favorable conditions if they had a birth weight greater than or equal to 2500g and less than or equal to 4000g, Apgar scores at 1st and 5th minutes equal to or greater than 7, and gestational age greater than or equal to 37 weeks and less than 42 weeks. **RESULTS:** There was a 6.03% reduction in the number of live births from 2019 to 2021. There was a decrease in the proportion of 1st-minute Apgar scores from 2019 to 2020, and an increase from 2020 to 2021. From 2019 to 2021, there was a general reduction in 5th-minute Apgar scores. From 2019 to 2020, there was a decrease in the proportion of low birth weight and adequate weight newborns, and an increase in newborns with high birth weight. From 2020 to 2021, there was an increase in low birth weight newborns, adequate weight newborns, and a decrease in newborns with high birth weight. There was an increase in preterm newborns from 2019 to 2021. From 2019 to 2020, there was an increase in term newborns and a reduction in post-term babies, and from 2020 to 2021, there was a reduction in term live births and an increase in post-term births. **CONCLUSION:** It is evident that, although the analyzed triennium was marked by challenges to maternal and child health, the analysis of the data indicates a percentage increase in births considered favorable by the study. In addition to this, there is a reduction in unavailable data, demonstrating a fundamental role played by the public health system in improving birth conditions. Therefore, the need to expand and advance services provided to the mother-baby dyad is concluded, in order to enable the rise of favorable markers observed.

92. **CONSUMPTION OF NEUROSTIMULANTS BY MEDICAL STUDENTS: A LITERATURE REVIEW**

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**INTRODUCTION:** Brain stimulants are substances with properties such as increasing motivation, alertness and improving concentration. Students on medical schools commonly use these resources with the finality of improving academic performances given that college education requires high levels of cognitive development. The present study aims to investigate, through a literature review, aspects related to the consumption of neurostimulants by medical students. **METHODS:** A literature review was carried out between 2015 and 2021, using the following databases: Pubmed, Google Scholar, Bireme and Scielo. After a systematic evaluation of the studies, the most pertinent articles were used to compose the core of this research. **RESULTS:** Central nervous system stimulants are widely used to contribute to cognitive improvement, reduce depressive symptoms and increase mood and performance. The most commonly utilized substances are caffeine, energy drinks, 3,4-methylenedioxy-N-methylamphetamine (MDMA), methylphenidate, modafinil and amphetamines. Although the specific mechanisms of action may vary, these stimulants act directly or indirectly on neurotransmitters that influence the improvement of motivation, attention and reward. Thus, 52.3% of the university students analyzed on the age range of 18 to 23 years consume these substances with a higher prevalence of caffeine and energy drinks, which are mostly used before exams and in the first year of the course. Methylphenidate, also known as ritalin, was one of the most widely used synthetic nootropics, and 23.5% of the students admitted to using it without a prescription. It demonstrates a lack of knowledge about its mechanism of action and adverse effects. In addition, there are important side effects related to the use of psychostimulants, which can vary in the short term, such as loss of appetite, irritability, insomnia, headache and abdominal pain, and in the long term, addiction, cardiovascular effects, anxiety and tremors. **CONCLUSION:** It can be inferred that the majority of medical students consider neuro-stimulants as a necessity and an effective way for momentary comfort and motivation. However, in the long-term period, these substances can carry negative health effects on the students. It is crucial then to assess the consequences of consuming these stimulants in order to minimize possible harmful effects.

**93. GLYCEMIC CONTROL IN RUNNERS WITH TYPE 2 DIABETES**

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**INTRODUCTION:** Type 2 diabetes is a metabolic disease characterized by hyperglycemia due to alterations in insulin secretion and/or action. Glycemic control in regular runners is a therapeutic strategy for the prevention and treatment of this syndrome, improving body composition and muscle metabolism related to lifestyle in this group. With this in mind, the study aimed to review the effect of running on glycemic control in diabetic patients who practice this modality. **METHOD:** Data was collected through a literature review using the descriptors "Controle glicêmico" or "glycemic control", "Corrida" or "running", "Diabetes Mellitus type 2" or "Diabetes Mellittus type 2", using articles from the BVS, Scielo, lilacs and Medline search engines. The inclusion criteria were original articles published in full online in Portuguese and English, within the last 5 years, using the aforementioned descriptors in the respective languages. The exclusion criteria were duplicate articles and those that did not meet the theme of the data search using the defined descriptors. **RESULTS:** With regard to the evidence of glycemic adjustment, it was possible to observe in the literature that there are significant benefits related to running and diabetes, such as a reduction in insulin resistance, a reduction in abdominal circumference and visceral fat in regular runners who run at least three to five times a week. It was possible to see a direct effect and significant impacts within a year of doing this physical exercise, as evidenced by the reduction in glycated hemoglobin, which resulted in a 15-20% reduction in cardiovascular events and a 37% reduction in microvascular complications. There was also an increase in the suppression of hepatic glucose production, improving the insulin sensitivity index in the liver, evidenced by the decrease in the postprandial C-peptide marker as an indicator of improvement in this result. **CONCLUSION:** Therefore, the importance of running as a regular practice can be seen, as it is directly related to improving quality of life and reducing glycemic indices.

**94. CORRELATION BETWEEN ANTHROPOMETRIC INDICATORS AND CARDIOVASCULAR RISK IN THE ELDERLY**

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**INTRODUCTION:** The aging of the population has contributed to increasing numbers of prevalence of cardiovascular diseases, as they are the pathologies that most affect this population. Anthropometric parameters are important sources of cardiovascular risk indicators as they take into account changes in body composition experienced in the older population. Therefore, this study aimed to verify the correlation between the Body Mass Index (BMI) and anthropometric indicators of cardiovascular risk in the elderly. **METHODS:** Cross-sectional study based on data from 7,072 elderly people participating in the second wave of the Brazilian Longitudinal Study on Aging (ELSI-Brazil), aged 60 years or over, living in the five major regions of the country. Data were collected between 2019 and 2021, related to socioeconomic, demographic, behavioral and anthropometric characteristics. The study was approved by the Ethics Committee of the Oswaldo Cruz Foundation - Minas Gerais (CAAE: 34649814.3.0000.5091). For data analysis, the Stata® version 14.0 program was used and for correlation between anthropometric indicators of cardiovascular risk, waist circumference (WC), waist-hip ratio (WHR), waist-height ratio (WHtR) and the BMI, Pearson's coefficient was used (p-value < 0.05). **RESULTS:** The average age was 70.1±8.8 years, of which 61.1% were women, 47.3% considered themselves white, 50.2% were married or had partners, 59.6% had the elementary school, 58.3% had a family income of less than one minimum wage, 89.2% did not smoke, 81.0% did not consume alcohol and 72.2% were sedentary. In reference to anthropometric variables, it was found that BMI and other indicators point to the risk of developing cardiovascular diseases. A strong correlation was also found between BMI and WC and WHtR. **CONCLUSION:** It was found that the best correlation to analyze the risk of cardiovascular disease in the elderly is between BMI, WC and WHtR. When correlating anthropometric parameters, the most consistent with each other are WC and WHtR, followed by WC and WHR in a moderate way, as well as WHR and WHtR. This information can help prevent probable cases of cardiovascular risk for this population. It is also important to highlight that the best way to prevent the onset of cardiovascular disease is a healthy and adequate diet associated with physical activity.

95. **OBSTETRIC CARE IN THE CONTEXT OF PERINATAL BEREAVEMENT: AVAILABLE SCIENTIFIC EVIDENCE**Mariana Azevedo Oliveira<sup>1</sup>, Martha Lourdes Rego Paula<sup>1</sup>  
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**INTRODUCTION:** Perinatal bereavement covers losses occurring during pregnancy from 22 weeks to the 29th day of life. It is estimated that almost half of late fetal deaths occur in apparently uncomplicated pregnancies. Therefore, families are generally not prepared for the loss, or for the loss of expectations of a birth full of happiness. In this scenario, the work of a qualified multidisciplinary team is essential to minimize suffering. Therefore, this work aims to review the best scientific evidence available to guide the actions of professionals who provide obstetric care in the context of perinatal bereavement. **METHODS:** This is a literature review constructed by searching multiple databases, such as: UpToDate, PubMed and ACCESSSS. The words Perinatal Bereavement, fetal death and Palliative Care were used as descriptors. **RESULTS:** The moment of diagnosis is especially painful for families and brings to light the need for the ability to communicate bad news and an institutionalized protocol in the health service, which must be known by the entire team. A type of "advance directive" can be considered for fetuses with serious malformations diagnosed during prenatal care, to be decided together with the family and the assistant team, which must include a neonatologist and palliative care team. Counseling is crucial in coping with loss, and intervention must be guided by the parents' wishes, also considering that the baby does not suffer from dysthanasia. The peripartum period must be attended in a separate space from other patients. Postpartum assessment is essential in planning a new pregnancy, if the family wishes. It is also necessary for the assisting professional to know the legal requirements for terminating a pregnancy, as well as limiting or withdrawing the life support system, even if such procedures conflict with their personal beliefs. It is recommended that the family be offered the possibility of seeing and holding the deceased baby, after being prepared for its physical appearance when it is extremely premature or has malformations. **CONCLUSION:** Team preparation is crucial when helping the family to develop a bond with the baby, as it helps prevent emotional distance from the loss and helps in the preparation of healthy mourning. The performance of the assisting health professional can be decisive in the outcome for the mental health of the family involved in the loss.

96. **PALLIATIVE CARE AND CHEMOTHERAPY IN TERMINAL PATIENTS: WHAT IS THE BEST INTERVENTION?**Maria Eduarda Mendes Gomes<sup>1</sup>, Maria Eduarda Couto de Melo dos Santos<sup>1</sup>, José da Silva Martins Neto<sup>1</sup>, Julia Alim Maluf Neves<sup>1</sup>, Giulia Germano de Azevedo da Silva<sup>1</sup>, Luiza Castro Mendes<sup>1</sup>, Maria Fernanda Sales Campos<sup>1</sup>  
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**INTRODUCTION:** Chemotherapy in the final weeks of life is a controversial medical approach. The pursuit of quality of life becomes crucial at this stage, and the decision to proceed with chemotherapy should be carefully considered, as palliative care, in some cases, could be the better option. The overall goal of this research is to assess the effectiveness of chemotherapy in terminal cancer patients, considering both potential benefits and associated challenges, as well as the ethical and clinical issues related to decision-making in this sensitive context. **METHODS:** The study presents itself as a qualitative, retrospective research with a literature review approach. Bibliographic search was conducted on platforms such as PubMed, BVS Saúde, and Scielo using the descriptors: "Chemotherapy," "Cancer," "Palliative Care," and "Quality of Life." Article synthesis was based on the review of scientific studies and the formulation of the guiding question: "What are the impacts of chemotherapy on the quality of life of terminal patients?" Articles in both Portuguese and English were included, and the temporal delimitation of the research focused on articles published between 2017 and 2023. **RESULTS:** From the bibliographic survey, it became evident that palliative care is the most appropriate alternative for terminal cancer patients, offering a significant improvement in quality of life and symptom relief, along with providing necessary psychological support and dignity to the patient. However, there is still a significant number of patients undergoing chemotherapy in their final weeks of life, even without the prospect of curing the disease. This represents a disregard for the individual patient's wishes and exposes them to unnecessary toxic substances and unwanted effects. **CONCLUSION:** Palliative care for terminal cancer patients provides humane care at a lower cost to the healthcare system, reducing ICU admissions, overall hospitalizations, and interventions. It brings significant benefits to the quality of life for both patients and their families. Moreover, chemotherapy treatment in patients in a terminal state ends up causing more harm than good, considering the lack of necessary humanized support for patient care.

97. **EPIDEMIOLOGICAL DATA OF AMERICAN TEGUMENTARY LEISHMANIASIS IN A CITY IN SOUTH MARANHÃO**

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**INTRODUCTION:** American Cutaneous Leishmaniasis (ATL) is a pathology caused by the protozoan of the genus *Leishmania*, present in Brazil since 1934, when it was first confirmed in São Paulo. Therefore, ATL transmission occurs through the bite of the female straw mosquito (*Lutzomyia cruzi*), its incubation time varies from 2 to 3 months. Therefore, to prevent contamination, accumulation of garbage, stagnant water and exposure to mosquitoes must be avoided. For a complete cure, the patient must faithfully follow the proposed treatment, which is provided free of charge by the SUS. Furthermore, this studied pathology mainly affects low-income populations, which do not have adequate basic sanitation and personal protection conditions, which is why it is a neglected disease. Finally, the objective of this study is to expose and analyze the numbers of ATL in the city of Açailândia, as well as the gender most affected. **METHODS:** To carry out the proposal, the TabNet platform was used, where the number of positive cases was researched in the four-year period from 2019 to 2022, and the gender most affected by the disease was researched in the years analyzed. **RESULTS:** During the proposed years, in 2019, 75 positive cases of the disease were found, 59 cases in men and 16 in women. The following year, 43 cases were reported in total, of which 34 were in men and 9 in women. In 2021, 19 diagnoses were made to men and 9 to women, totaling just 28 confirmed cases. In the last year (2022) analyzed, there were 107 cases of ATL reported, 84 cases in men and 23 in women. At the end of the proposed four-year period, 253 cases of the disease were confirmed, 196 (77.4%) in males and 57 (22.4%) in females, showing a considerable discrepancy between the affected sexes. **CONCLUSION:** Regarding the sex of patients, it is concluded that men are more exposed to contamination, due to the lack of adequate protection and certain jobs that are historically more common for men, which is why there is greater notification to the male public. From the perspective of notifications, in the years 2020 and 2021, there was the COVID-19 pandemic, which reflected in the reduction of ATL notifications, due to social isolation and the consequent lack of demand for primary care. In 2022, there was a large increase in notifications, due to the restructuring of services, with the end of the state of emergency caused by the pandemic.

98. **CHEMICAL DEPENDENCE ON OPIOIDS: CLINICAL CONSEQUENCES OF THE INDISCRIMINATE USE OF FENTANYL**

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**INTRODUCTION:** Opioids are frequently used in hospital settings, due to their high analgesic and sedative potential for moderate to severe pain. Of the most used active ingredients, Fentanyl stands out, derived from morphine, with significant tolerance and dependence power. Therefore, this work aims to understand the consequences of the indiscriminate use of this medication. **METHOD:** This study is a descriptive literature review that includes analysis and interpretation of data, aiming at a critical assessment of the indiscriminate use of Fentanyl. The research was based on articles from the Scientific Electronic Library Online (SCIELO), Google Scholar and PubMed platforms, in the time range from 2018 to 2023. **RESULTS:** Chemical dependence on Fentanyl is associated with a combination of factors, including genetic predisposition, psychological profile and sociocultural context. This occurs due to the adaptation mechanism in the  $\mu$  receptors of the central nervous system, responsible for analgesia. With chronic consumption, tolerance develops, and with this comes the need for larger doses to produce similar effects, leading to a deterioration in mental and physical health in general. The risk of overdose from Fentanyl is significantly high, being around 100 times more potent than morphine, with lethal doses of around 2 mg. This is evidenced by the increase in deaths from synthetic opioids in the USA between 2020 and 2021, with 56,000 and 70,000 deaths, respectively, representing an almost fifteen-fold increase compared to 2010, predominantly due to Fentanyl. **CONCLUSION:** In this scenario, the indiscriminate use of Fentanyl is alarming due to its popularization and the associated serious clinical consequences. Uncontrolled use is related to worsening dependence with high doses often combined with other pain-relieving drugs, increasing the risk of intoxication and overdose. Therefore, it is crucial to critically address the use of Fentanyl to combat this growing public health crisis.



99. **DEPRESSION IN THE ELDERLY: AN ANALYSIS OF RISK FACTORS AND PHARMACOLOGICAL THERAPY**

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<sup>1</sup>FAHESP/IESVAP<sup>1</sup>

**INTRODUCTION:** The elderly population is more vulnerable to health problems, with a higher prevalence of mental illnesses, with an emphasis on depression, which has a prevalence of 15% in this group. The disease is caused by a series of psychopathological changes that can differ in symptoms, severity and prognosis. Several biopsychosocial risk factors are described, including clinical comorbidities, functional decline, grief and social isolation, as well as chronic conditions, loss of independence and mobility. It is most commonly manifested by a depressive and/or irritable mental state. The treatment has a medicinal approach as the first choice, and can be combined with psychotherapy and physical exercise. Therefore, the present study aims to understand the risk factors and pharmacological management of these patients. **METHODS:** This is an integrative, qualitative, retrospective and bibliographic literature review. Around 10 articles were analyzed between the period 2019 and 2023, extracted from the following databases: Google Scholar, Scielo and Lilacs, about risk factors and pharmacological treatment of depression in the elderly with the descriptors "Depression", "Elderly", "Factors risk", "Pharmacological Therapy" and Boolean operators "AND" and "OR". **RESULTS:** Pharmacological therapy is carried out with antidepressants, with selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants, monoamine oxidase inhibitors, selective noradrenaline reuptake inhibitors, serotonin and noradrenaline reuptake inhibitors being recommended for the elderly population. SSRIs receive greater emphasis as they present lower intoxication, dropout rate, drug interactions and side effects, characteristics that offer greater benefit to these patients who sometimes have several comorbidities and are on polypharmacy. On the other hand, attention should be paid to the rates of suicidal thoughts at the beginning of treatment, as its action begins after two weeks. Biopsychosocial risk factors can negatively interfere with treatment as they can lead to a worsening of the condition. **CONCLUSION:** It is concluded that depression is a multifactorial disease, of great importance, with several factors that influence it and that affects a large proportion of elderly people. Therefore, one must have knowledge of pharmacological treatment. Thus, doctors must have a critical approach to this problem and ask themselves how best to help their patients.

100. **DEPRESSION IN POLYCYSTIC OVARY SYNDROME (PCOS) WOMEN IN SÃO LUÍS-MA, BRASIL**

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**INTRODUCTION:** The Polycystic Ovary Syndrome (PCOS) is an endocrine disease that presents symptoms related to metabolic syndromes, like type 2 Diabetes and cardiovascular diseases, and presenting irregularity in the menstrual cycle. Being prevalent in women of reproductive age, varying according to age, ethnicity and used diagnostic criteria. Furthermore, has unknown etiology with genetics and epigenetics. The current study has the goal to investigate the association between the depressive behavior and women with the polycystic ovary syndrome. **METHODOLOGY:** A cross-sectional study was conducted with 139 women, 71 women with PCOS and 68 healthy women in the control group aged 24-33 years old. The patients attended the Gynecology Clinic of a public research Hospital in Maranhão, where PCOS was confirmed through nutritional assessment, biochemical tests and ultrasound exams. To investigate levels of depression related to PCOS, the Beck's Depression Inventory (BDI) was applied. This study was approved by the Research Ethics Committee from the University Hospital — UFMA (protocol #71987) and meets the requirements of the Declaration of Helsinki. All the participants signed a consent form. **RESULTS:** PCOS women presented higher risk of low, moderate or high depression (OR = 6.00; 95% CI: 2.39-15.05; P < 0.01) while compared with control group, regardless of cofactors such as age or marital status. **CONCLUSION:** It was found that PCOS women are at increased risk for symptoms of depression when compared to women without PCOS.

**101. DERMATOSIS ASSOCIATED WITH HIV INFECTION: LITERATURE REVIEW**

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**INTRODUCTION:** The human immunodeficiency virus (HIV) causes great depletion of the immune system by reducing the total number of CD4 lymphocytes, leading to the emergence of opportunistic infections in various organs, including the skin. It is known that approximately 90% of people living with HIV present, during the course of the disease, skin changes that are considered by the WHO to be useful in assessing the severity of the infection. This article reviewed the main studies available in the literature on the topic, given their relevance and clinical importance. **METHODS:** Bibliographical survey, carried out on the LILACS, Scielo and Pubmed platforms, of studies addressing the topic of dermatoses related to HIV infection, published in Portuguese, English and Spanish between the years 2017 and 2023. No articles were analyzed outside the period of survey or in another language. **RESULTS:** Most HIV-positive patients present some mucocutaneous lesion of infectious origin, whether fungal (33.03%), bacterial (28.18%) or viral (14.55%). HIV infection predisposes to co-infection by other pathogens, particularly herpes simplex (52.4%) and oropharyngeal candidosis (47.6%), which is considered a predictor of immunological status. Among the most common dermatoses, xerosis (54.8%) and seborrheic dermatitis (54.4%) stand out, the latter of which can reach an incidence of 85 to 95% in cases of advanced HIV infection. Regarding the inflammatory dermatoses most commonly associated with HIV, the following are evident: psoriasis, atopic dermatitis, eosinophilic folliculitis, pruritic papular eruption, photosensitivity disorders, nodular prurigo and acquired ichthyosis. There is also a link between HIV-induced immunosuppression and increased predisposition to some skin cancers, including squamous cell carcinoma, melanoma, Kaposi's sarcoma and Merkel cell carcinoma. **CONCLUSION:** The intimate relationship between HIV and many dermatological manifestations is evident. HIV-positive individuals present dermatoses that are important markers of the evolution of immunosuppression, also enabling the diagnosis of opportunistic infections with extracutaneous involvement, which demonstrates undeniable clinical relevance. Therefore, it is essential for all health professionals to recognize early cutaneous manifestations related to HIV. HIV infection.

**102. PERSISTENT CHALLENGES: A RETROSPECTIVE STUDY OF MATERNAL MORTALITY IN MARANHÃO (2012-2021)**

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**INTRODUCTION:** Maternal death, as defined by the World Health Organization (WHO), refers to the death of a woman during pregnancy or within 42 days after the end of pregnancy. In Brazil, the main causes include hypertensive disorders, hemorrhages, puerperal infections, and complications resulting from abortions. The reduction of maternal mortality is one of the Sustainable Development Goals (SDGs); however, despite efforts made, Brazil still faces significant challenges in achieving this goal. Maternal mortality persists as a serious public health issue. **METHODS:** This is a descriptive retrospective study on maternal mortality in the state of Maranhão from 2012 to 2021. Data were obtained through queries to the database available at the Department of Health Information System (DATASUS) and processed using Microsoft Excel® for descriptive statistical analysis. **RESULTS:** Between the years 2012-2021, 1,035 maternal deaths were recorded, with 88% occurring in a hospital setting. Direct obstetric causes accounted for 75% of cases, while indirect causes composed 24%. Eclampsia was the leading cause (16%). An increase in deaths due to infectious and parasitic diseases was observed in 2020 and 2021, possibly related to the COVID-19 pandemic, with 17 and 57 cases respectively in each year, while the previous 8 years (2012-2019) totaled 11 cases. Regarding the sociodemographic profile, the most affected age group was 20-29 years (41%), followed by 30-39 years (33%). The majority of women identified themselves as mixed race (69%). About 46% were single, and 43% had between 8 to 11 years of education. **CONCLUSION:** Maternal mortality is a crucial indicator of reproductive health that reflects the quality of health services. Cases of infectious and parasitic diseases have increased in recent years, possibly due to the COVID-19 pandemic. Maranhão still faces challenges in reducing maternal mortality, emphasizing the needs for improvements in prenatal care and new strategies to address this issue.

**103. DESCRIPTION OF MALE BREAST CANCER CASES IN THE STATE OF MARANHÃO BETWEEN 2012 AND 2023**Marliane Lisboa Soares<sup>1</sup>; Dâmaris Gonçalves Vieira<sup>1</sup>; Mariana Azevedo Oliveira<sup>1</sup>; Ana Gabriela Caldas Oliveira<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão (UFMA)

**INTRODUCCION:** Male breast cancer is a rare disease, accounting for less than 1% of all cancers in men. Although less common than female breast cancer, this condition deserves attention. The study aims to describe the occurrence of breast cancer in men over an 11-year period in the state of Maranhão. **METHODOLOGY:** This is a descriptive, observational study involving the collection of epidemiological data and information from mammography reports of male patients with breast cancer in Maranhão, as documented in the Department of Informatics of the Unified Health System (DATASUS). The study considers age, gender, educational level, and information about mammography. **RESULTS:** A total of 887 cases of male breast cancer were diagnosed, with a predominance in the year 2022 (23.11%, n=205), followed by 2023 (14.32%, n=127) and 2021 (13.53%, n=120). The age group with the highest incidence was between 45 and 64 years (n=484 cases). Approximately 98.20% of the sample (n=871) did not provide information on educational background, with only 0.90% (n=8) having completed high school, and 0.45% (n=4) having completed elementary school or being illiterate. Regarding mammography data, 83.54% (n=741) underwent screening mammography, and 17.47% (n=155) underwent diagnostic mammography. Both indications showed the highest number of cases in the age group of 45 to 64 years. **CONCLUSION:** The results demonstrate that male breast cancer primarily occurs in individuals over 40 years old, emphasizing advancing age as a risk factor for breast cancer development. The significant amount of missing data regarding education suggests a lack of interest in recording this information in medical records. Mammography is the primary examination performed in male patients with breast cancer. Therefore, it is crucial to implement policies aimed at preventing and facilitating early diagnosis of breast cancer in men in the state of Maranhão.

**104. COGNITIVE DEVELOPMENT OF INDIVIDUALS WITH AUTISM: A LITERATURE REVIEW**Vanessa Gonçalves de Sousa Vidal<sup>1</sup>, Carla Cristine Gonçalves de Souza<sup>2</sup>, Luís Augusto Marinho de Lucena<sup>2</sup>, Thalita de Cássia Silva de Oliveira<sup>1</sup>, Fernando Martins de Oliveira<sup>1</sup>, Laila de Castro Araújo<sup>1</sup>, Valéria de Castro Fagundes<sup>1</sup>.<sup>1</sup>Faculdade de Ciências Médicas do Pará - FACIMPA<sup>2</sup>Centro Universitário do Maranhão – CEUMA

**INTRODUCTION:** Autism Spectrum Disorder (ASD) is a chronic and invasive neurodevelopmental condition more prevalent in males' gender (around 4 times) when compared with females and its estimated prevalence is around 1-2%. It is a disorder that affects the social, communicative and behavioral development of individuals, resulting in difficulties in expression and social relationships, in addition to presenting specific interests and repetitive behaviors. Therefore, the aim of this work is to understand cognitive development in ASD in order to better understanding the signs and symptoms this disorder. **METHODOLOGY:** This work is a bibliographic review of studies published between 2019 and 2023, in the databases of Lilacs and Pubmed. For this, we used the crossing of the descriptors "Autistic Spectrum Disorder" and "Cognitive function" in Portuguese, English and Spanish. **RESULTS:** Observed that the deficiency of anti-inflammatory markers, such as progranulin, can cause cumulative damage result from unregulated inflammation that cause delay in cognitive development. Neuroimaging exams have associated larger volumes of gray substance in the temporal poles of middle temporal gyri of right and left to individuals with ASD and language delay. In the hearing field, histopathological studies show that patients of ASD have less neurons in the auditory hindbrain and the surviving neurons are smaller and dysmorphic, that result a hearing dysfunction. In reference, the autistic cerebellum has a reduced number of cells' Purkinje and the presence of ectopic neurons. This way, it is possible to understand the presence of postural instability and gait dysfunction in some patients. Regarding brain connection, it is possible notice, through magnetic resonance imaging, that there is weakened functional connectivity in the areas of the hippocampus, parahippocampal gyrus, superior frontal gyrus, inferior temporal gyrus, precuneus, amygdala and perirhinal cortex, with a predominance of hippocampus and parahippocampal gyrus – which can interfere with changes in social and behavioral patterns. **CONCLUSION:** People with ASD have an uneven cognitive development, where it is possible to observe that changes in developmental milestones from 6 months onwards when skills, especially motor skills, tend to delay. So, attention to children's development is essential for early diagnosis with appropriate treatment in order to promote quality of life.

**105. DEVELOPMENT OF ALCOHOLISM IN POST-BARIATRIC PATIENTS: A LITERATURE REVIEW.**

Maria Eduarda Setuba Barros<sup>1</sup>, Stéphanie Cristina Ramos Soares<sup>1</sup>, Nathalia Neres Barros<sup>1</sup>, Vanessa Silva Sousa<sup>1</sup>

<sup>1</sup> Universidade Ceuma

**INTRODUCTION:** Obesity is a chronic disease with increasing rates, which can be defined as the accumulation of adipose tissue and excess food consumption compared to energy consumption for vital activities, leading to metabolic and systemic changes, which makes it a public health problem. The treatment of obesity is multidisciplinary and seeks to modify lifestyle. Bariatric surgery is currently the alternative with the best results in terms of long-term weight loss, improvement or remission of comorbidities and reduced mortality. However, studies point to its correlation with the post-surgical development of addictions to substances, especially alcohol. Therefore, this study aims to discuss the development of alcoholism in patients undergoing bariatric surgery. **METHODS:** A literature review was carried out based on articles from Google Scholar, Scielo and PubMed, published between 2017 and 2023. The descriptors used were obesity, bariatric surgery and alcoholism. The most relevant studies were selected to make up the body of the paper. **RESULTS:** According to the articles analyzed, there is unanimity among them that bariatric surgery patients, especially after Roux-en-Y gastric bypass (RYGB), have a higher risk of developing an alcohol use disorder. This tendency is associated with the anatomical alteration related to the surgical technique, which results in changes in the brain's reward system, predisposing to the disorder. In addition, another factor cited is the transfer of binge eating to alcohol abuse, because after the procedure, the patient looks for alternative ways to meet the need for reward and well-being. In addition, RYGB alters the mechanism of alcohol in the blood, enhancing its absorption and potentially increasing vulnerability to addiction or problematic use. The development of this alcoholism is seen mainly after 24 months post-surgery and continues to increase over the years. **CONCLUSION:** The influence of a number of related factors can lead to a good or poor prognosis in relation to alcohol in patients undergoing bariatric surgery. These factors can range from surgical technique to lack of knowledge about post-surgery and changes in lifestyle habits. It is therefore crucial that these patients are followed up beyond 24 months in order to improve their prognosis and quality of life.

**106. MISINFORMATION ABOUT HPV AS A RISK FACTOR FOR DEVELOPING PENILE CANCER**

Wemerson Matheus Ramos Cruz<sup>1</sup>, Kayo Patryck Gomes Ferreira<sup>1</sup>, José Vinícius Pereira Soares<sup>1</sup>, Milena Ribeiro Silveira<sup>1</sup>, Caroline Chavier Pereira Santana<sup>1</sup>, Samuel Gonçalves Santos de Lima<sup>1</sup>, Anderson Gomes Nascimento Santana<sup>1</sup>

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**INTRODUCTION:** Penile cancer (PC) is a neoplastic condition with prevalence in underdeveloped and developing countries. Among the various etiological factors associated with this pathology, the Human Papillomavirus (HPV) infection, especially type 16, stands out as the leading risk factor for the development of penile neoplasms. This study aims to identify, through pre-existing studies, the gap in knowledge regarding the population's understanding of the correlation between penile cancer and HPV. **METHODS:** Integrative literature review based on the bibliographic collection of the last five years from the SciELO, VHL, and PubMed databases. Controlled terms DeCS and MeSH were used, with "Human Papillomavirus Viruses," "Penile Neoplasms," and "Risk Factors" as descriptors. Ten studies that met the eligibility criteria for analysis were selected. **RESULTS:** The evaluation of the evidence revealed that the knowledge about the relationship between HPV infection and PC is substantially lower compared to cervical cancer. Remarkably, the understanding of HPV vaccination and its benefits is more pronounced among women compared to men, possibly due to a greater awareness of health issues in the first group. The level of education is also directly related to expanded access to information about the types of cancer associated with HPV infection. Furthermore, the population living in urban areas tends to have a higher level of knowledge on the subject, in contrast to those who live in rural areas. However, it is important to emphasize that, when it comes to the relationship between PC and HPV, the understanding of this topic is at an equally low level in both population groups. **CONCLUSION:** In this sense, the results suggest a significant lack of information about the association between penile cancer and HPV infection. This knowledge gap contributes to the expansion of risk factors associated with penile neoplasms on a global scale. Therefore, there is a clear need to facilitate and promote the dissemination of information related to public health among the male population, who historically neglected their self-care.

107. **GESTATIONAL DIABETES: AN APPROACH TO MATERNAL-FETAL COMPLICATIONS**

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<sup>1</sup>Faculdade ITPAC

**INTRODUCTION:** Pregnancy imposes a metabolic load on women, i.e., weight gain and insulin resistance. Thus, gestational diabetes mellitus (GDM) is a metabolic complication in pregnant patients and can be defined as impaired glucose intolerance with onset or first recognition in pregnancy. Therefore, this condition generates complications during pregnancy, such as preeclampsia and premature birth. **METHODS:** Systematic review of pregnancy complications resulting from GDM. The works were searched on the PubMed, Scielo and Google Scholar platforms, limited to articles written in English, between 2017 and 2023, following inclusion and exclusion criteria of the works found in the literature. **RESULTS:** The results reveal that hyperglycemia increases the concentrations of fatty acids and amino acids in the maternal blood, which results in the elevated supply of nutrients to the fetus through the placenta. This supply will stimulate fetal pancreatic cells to produce more insulin, a process known as fetal hyperinsulinemia, which leads to the growth of insulin-sensitive tissues, such as the heart, liver, and adipose tissue. In this sense, newborns born to mothers with GDM may have more pronounced body weight and progression of metabolic diseases during childhood, such as dyslipidemia and diabetes. In view of maternal complications, there was a two-fold increased risk of cardiovascular and systemic diseases in women with GDM, in addition to the increased risk of preterm birth, cesarean section and preeclampsia. **CONCLUSION:** Therefore, it is evident that GDM is related to the emergence of adverse repercussions during pregnancy. In addition, medical inferences about future complications for the health of the fetus and the mother indicate that there is a development of metabolic syndromes and physiological dysfunctions during pregnancy, in addition to the risk of progression of cardiovascular and systemic diseases after childbirth. That being the case, it is necessary to emphasize that future studies should be carried out in order to elucidate unclarified points, such as the behavioral and psychosocial changes of pregnant women in the face of GDM, in addition to expanding epidemiological research on the early diagnosis of GDM in asymptomatic conditions.

108. **DIAGNOSIS OF LUNG INJURY ASSOCIATED WITH THE USE OF ELECTRONIC CIGARETTE OR VAPING PRODUCTS**

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**INTRODUCTION:** The use of electronic cigarettes has recently begun and was created to mitigate smoking, but has not achieved proven results. The great attraction of these devices is the diversity of types and flavors on the market. The National School Health Survey revealed that, in 2019, 16,8% of school-age children had already tried vaping. Its composition has vitamin E acetate which works as a diluent for tetrahydrocannabinol oil, identified as one of the main elements causing lung damage associated with the use of electronic cigarettes or vaping products (EVALI), as it was found in a large number of samples from the bronchoalveolar lavage (BAL). The objective of this study is to analyze the diagnosis of lung injury caused by electronic cigarette use. **METHODOLOGY:** Integrative review based on databases: PubMed, LILACS, and MEDLINE. With the descriptors: lung injury, electronic cigarette, and diagnosis. The inclusion criteria were: articles on image diagnosis and clinical signs, in Portuguese and English, indexed in the last 5 years and within the theme. And the exclusion criteria: are duplicate works, literature reviews, and articles that do not fit with the thematic axis, totaling 3 articles for analysis. **RESULTS:** Patients with EVALI present dyspnea, cough, fever, chills, and gastrointestinal symptoms, such as nausea and vomiting. In laboratory tests, there may be increased levels of erythrocyte sedimentation rate and C-reactive protein, in addition to leukocytosis. Patients also have negative viral and bacterial tests. On chest radiography, there are multilobular and multifocal opacities, which have variable distribution and extent. On CT, a diffuse or multifocal ground-glass pattern is seen, which is attributed to organizing pneumonia. Centrilobular thickening and mosaic attenuation are also observed. Such findings resemble eosinophilic pneumonia and hypersensitivity pneumonia. LVB cytology shows macrophages and neutrophils. **CONCLUSION:** It is therefore concluded that the number of diagnoses due to lung injury associated with the use of electronic cigarettes or vaping has increased in recent years, especially among adolescents and young adults. The diagnosis is normally made by exclusion and in most cases, it results from acute respiratory symptoms, with computed tomography being the most effective method for visualizing the damage caused to lung tissue.

**109. DIFFERENTIAL DIAGNOSIS OF BILIARY ATRESIA BASED ON DIAGNOSTIC IMAGING**

João Pedro Oliveira da Silva<sup>1</sup>, Gildean Pereira Costa<sup>1</sup>, Miriam Santos Nunes<sup>1</sup>, João Pedro Lima dos Santos<sup>1</sup>, Débora Cardoso Oliveira<sup>1</sup>

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**INTRODUCTION:** Biliary atresia is a neonatal condition characterized by total obstruction of the intra- and extrahepatic bile ducts, leading to chronic inflammation, fibrosis and cirrhosis in the majority of patients. Physical examination and clinical findings in a child with cholestasis typically include prolonged jaundice, scleral icterus, acholic stools, choluria, and hepatomegaly, and abdominal ultrasound is the first imaging test to be performed. Therefore, this study aims to analyze the main imaging tests that help in the differential diagnosis of biliary atresia in pediatric patients. **METHODS:** A literature review was carried out, selecting articles published in the PubMed database, from August 2018 to August 2023. To this end, studies were included that were in the proposed period, available in English and made available in full. Duplicate articles, case reports, theses, dissertations, reviews and pre-clinical studies were excluded. **RESULTS:** After analysis, 5 articles were selected. It was found that ultrasound features such as triangular cord thickness > 2 mm, gallbladder classification, presence of hilar microcyst, and serum GGT levels were found to be significantly useful for diagnosing biliary atresia. When analyzing the duodenal tube test, the relationship between total bile acid in duodenal fluid and serum GGT was the most specific parameter compared to hepatobiliary scintigraphy to evaluate biliary excretion. The spider-shaped hepatic subcapsular telangiectasia sign was highly accurate, being identified in all patients with biliary atresia. **CONCLUSION:** It was observed that the results were promising regarding the differential diagnosis using imaging methods, with a high success rate in identifying biliary atresia, such as the presence of the intraoperative sign of hepatic subcapsular telangiectasia, duodenal tube test and ultrasound characteristics associated with GGT levels, which facilitates early diagnosis and treatment, enabling a better prognosis for the patient.

**110. DIAGNOSIS AND TREATMENT OF CYSTIC FIBROSIS: A LITERATURE REVIEW**

Emanuele Camile Cardoso Carvalho<sup>1</sup>, Saani Maressa Lima Ribeiro<sup>1</sup>, Samia Raysa Sales Rodrigues<sup>1</sup>, Rayres Campos Ferreira<sup>1</sup>, Lanna Marry Silva de Morais<sup>1</sup>, Bismarck Ascar Sauaia<sup>1</sup>

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**INTRODUCTION:** Cystic Fibrosis (CF), also known as mucoviscidosis, is a severe autosomal recessive genetic disease characterized by the excessive production of thick mucus. The accumulation of mucus promotes the proliferation of microorganisms, initially in the respiratory tract, later in the gastrointestinal tract, and pancreas. More common in childhood, its treatment aims to improve the quality of life and increase the life expectancy of the patient. **METHODS:** A review study was conducted using the Medline, PubMed, Scielo, and Google Scholar databases, the terms were considered: cystic fibrosis, diagnosis, under 10 years old, in Portuguese, English, and Spanish, between the years 2019 and 2023. Studies outside this period and those that did not address the review objectives were excluded. The research aimed to identify diagnostic criteria in children under 10 years old and available treatments. **RESULTS:** Throughout the historical process, relevant methods have been developed, with the early diagnosis being crucial for the survival of patients. The sweat test, with electrolyte measurement, represents the gold standard, followed by prenatal screening, neonatal screening, DNA, and confirmatory laboratory tests, all of which present complexities and discussions in the literature. Symptomatology depends on the patient's immune status and the progression of the disease, requiring a careful medical history to guide test requests and rule out other diseases. Treatment encompasses various modalities, including nutritional therapy, antibiotics, and mucolytic agents for airway clearance, inflammation reduction, and infection control. Respiratory physiotherapy, aiding in expectoration, has a positive impact on the quality of life of individuals with CF. **CONCLUSION:** Given the multisystemic complications caused by CF, there is a need for understanding different diagnostic methods and challenges, as well as advantages in individualized treatment, aiming for a faster diagnosis and greater effectiveness in essential care to increase the life expectancy of individuals with the disease.



111. **DIAGNOSIS AND TREATMENT IN VULVOVAGINAL CANDIDIASIS: A LITERATURE REVIEW**

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**INTRODUCTION:** Vulvovaginal candidiasis (VVC) is a gynecological fungal infection with considerable prevalence in the female population, with reports of over 2 million cases per year in Brazil. *Candida albicans* is a microorganism responsible for approximately 90% of fungal infections, causing an imbalance in vaginal flora and consequently the presence of thick white discharge accompanied by inflammation. Although this condition is not considered serious, it is important to note that its symptoms can be extremely uncomfortable and significantly impact the quality of life of affected women. The present study aims to describe, through a literature review, the implications of VVC in women's lives, its diagnosis, and treatment.

**METHODS:** This is a literature review in which articles were sought in the Google Scholar database, using the descriptor "Vulvovaginal Candidiasis." Inclusion criteria included original articles addressing data related to vulvovaginal candidiasis between the years 2019 and 2023. Exclusion criteria involved articles discussing vulvovaginal candidiasis during pregnancy and adolescence. Additionally, articles that, upon reading their abstracts, did not address the specified theme were excluded. **RESULTS:** The main symptoms of VVC include the presence of thick white vaginal discharge, itching, and irritation in the vaginal and vulvar region. Some women may also experience pain during sexual intercourse and pain or burning during urination. The diagnosis of VVC is based on clinical symptom evaluation, as well as laboratory tests such as cultures, which can confirm the presence of the *Candida* fungus in the vaginal region. Antifungals, such as miconazole and fluconazole, are the most commonly prescribed medications for the treatment of the condition. On the other hand, a hindrance to proper therapy is the self-diagnosis that women often engage in leading to detrimental consequences such as fungal resistance to medications. **CONCLUSION:** Based on the conducted study, Vulvovaginal Candidiasis is a condition that can present symptoms or be asymptomatic. A notable drawback identified is the lack of consensus among the studied authors regarding predisposing factors for VVC. Positive aspects include the evolving presentations of various diagnostic and treatment approaches for VVC.

112. **FETAL DIAGNOSIS OF CONGENITAL HEART DISEASES: A LITERATURE REVIEW**

Fernanda Karolynne Sousa Coimbra<sup>1</sup>, Camila de Carvalho Vieira<sup>1</sup>, Glauber Miranda Silva Filho<sup>1</sup>, Andreia Sena Sousa Aguiar<sup>1</sup>, Welson Sousa Lopes<sup>1</sup>, Matheus da Silva Moraes<sup>1</sup>, Paulo Victor de Aguiar Ribeiro<sup>1</sup>  
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**INTRODUCTION:** Congenital heart disease in infancy is defined as any structural malformation of the heart. Various environmental, genetic and pathological factors are involved in the incidence of these abnormalities, especially during the period of heart formation, up to the eighth week. Despite the possibility of detection in the intrauterine period using methods such as morphological ultrasound and fetal echocardiography, many diagnoses go unnoticed or are not made, leading to negligence in the treatment of heart defects. These disorders are thus related to high morbidity and mortality during childhood. In this context, this study aims to assess the impact of diagnostic methods for congenital heart disease on preventing infant mortality. **METHOD:** This is a literature review, constructed through searches in the following databases: Scientific Electronic Library Online (SciELO), PubMed, and Google Scholar, using the descriptors "heart diseases," "congenital," and "diagnosis." The inclusion criteria were publications conducted between 2019 and 2023, including original articles and review studies on the proposed topic, in Portuguese and English languages, with full-text availability and all keywords present in the titles of the publications. Exclusion criteria were duplicate publications and those that do not fit within the defined theme.

**RESULTS:** It was observed that the most frequently cited tests for the early diagnosis of fetal congenital heart disease are fetal echocardiography and echocardiography, both of which were highlighted as having the highest accuracy in four of the seven studies analyzed. In addition, pulse oximetry was highlighted as part of the list of neonatal tests and was mentioned in three of the seven studies. Finally, physical examination and complementary tests such as morphological ultrasound, electrocardiogram (ECG), systemic ultrasound, karyotyping, chromosomal microarray analysis (CMA), nuchal translucency, prenatal cytogenetic diagnosis, dried blood samples, magnetic resonance imaging and computed tomography were also highlighted. **CONCLUSION:** In light of this, it is clear that tests such as echocardiography and fetal echocardiography are essential for diagnosing congenital heart disease and, consequently, for early care of the baby to prevent possible complications, thus improving quality of life. However, it was not possible to assertively infer that such early diagnosis reduces infant mortality.

113. **EARLY DIAGNOSIS OF RETINOBLASTOMA IN PEDIATRIC PATIENTS: A NARRATIVE REVIEW**

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Retinoblastoma (RB) is a rare intraocular tumor with high mortality rates, making it the most prevalent type of cancer in childhood. Symptoms are variable depending on size and location. In this context, guardians usually notice a different shine in the child's eyes and seek out a doctor, who is essential for early diagnosis, as they must recognize the first signs of eye disease. Given this, it is believed that developing countries have higher rates of RB, due to late diagnosis, as a result of doctors' unpreparedness in carrying out clinical ophthalmological examinations. Therefore, the present study aims to collect information about methods for early diagnosis of RB in children. This is a narrative review that used the descriptors "Child", "Early Detection of Cancer" and "Retinoblastoma" in two databases (SciELO and Biblioteca Virtual em Saúde Brasil) in October 2023. Written articles were included in Portuguese or not, published between 2018 and 2023. In total, 22 articles were found, of which 6 were in line with the objective of this work. The articles analyzed indicated that the main signs found in RB are leukocoria and strabismus. However, these signs may be absent, which contributes to late diagnosis as a result of not carrying out a complete physical examination, given the lack of medical suspicion. Furthermore, the studies mentioned the Red Reflex test, the Pupillary Reflex test and Fundoscopy as the main clinical exams to be carried out to detect the tumor. With regard to imaging tests such as Ultrasonography, Computed Tomography (CT) and Magnetic Resonance Imaging, they have complementary value to diagnosis, with CT being the most important. Retinoblastoma is a serious neoplasm that may not be diagnosed due to the lack of a complete and thorough evaluation. Therefore, it is important that professionals are trained to carry out screening tests, in order to be able to suspect the disease and subsequently refer it to a specialist. Furthermore, it is necessary that all children, immediately after birth, undergo the "eye test" and that every year of early childhood, the pediatrician carries out a complete ophthalmological examination. Thus, it is possible to make an early diagnosis and promote a better prognosis for patients.

114. **FEMALE SEXUAL DYSFUNCTION INDUCED BY SELECTIVE SEROTONIN REUPTAKE INHIBITORS**

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**INTRODUCTION:** A functioning sex life is important for maintaining physical and emotional health, as any problem can affect well-being. Thus, much is discussed about male sexual dysfunction and ends up neglecting female sexual dysfunction, which affects around 40 women, and can manifest itself in different ways, such as decreased sexual desire, impaired arousal, inability to reach orgasm or pain during sexual intercourse. Therefore, the etiology of this dysfunction is generally multifactorial and includes psychological problems, such as depression and anxiety, and the use of medication, especially selective serotonin reuptake inhibitors (SSRIs), first-choice medications in many psychiatric disorders and are associated with different aspects of female sexual dysfunction (FSD). **METHODS:** This is a literature review, in which the Google Scholar and Pubmed portals were searched, using as eligibility criteria original articles published from 2019 onwards, without language restrictions, and which specifically presented the topic. The descriptors used were: "sexual dysfunction in females"; "selective serotonin reuptake inhibitors"; "depression". **RESULTS:** FSD can be caused by multiple factors, psychological, medication, iatrogenic or surgical, with patients with depression being affected doubly by the disease and the medication. Therefore, it is clear that DSF is a side effect that affects 30 to 65 people, being more common with the use of SSRIs, reaching up to 80% of patients. This happens because SSRIs negatively regulate and desensitize 5HT1A receptors, involved in the regulation of sexual desire, and act to activate 5HT2A and 5HT2C receptors, which indirectly alter neurotransmitters that are associated with sexual functioning. Because of this, patients who use SSRIs experience reduced libido, anorgasmia, poor arousal and inadequate lubrication. In these cases, it is recommended to wait 2 to 8 weeks for a spontaneous remission, if this does not happen, check whether the patient is on the minimum dose, if so, change to another antidepressant, such as bupropion, a noradrenaline-dopamine reuptake inhibitor, or mirtazapine, tricyclic antidepressant. **CONCLUSION:** Therefore, the importance of discussing DSF and how it affects female well-being is noted, in addition to understanding how SSRI treatment can cause DSF.

115. **GENDER DISPARITIES IN STROKE INCIDENCE AND MORTALITY IN MARANHÃO**

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**INTRODUCTION:** Stroke stands as the second leading cause of global mortality and is the primary cause of death and disability in Brazil. Clinically characterized by the interruption of blood flow in a specific region of the brain resulting in local cell suffering and death due to reduced levels of nutrients and oxygen. This context underscores the critical relevance of understanding the pathophysiology and clinical implications of stroke, considering its significant impact on global and local public health. In this regard, the present study aims to analyze the epidemiological profile of stroke incidence and mortality in Maranhão, describing gender disparities associated with the disease. **METHODS:** This is an ecological, cross-sectional analysis with a quantitative approach, using data from the Department of Health Informatics of the Unified Health System (DATASUS). Data were collected regarding the number of hospitalizations, gender, age group, deaths, and mortality rate. Statistical analysis was performed using SPSS 25.0 software for Windows, with Kendall's Tau-b and chi-square tests, adopting a significance level of 5%. **RESULTS:** During the period, 51,380 stroke hospitalizations were reported, with an average of 5,138 hospitalizations per year, incidence was slightly higher in males (52.5%). The age group between 50-79 years was the most frequent (63.7%), with males having a slightly higher prevalence (52.6%) within the total. The total mortality was 7,429 individuals. Regarding the mortality rate, between genders, similar rates were observed among men and women, 12.7% and 13.5% respectively. The chi-square test of independence showed an association between gender and patient survival status ( $p = 0.017$ ). **CONCLUSION:** Based on the epidemiological analysis, it is concluded that stroke has significant implications in the population's life, mainly in individuals over 50 years old and with a slight emphasis on the male population. Thus, preventive and intervention measures are necessary to reduce the morbidity and mortality associated with stroke.

116. **ACUTE AORTIC DISSECTION AS A DIFFERENTIAL DIAGNOSIS OF CHEST PAIN**

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**INTRODUCTION:** Aortic dissection is a critical and potentially fatal medical condition characterized by the separation of the layers of the arterial wall, which can result in internal bleeding, heart failure or even sudden death. The aim of this study was therefore to analyze scientific literature on the subject of acute aortic dissection and its relationship with the differential diagnosis of chest pain. **METHODOLOGY:** This is a narrative literature review study carried out to analyze scientific productions on the subject of acute aortic dissection as a differential diagnosis of chest pain. Articles were selected from the databases Medical Literature Analysis and Retrieval System Online (MEDLINE) via PubMed and Scientific Electronic Library Online (SciELO) for the review and selection of articles. **RESULTS:** The main symptom of Acute Aortic Dissection (AAD) is intense chest pain with sudden onset, which can radiate to other areas and may be accompanied by dyspnea, dizziness and paralysis, or even be completely painless. Due to the varied clinical picture, the diagnosis of AAD is often confused with Acute Coronary Syndrome (ACS), which is estimated to account for less than a fifth of chest pain cases. In order to make this diagnosis, more characteristic signs and symptoms of AAD can be used, such as the involvement of poorly controlled hypertension, the presence of pulse and systemic blood pressure asymmetry, the presence of an aortic regurgitation murmur and radiological signs such as an abnormal aortic contour and mediastinal enlargement. Cases of AAD can also show ST-segment elevation on the electrocardiogram, and should be excluded from the differential diagnosis before using thrombolytics. Furthermore, it is recommended that, in the event of non-specific symptoms that may be of vascular origin, AAD should always be considered as a differential diagnosis, especially if chest pain is present. Once AAD has been considered, the diagnosis should be confirmed by imaging tests, such as angiography or echocardiography, which will lead to a more precise approach and efficient treatment. **CONCLUSION:** Acute aortic dissection is one of the emergency causes of chest pain. This differential diagnosis should be considered and investigated promptly in the clinical evaluation, in order to avoid sudden death among patients presenting with chest pain.

**117. MENSTRUAL DISORDERS CAUSED BY STRESS IN THE COVID-19 ERA**Ana Clara Silva de Alencar<sup>1</sup>, Ana Clara Mota Gonçalo<sup>1</sup>, Giulia Germano de Azevedo Silva<sup>1</sup><sup>1</sup>Universidade Ceuma

**INTRODUCTION:** Stress consists of the body's physiological response to tension events, promoting the release of chemical mediators. By activating the Hypothalamus-Pituitary-Adrenal axis, stressful events end up producing cortisol, a steroid that suppresses GnRH, a hormone that stimulates the secretion of gonadotropins essential for the proper functioning of the menstrual cycle: FSH and LH. Amid the Covid-19 pandemic, the population found itself more exposed to stressful episodes, be they the loss of family and friends, financial crisis or the fear of becoming another statistic of the disease. The impacts of this atypical moment have affected female menstrual flow and frequency. Therefore, the present study aims to carry out a literature review to evaluate the impacts of stress caused by the Covid-19 pandemic on the menstrual cycle. **METHOD:** This was a review of the impacts of stress on women's menstrual cycles in times of pandemic, carried out in the SciELO, Google Scholar and PubMed databases. **RESULTS:** It was noted that many studies report the impacts of stress on the menstrual cycle, but few findings have linked menstrual disorders due to stress to the pandemic. However, the bibliographic survey showed that the pandemic brought with it not only the adoption of preventive measures against coronavirus contamination, but also a series of stressful events responsible for the secretion of cortisol, a chemical mediator that acts by inhibiting the release of gonadotropins. Menstrual regularity depends on the normal release of FSH and LH, and therefore, dysfunctions in GnRH secretion influence bleeding patterns, leading to cycles of amenorrhea, hypomenorrhea or menorrhagia. **CONCLUSION:** Therefore, the study demonstrated that the stress caused by the Covid-19 pandemic could indeed be closely related to menstrual disorders at the time, since by stimulating the release of cortisol, stressful events end up suppressing the secretion of GnRH and, consequently, interfering with the menstrual episode.

**118. DOPAMINE AND BRAIN HYPERCONNECTIVITY: A NEUROSCIENTIFIC PERSPECTIVE**Paulo Vitor Loiola Braide<sup>1</sup>, Túlio Martins Rezende<sup>1</sup>, Mellanie Demelo Contreras<sup>1</sup>, Maria Eduarda Longo Sousa<sup>1</sup>, Victor de Souza Calixto Neves da Silveira<sup>2</sup><sup>1</sup>Centro Universitário Dom Bosco<sup>2</sup>Universidade CEUMA

**INTRODUCTION:** Dopamine, often referred to as the "reward neurotransmitter," plays a fundamental role in the functioning of the nervous system. It has a diverse and multifaceted role, being intrinsically involved in motivation, learning, mood modulation, and cognition. Brain hyperconnectivity on social networks is a phenomenon that has become increasingly prominent in the digital age. It refers to the state in which social media users are constantly connected, interacting, sharing information, and consuming online content incessantly. With that said, the present study aims to correlate how excessive use of social networks impacts the dopaminergic reward system. **METHODS:** This study is a literature review. Articles were chosen through searches on the "PubMed" and "Google Scholar" platforms using the descriptors: "Dopamine", "Reward System", "Social Media". Inclusion criteria were studies published in the last 5 years, written in English and/or Portuguese. Articles that exceeded the publication date, did not correspond to the study goals, and duplicates were excluded, resulting in 8 publications that addressed the theme of this review. **RESULTS:** According to the selected studies, excessive use of social networks leads to constant activation of the reward system, especially when users receive likes, compliments, or watch short-duration videos, thereby generating an exacerbated dopaminergic discharge. However, despite initially feeling gratified, hyperconnectivity causes receptors to become less sensitive to the neurotransmitter. As a consequence, individuals will seek more and more stimuli to satisfy the addicted reward circuit, increasing time spent connected to screens. This situation brings about psychosocial impairments, as "offline" activities, such as walking on the beach or having a family dinner, do not provide the same level of satisfaction to a reward system accustomed to instant pleasures and large doses on the internet, even affecting basic daily tasks in more severe cases. **CONCLUSION:** In light of the foregoing, it is evident that hyperconnectivity on social networks impacts quality of life, given the dysregulation of the reward circuit associated with excessive dopaminergic release, affecting the mental health of users.

119. **NEUROPATHIC PAIN IN PATIENTS WITH SICKLE CELL ANEMIA: A LITERATURE REVIEW**

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**INTRODUCTION:** Neuropathic pain represents a painful chronic complication that may occur in individuals suffering from sickle cell anemia, a genetic disorder of the blood system that gives red blood cells a sickle shape. Thus, the aim of this study is to analyze and understand the prevalence and characteristics of neuropathic pain in patients with this pathology. **METHODOLOGY:** This study is an integrative and descriptive literature review conducted in September 2023. Data were collected from SciELO, PUBMED, and LILACS databases, using Portuguese and English Health Sciences Descriptors (DeCS/MeSH): "Neuropathic pain," "Sickle cell," "Anemia," with the boolean operator AND. Inclusion criteria were full articles published between 2018 and 2023 in Portuguese or English, excluding duplicates, grey literature, and articles outside the specified timeframe. **RESULTS:** From the search, 29 studies were found; of these, 9 fit the proposed scope. Based on these studies, neuropathic pain was described as a debilitating and underdiagnosed complication in sickle cell anemia (SCA) patients, directly impacting their treatment. Several studies agreed on a higher prevalence of neuropathic pain in SCA in female and African descent patients. Regarding pain, predominantly moderate to very severe intensity was reported, with symptoms described using various unique descriptors (burning, heat, electric shocks, shots, stings, pins, needles, numbness, and tingling). Physical examinations revealed positive sensory signs (allodynia, hyperalgesia) and negative signs (partial symptoms or complete sensory loss). In terms of quality of life, although neuropathic pain (13.6% to 40%) is less prevalent than nociceptive pain, its influence is more significant. Additionally, all studies affirm that neuropathic pain affects all domains of quality of life, assessed by scales that include sensory, affective, evaluative, and temporal descriptors. **CONCLUSION:** Neuropathic pain is an under-evaluated and debilitating complication in sickle cell patients, significantly impacting their treatment and quality of life. Furthermore, the pain is characterized by moderate to severe intensity and a variety of sensory descriptors. These findings reinforce the importance of early diagnosis and proper management of neuropathic pain in SCA patients.

120. **DUAL ANTIPLATELET AGGREGATION POST CORONARY ANGIOPLASTY: AN ANALYSIS OF THE EVIDENCE**

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**INTRODUCTION:** Coronary angioplasty is a procedure widely used in the treatment of coronary artery disease. After performing angioplasty, prevention of thrombotic complications becomes imperative to ensure the lasting success of the procedure. Considering that dual antiplatelet therapy (DAPT) with acetylsalicylic acid (ASA) and P2Y12 inhibitors plays a central role in preventing these adverse events, this review therefore seeks to gather and analyze the evidence available. **METHODS:** Bibliographic review was carried out using the PubMed database. The descriptors were "dual antiplatelet therapy", "duration dual antiplatelet therapy" and "dual antiplatelet coronary therapy". Included articles with the described theme and published between 2018 and 2023. Exclusion of duplicate works or those that addressed the theme indirectly. **RESULTS:** DAPT with aspirin (ASA) and clopidogrel for 6 to 12 months and optional chronic use of ASA has established itself as a standard approach in the treatment of post-angioplasty patients. However, the search for an ideal balance between the risk of bleeding and the risk of thrombotic events has led to the development and testing of new strategies. Recent trials have shown that monotherapy with a P2Y12 inhibitor or AAS after 1 to 3 months of DAPT showed no benefit, and there was even an increase in ischemic events in monotherapy with clopidogrel after 1 month of DAPT. However, satisfactory results were identified in patients at high risk of bleeding who underwent DAPT for 1 to 3 months, compared to DAPT for 6 months, presenting less risk of bleeding and without increasing ischemic risk, especially with the use of ticagrelor, both in DAPT, as well as post-DAPT monotherapy. Furthermore, the chronic use of a P2Y12 inhibitor was superior to the chronic use of ASA. Currently, new DAPT de-escalation strategies are being tested, some even initially showing favorable results. **CONCLUSION:** DAPT remains a cornerstone of treatment after coronary angioplasty. As new therapeutic modalities and drugs are developed and tested in clinical studies, alternatives with superior benefits and improved safety profiles may emerge. Regularly consulting updated clinical guidelines is key to making informed, evidence-based treatment decisions.

121. **EFFECTS OF AUTOIMMUNE GASTRITIS ON THE GASTROINTESTINAL TRACT: AN INTEGRATIVE REVIEW**  
Ana Luiza Espínola Lobo<sup>1</sup>, Ana Beatriz Oliveira Reis<sup>1</sup>, Gabriel Gomes Nascimento Campos<sup>1</sup>, Louisa Ferreira Carvalho<sup>1</sup>, Rafaela Dias de Medeiros<sup>1</sup>, Wellyson da Cunha Araújo Firmo<sup>1</sup>.

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**INTRODUCTION:** Autoimmune gastritis (AIG) is a chronic inflammatory condition that affects the gastrointestinal tract (GIT), especially the mucosa of the gastric body and fundus. This inflammation occurs due to genetic and/or environmental factors and is the result of self-destruction of the stomach's parietal cells by the immune system or by infection secondary to bacteria, leading to a decrease or loss of gastric juice production. Clinically, the symptoms of gastritis range from gastrointestinal to neurological problems, as well as being related to other autoimmune diseases, such as chronic thyroiditis and type 1 diabetes mellitus. Given this context, the aim of this study was to address the aspects surrounding AIG, obtaining an overview of this disorder and its consequences for the GIT. **METHODS:** This is an integrative literature review whose information was collected through the PubMed platform, using the descriptors "gastritis," "autoimmune," and "gastrointestinal." 95 articles published between 2019 and 2023 in English were found, of which only 38 were selected because they covered the topic in question. **RESULTS:** The studies show that AIG has not only gastroenterological effects but also hematological effects (iron deficiency anemia and pernicious anemia) and neurological effects (neuroendocrine tumors). However, the most commonly reported are those that affect the GIT, the main ones being dyspepsia, heartburn, regurgitation, abdominal distension, and epigastric pain, although some authors state that the disease often remains asymptomatic in the early stages. Other studies show that patients severely affected by AIG, due to the atrophy of the stomach mucosa, become more susceptible to the appearance of precancerous cells. These, in the long term, can lead to gastric tumors, such as adenocarcinomas and esophageal, gastric, or intestinal carcinomas, and lymphomas in the gastric area. Finally, the selected studies also show the recurrence of anemia in those affected, since the absorption of iron and vitamin B12 is compromised by the loss or reduction of pepsin and intrinsic factor due to the destruction of the parietal cells. **CONCLUSION:** AIG is a disorder caused by the body's own defense mechanisms, causing damage, especially to the organs of the GIT. Therefore, early diagnosis is essential to prevent anemia and neoplasms from developing, thus avoiding a systemic condition.

122. **EFFECTS OF EARLY MENARCHE: A LITERATURE REVIEW**

Jorge Fernando Lopes da Cunha<sup>1</sup>, Murilo Freitas e Silva Filho<sup>1</sup>, Maria Fernanda Muniz da Costa<sup>1</sup>, Mateus Oliveira Viana<sup>1</sup>, Fernanda da Silva Feitosa<sup>1</sup>, Vanda Maria Ferreira Simões<sup>1</sup>.

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**INTRODUCTION:** Menarche is the first menstruation and represents an important marker of pubertal and biopsychosocial development that is still associated with many taboos. In Brazil, 75% of girls experienced menarche by the age of 12, with the average age of occurrence being 11.71 years, without major differences between macro-regions. However, an increase in the prevalence of early menarche (EM) has been observed in several countries, reaching 24.9% in Portugal, 34.6% in South Korea, and similar data in North America and Europe. EM is considered a public health problem, given possible negative effects throughout life. Considering that, the aim of this study was to identify the pathological effects of early menarche. **METHODS:** The systematic review study was carried out based on a database survey on the CAPES CAFE portal, using the descriptors: menarche and precocious puberty. Nine papers published between 2019 and 2022, in Portuguese and English, were selected and read in their entirety for data collection. **RESULTS:** In childhood and adolescence, EM is related to a higher risk of sexual abuse and early sexual initiation. In adulthood, early menarche was associated with cardiometabolic outcomes, such as type 2 diabetes and hypertension. Furthermore, it is linked to bone and joint dysfunctions such as osteoporosis, osteoarthritis and arthrosis. It is known that there is a relationship between EM and the development of psychiatric disorders and sleep disorders, as well as the onset of ischemic heart disease and greater mortality due to all factors. From a social point of view, EM also indicates a greater incidence of gynecological infections, since the dysfunction is also affected by the globally established menstrual poverty. Treatment for EM, in addition to changing the child's lifestyle habits and treating the causes of hormonal changes, sometimes uses drugs that block the pubertal axis and monitoring should begin as soon as menarche or other signs of early pubertal development occur, aiming to preserve development potential and reduce psychosocial difficulties with puberty. **CONCLUSION:** Early menarche is an important event for public health that brings with it the manifestation of various dysfunctions throughout life, whose treatment is essential to maintain quality of life and development in the short, medium and long term.



123. **EFFECTIVENESS OF CARDIAC RESYNCHRONIZATION THERAPY IN PATIENTS WITH HEART FAILURE**

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<sup>1</sup>Universidade Estadual do Maranhão – UEMA

**INTRODUCTION:** Heart failure (HF) is a chronic pathology that presents high morbidity and mortality rates in Brazil. Among the clinical repercussions of this disease, intraventricular conduction disorders are commonly reported due to changes in myocardial functional efficiency. Cardiac resynchronization therapy (CRT) emerges as an intervention that consists of stimulating the left ventricle through the coronary sinus and is used as an adjuvant therapy for the treatment of HF and associated conduction disorders in patients refractory to optimized drug therapy. The present study aims to evaluate the effectiveness of CRT in patients with heart failure.

**METHODS:** This is an integrative review of qualitative literature constructed from articles found in the PUBMED and SCIELO databases. The research was carried out using the Health Sciences Descriptors (DeCS/MeSH): "Heart Failure", "Cardiac Resynchronization Therapy" associated with Boolean operators. 105 studies were identified that met the inclusion criteria: articles with full text, available for free access, published between the years 2018 and 2023. 4 articles were selected from among these that suited the objectives of this study. **RESULTS:** Several studies reveal that the use of CRT is an effective option for patients with advanced HF and conditions refractory to drug therapy, with improved quality of life, symptoms and cardiac remodeling. However, around 30% of patients undergoing this intervention do not show improvement, therefore there is a need to use stratification strategies to identify patients who can benefit most from the procedure and new techniques for performing CRT, aiming to increase its efficiency. Recent studies suggest that CRT guided by myocardial scintigraphy and phase analysis may be a viable approach to improve the effectiveness of therapy by enabling more precise placement of the electrodes used in treatment. Furthermore, cardiopulmonary exercise test parameters may be useful in evaluating the effectiveness of CRT in patients with HF. **CONCLUSION:** Therefore, CRT is a viable alternative for the treatment of HF refractory to drug therapy. However, due to its high failure rate, new techniques for implementing the therapy can be used to increase its efficiency and benefits for the patient.

124. **THE EFFICACY OF AUTOTAXIN INHIBITORS IN IDIOPATHIC PULMONARY FIBROSIS: A SYSTEMATIC REVIEW**

Larissa de Sousa Miranda<sup>1</sup>, Larissa Saboia de Freitas Diógenes<sup>1</sup>, Wellyson da Cunha Araújo Firmo<sup>1</sup>  
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**INTRODUCTION:** Idiopathic pulmonary fibrosis (IPF) is a chronic and progressive lung disease characterized by the scarring and thickening of pulmonary tissue. Novel autotaxin inhibitors (AIs) such as Ziritaxestat, GLPG1690, and BMS-986020 present alternative therapeutic approaches. In light of this context, this study aimed to assess the efficacy of AIs in IPF. **METHODS:** This is a literature review study conducted by searching the PubMed, EMBASE, Cochrane Library, and ClinicalTrials.gov databases. Articles from randomized clinical trials comparing AIs with placebos were selected. Out of 202 related studies, four were chosen after screening and deduplication. Primary outcomes evaluated included the rate of forced vital capacity (FVC) decline, all-cause mortality, and the six-minute walk test (6MWT). **RESULTS:** The four clinical trials encompassed 1,472 patients, of whom 498 (33.8%) received 600mg of AI once daily. The distribution was as follows: 48 from the FLORA trial, 174 from ISABELA I, 259 from ISABELA 2, and 17 from PALMER. The mean ages of patients were 70, 69.4, 69.2, and 67, respectively. Among the 498 AI recipients, 75.70% were white, 79.12% were male, and 20.88% were female. The mean FVC in the ISABELA 1 study was 2.94L, in ISABELA 2 it was 2.77L, in FLORA it was 2.44L, and in PALMER it was 2.8L. However, when comparing the medicated group with the placebo group, no significant difference in the annual FVC decline rate was observed. In the 6MWT, healthy individuals aged 55 to 75 cover an average distance of 659m, whereas participants in ISABELA 1 and 2 achieved averages of 416.3m and 408.3m, respectively. Regarding all-cause mortality, ISABELA 1 showed a 14.00% death event rate in the medicated group compared to 11.00% in the placebo group, while ISABELA 2 reported values of 24.00% and 12.00%, respectively. FLORA had no death events, whereas PALMER had 2 deaths in the medicated group versus 1 in the placebo group. **CONCLUSION:** In patients with a prior indication for anti-autotaxin therapy, AIs do not significantly reduce the rate of FVC decline compared to placebo. Additionally, there is no significant difference in individual 6MWT outcomes or improvement in all-cause mortality. However, further studies are warranted.

**125. EPIDEMIOLOGY OF ENDOMETRIOSIS IN THE REGIONS OF BRAZIL: AN ANALYSIS FROM 2018 TO 2022**

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<sup>1</sup>Universidade Federal do Maranhão - UFMA Campus Pinheiro

**INTRODUCTION:** Endometriosis is a condition in which the cells of the tissue lining the uterus (endometrium) undergo a change in their normal functioning and, instead of being expelled from the body during the menstrual period, they move in the opposite direction and fall into the ovaries or in the abdominal cavity, when they reproduce and bleed again. When this disease originates in the ovaries, it can cause the appearance of a cyst called endometrioma, filled with brown blood, which mainly causes pelvic pain, colic and female infertility. Therefore, the present study aims to analyze data relating to endometriosis from 2018 to 2022. **METHODOLOGY:** This is a descriptive cross-sectional study, with a quantitative approach, based on data collected from the SUS Hospital Information System (SIH/SUS), available on the platform of the Department of Information Technology of the Unified Health System (DATASUS). The variables number of hospitalizations, deaths and mortality rate were selected, related to the regions of Brazil during the period from 2018 to 2022. **RESULTS:** In the period analyzed, 65,033 hospitalizations were recorded throughout the national territory, with emphasis on the Southeast region (SE) and North (N), which represent the highest and lowest number of hospitalizations (28,050 and 4,027), respectively. The total number of deaths in the interval described was 98, with SE being the region with the highest number of deaths (49) and N being the region with the lowest number (7), in addition, the Northeast (NE), South (S) and Central-West (CO) recorded 21, 12 and 9 deaths, in that order. The CO region has a mortality rate of 0.19, being the highest in the period described, while the S region shows the lowest mortality rate (0.11), while the NE, N and SE regions have recorded mortality rates of 0.12, 0.17 and 0.17, in their due order. **CONCLUSION:** Given the above, it is clear that endometriosis, although it is a benign pathology, when not diagnosed and treated, can lead to female deaths, as previously described in the results. Furthermore, the data demonstrate that both the number of hospitalizations and the number of deaths corroborate the appropriate demographic densities of each region, but the mortality rate does not follow this population distribution. Therefore, it is important to screen for this condition and subsequently treat it, in order to reduce the number of complications and deaths.

**126. IMPACT OF SARCOPENIA ON AGING AND HEALTH RISKS: A LITERATURE REVIEW**

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**INTRODUCTION:** Sarcopenia is a syndrome described by progressive and generalized loss of muscle mass and function with risk of adverse reactions such as physical disability, loss of quality of life and death. Highly prevalent in individuals over the age of 60, this condition interferes with balance and gait, thus increasing the risk of falls and fractures. Thus, preventive measures can be the key to reducing frailty, such as a healthy diet and regular physical exercise. Such research aims to address the impact of sarcopenia on aging and health risks. **METHODS:** Conducted on the PubMed platform, between 2019 and 2023, the research used descriptors in English, such as "Sarcopenia", "Negative Results", "Aging" and "Health Risk". Exclusion criteria were applied, excluding non-epidemiological studies with no direct relationship with the research objective. **RESULTS:** A total of 49 articles were located in the initial search, and 6 studies were selected for analysis after applying the exclusion criteria. The analyzed articles addressed aspects related to the impact of sarcopenia and the risks it can bring to the health of the elderly and demonstrated that its cause is multifactorial and affects quality of life. Thus, in the studies, some factors included age, low nutritional status, anorexia, sedentary lifestyle, serum vitamin D levels, hospitalization and chronic diseases, as potentiators for the onset of this condition. In addition, other studies have shown that loneliness and environment, loss of autonomy, and financial situation are also determining factors for sarcopenia. Thus, in addition to the early detection of sarcopenia, it is necessary to promote the practice of resistance physical activity and nutritional diet to ensure a better quality of life for the elderly. **CONCLUSION:** Finally, the analysis emphasizes that although sarcopenia presents several risks to the health of the elderly, there are several aspects that can prevent this condition. Among them, maintaining a healthy lifestyle, practicing physical activities, having nutritional and psychological follow-up, maintaining consultations with the geriatrician and thus preventing sarcopenia. As studies on sarcopenia advance, the need for early diagnosis in order to increase longevity and healthy aging is increasing.

127. **IMPACT OF VACCINATION AGAINST HUMAN PAPILOMAVIRUS (HPV) ON COLLAR CANCER UTERINE**Pedro Antônio da Costa Carvalho<sup>2</sup>, Dara Farias Freitas<sup>1</sup>  
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**INTRODUCTION:** Human papillomavirus (HPV) is a virus that causes sexually transmitted infections, causing warts in oral and genital tissues and, depending on the viral type, can cause cancer, such as: cervix, vulva, vagina, penis, anal canal, among others. The HPV vaccine is applied in the Public Health System (SUS) with a focus mainly on individuals who have not yet started their sexual life. In Brazil, immunization began in 2014 with two doses of the quadrivalent vaccine, which protect against types 6 and 11 (which cause warts), 16 and 18 (oncogenic). Today, vaccination also extends to boys aged nine to 14. This research aimed to identify how vaccination coverage occurred over the years in Brazil, relating it to the incidence of cervical cancer. **METHODS:** this study, of a quantitative nature, used as a method a numerical survey of the distribution of HPV vaccines in Brazilian states and their adherence. Also, a survey of the rates of patients with cervical cancer was carried out, in order to manage comparisons of the values found for vaccination with the incidence of cancer. All surveys were carried out through the government website DATASUS. For the other theoretical foundations, extensive research was used on related websites, such as: WHO, INCA, among others. **RESULTS:** In Brazil, adherence to the HPV vaccine does not reach the level recommended by the WHO, 90% for girls between nine and 14 years old. According to a study by the Cancer Foundation, with data from 2013 to 2020, 76% of the target audience took the first dose and only 56% took the two doses provided for in the Brazilian vaccination schedule. In relation to boys, the numbers are even lower, with only 52% vaccinated with the first dose in 2022. The main reason for coverage so far below the target is mainly fear and lack of information among the population. In Brazil, the mortality rate from cervical cancer, adjusted for the world population, was 4.60 deaths/100 thousand women in 2020. **CONCLUSION:** Cervical cancer still appears as one of the main causes in the country, ranking as the third highest incident, especially in the North and Northeast regions, which have lower vaccination coverage and access to routine exams for early diagnosis and treatment. Despite being a potentially preventable cancer with preventive measures and early screening, we are still far from achieving adequate targets for the Brazilian population.

128. **IMPACTS OF SLEEP DEPRIVATION IN MEDICAL STUDENTS: A LITERATURE REVIEW**Gustavo Bender Hendges<sup>1</sup>, Saleth Victoria Pinheiro Maciel<sup>1</sup>,  
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Deborah Bouéres Laender Morais<sup>1</sup>, Anna Beatriz Costa  
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**INTRODUCTION:** The quality of sleep is paramount for the well-being, academic performance, and physical and mental health of medical students. However, these students often encounter difficulties in meeting the daily sleep recommendations (7 to 9 hours) due to various factors such as extensive schedules, night shifts, stress, and poor sleep habits. Consequently, concerns arise regarding learning, academic performance, and patient safety concerning the impacts of sleep deprivation on medical students. **METHODS:** An integrative literature review was conducted using the descriptors "sleep deprivation," "impacts," and "medical students" in both English and Portuguese, employing the connector "AND" on the PubMed and SciELO databases. Articles published within the last 5 years in indexed journals and relevant to the research topic, in either English or Portuguese, were included. The exclusion criteria comprised thesis papers and literature reviews. A total of 21 articles were identified, of which 9 met the pre-established criteria and were utilized. **RESULTS:** Studies conducted with medical students in Brazil revealed that daytime sleepiness was associated with a higher risk of developing depression and anxiety, as well as a lower quality of life and a negative perception of the educational environment. Research from other countries such as Pakistan, Poland, and India corroborated these findings, highlighting the role of tobacco and energy drinks in insomnia and the influence of study time and excessive use of social media on sleep deprivation. Furthermore, studies from the United States and Saudi Arabia evaluated the impact of COVID-19 on the sleep quality of medical students. With stay-at-home restrictions, the pandemic further disrupted sleep patterns, resulting in reduced sleep quality and increased use of sleep medication among medical students. None of the analyzed studies found relationships between sleep deprivation and academic performance. **CONCLUSION:** Sleep deprivation significantly impacts the quality of life of medical students, with implications for short- and long-term physical and mental health. While a direct relationship between sleep deprivation and academic performance was not found in the analyzed studies, it is crucial to review the routines of these students to ensure better quality of life and professional development.

**129. IMPEDES TO SCREENING AND ASSOCIATED RISK FACTORS OF PROSTATE CANCER**

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**INTRODUCTION:** Prostate Carcinoma (PC) is the anomaly affecting the prostate, a gland located below the bladder that surrounds the urethra, the canal connecting the bladder to the external opening of the male reproductive organ. This neoplasm can be traced through digital rectal examination and analysis of Prostate-Specific Antigen (PSA), recommended from the age of 45. In the Brazilian context, the stigma associated with rectal examination and the ineffectiveness of public awareness policies compromise early screening, thus delaying the initiation of therapy. The purpose of this study is to analyze the risk factors linked to prostate cancer and identify barriers hindering disease screening in the country. **METHODS:** This study adopted an integrative review approach, selecting articles published from 2018 to 2023, using Lilacs, MedLine, and Scielo platforms. Inclusion criteria encompassed primary, original articles written in Portuguese. Studies not meeting the established inclusion requirements were excluded from the analysis. **RESULTS:** Through the intersection of descriptors used, a total of 57 articles were identified, with 14 meeting the criteria for this review. Data analysis revealed that prominent risk factors associated with PC include: low education level, advanced age, lifestyle, black ethnicity, and ancestry. Additionally, variables such as elevated anthropometric measures, lifestyle habits, smoking, alcohol consumption, family history, and socioeconomic status were considered coadjutant aspects in predisposition to PC. Simultaneously, literature emphasized key obstacles affecting men's adherence to preventive examinations, including shame related to intimate exposure, prejudice towards rectal examination, lack of information, and apprehension associated with PSA blood testing and prostate biopsy. **CONCLUSION:** This study underscored the importance of training a multiprofessional team, focusing on creating humanistic approaches to encourage greater male participation in screening campaigns. Furthermore, it highlighted the significance of developing tools facilitating shared decision-making between doctors and patients, contributing to more rational and effective clinical care.

**130. IMPORTANCE OF GENETIC DIAGNOSIS IN CONGENITAL MYOPATHIES: A LITERATURE REVIEW**

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**INTRODUCTION:** Congenital myopathies are a heterogeneous group of disorders that result in hypotonia, muscle weakness, and dystrophies or myopathic findings on muscle biopsy. Previously, their diagnosis was made based on clinical and histopathological aspects, however, recent advances in genetics have changed diagnostic practice, relying more strongly on genetic findings, contributing to accuracy and speed, in addition to being increasingly accessible and non-invasive. The aim of this review is to analyze the role and clinical relevance of molecular genetic diagnostic tests for the accurate and early diagnosis of the main congenital myopathies. **METHODS:** Literature review in PubMed and Cochrane databases, selecting articles in English between 2014 and 2019. The search used MeSH terms and keywords with boolean operators to retrieve articles on genetic testing in the diagnosis of congenital myopathies. The terms included "congenital myopathy" OR "congenital muscular dystrophy" AND "genetic testing" OR "molecular diagnosis". Original studies, narrative reviews and case studies were included. **RESULTS:** Genetic testing has become the first exam in the diagnosis of most patients with suspected congenital myopathies, especially for the exclusion of differential diagnoses. However, careful interpretation of the results is essential, since many of these diseases are associated with several genes, presenting wide phenotypic variation and overlap of clinical characteristics. Accurate molecular diagnosis enables proper genetic counseling, recurrence risk estimation, and guidance on surveillance and treatment. In addition, the initial use of genetic testing represents time savings and avoids invasive and expensive procedures. However, one of the main challenges is determining whether the detected genetic variants are truly pathogenic and distinguishing them from the polymorphisms that exist in diseases. **CONCLUSION:** Genetic findings should always be combined with information on clinical presentation, family history, and other examinations such as muscle biopsy, since further studies are still needed to increase the diagnostic capacity of genetic testing alone. In addition, more long-term data on genotype-phenotype and natural history of diseases are needed to improve the interpretation of genetic test results.

131. **IMPORTANCE OF LABORATORY ANIMALS IN BIOMEDICAL SCIENCES: A LITERATURE REVIEW**

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**INTRODUCTION:** Since ancient times, animals have been exploited for various purposes, including in scientific research that seeks advances in the area of health. As a result, many benefits to the human species were achieved, including the discovery of vaccines, medicines and new surgical techniques. Furthermore, the use of laboratory animals is extremely important in the teaching-learning process of professionals in biomedical areas, as they provide means for safer practice. The objective of the study is to highlight the use of animals in medical training as an essential component in the preparation of the most diverse professionals in the field. **METHODS:** This is a narrative literature review on the importance of laboratory animals in biomedical sciences. The bibliographic search was constructed through research in the following databases: Scientific Electronic Library Online (SciELO), PubMed and Virtual Health Library (VHL). The scientific productions were selected based on the descriptors: "Laboratory animals" and "Biomedical sciences". Six scientific productions were selected between 1989 and 2020 with literary relevance and a reliable relationship with the theme. **RESULTS:** 6 articles were selected on the use of laboratory animals and their impacts on academic training for biomedical sciences, seeking to associate animal models and the ethical concerns of their use, especially in the development of medical skills. Simulation offers less risk to the patient, since the application of animal models helps to improve surgical skills and preparation of students. In the literature, it was clear that new devices and techniques were always initially tested on experimental animal models. Finally, all articles culminate in the importance of highlighting that the use of animal models should be limited to cases in which there really is a plausible justification for their applicability. **CONCLUSION:** Therefore, the relevance of using laboratory animals in biomedical sciences comes from the educational potential associated with experimental practice in the training process, given that the advantages inherent to the use of laboratory animals are related to scientific innovation, technical simulation and improvement of skills and competencies that guarantee qualified medical training.

132. **INCIDENCE OF ANXIETY AND DEPRESSION IN PATIENTS WITH CHRONIC HEART FAILURE**

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**INTRODUCTION:** Heart failure with reduced ejection fraction (HFrEF) is the inability of the heart to pump blood adequately, which can compromise patients mental health and quality of life. With this in mind, the purpose of this study is to analyze the incidence of anxiety and depression in patients with HFrEF treated on an outpatient basis and to broaden the discussion on the subject. **METHODS:** This is a cross-sectional study of 174 patients with HFrEF in a public hospital in Maranhão in 2022. Two validated questionnaires were used to assess mental health, one for anxiety, Generalized Anxiety Disorder 2 (GAD-2), and the other for depression, Patient Health Questionnaire-2 (PHQ-2). For each questionnaire, a score greater or equal to three represents the highest probability of the patient having the conditions investigated. Pearson's correlation test was used to assess the association between the GAD-2 and PHQ-2 questionnaires. The sociodemographic variables used were: gender, ethnicity, age and marital status. Descriptive analysis was also carried out using the RStudio software and this study was approved by the Research Ethics Committee under protocol number: 25756919.9.2004.5086. **RESULTS:** The study included 174 patients with a mean age of 57.6 years (SD=14.2), the majority of whom were male (70%), mixed race (61.2%) and married (50.3%). As for the GAD-2 questionnaire, 30.4% (n=53) said they were unable to control their worries more than half the time and 28.16% (n=49) had a positive score for anxiety. In the PHQ-2 analysis, 22.4% (n=39) felt little interest in doing their activities most days and 20.6% (n=36) had a positive score for depression. Pearson's test between the GAD-2 and PHQ-2 scores showed a value of 0.547, representing a moderate correlation. There was no correlation between the results of the questionnaires and sociodemographic conditions. **CONCLUSION:** A significant percentage of patients with HFrEF have anxiety and/or depression. This indicates that this disease can lead to major emotional decompensation due to worries and lack of interest in daily activities, causing a decline in quality of life. Therefore, it is important to initially identify patients in emotional distress in order to carry out a psychological intervention combined with pharmacological treatment, in order to act beyond the physical aspects of the disease



**133. INCIDENCE OF TUBERCULOSIS IN YOUNG PEOPLE IN THE SÃO LUÍS REGION FROM 2018 TO 2022**

Ana Clara Arouche Lemos da Silva<sup>1</sup>, Marcelle Teixeira e Silva<sup>1</sup>, Renato de Freitas Farias<sup>1</sup>, Francisco Santos de Almeida<sup>1</sup>, Anna Karoliny Freitas de Souza<sup>1</sup>, Dâmaris Gonçalves Vieira<sup>2</sup>, Walquiria Lemos Ribeiro da Silva Soares<sup>1</sup>.  
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**INTRODUCTION:** Tuberculosis (TB) is an infectious disease, transmitted by a microorganism (or microbe), that can occur in various locations of the body, with over 85% of cases occurring in the lungs. This microorganism is a special type of bacterium, also known as the bacillus of Koch, named after Robert Koch who identified *Mycobacterium tuberculosis* in 1882. Data from the World Health Organization (WHO) indicate that Brazil is among the 22 countries with the highest number of TB cases, responsible for 82% of global cases and 75% of cases involving youth. **METHODS:** This is an ecological study of a time series, conducted between 2018 and 2022, in the São Luís Health Region, Maranhão, Brazil. All cases of tuberculosis in individuals aged zero to nineteen years (0 to 19 years) registered in the São Luís Health Region were considered. The data were obtained from the Notifiable Diseases Information System (Sinan) provided by the Health Department of the State of Maranhão, in digital format. The incidence rate of TB in children and adolescents was considered as the dependent variable and study outcome. The rate was calculated as the ratio between the number of new TB cases in individuals under 19 years old and the population at risk, multiplied by the constant 100,000. A new case of tuberculosis is understood to be a patient who has never undergone anti-tuberculosis therapy or who has been treated for less than 30 days. **RESULTS:** During the study period, a total of 6,509 (100) confirmed TB cases were registered, with a value of 483 (7.42) in the age group of 0 to 19 years. The incidence rate of TB in children and adolescents over the years showed its highest index in 2022 (7.49). **CONCLUSION:** The study allowed for an understanding of the incidence of new TB cases in childhood and adolescence in the São Luís Health Region, as well as identifying the year 2022 as having the highest incidence rate (7.49). Among the possible limitations of this study, it is understood that the use of secondary sources, although official and widely used in scientific work, may present data incompleteness and divergent conditions. The results presented contribute to a deeper understanding of the epidemiological situation of tuberculosis over the years, providing measures for decision-making related primarily to prevention and treatment actions for the disease in the São Luís Health Region.

**134. INCIDENCE OF GIST TUMOR IN BRAZIL**

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**INTRODUCTION:** GISTs, or Gastrointestinal Stromal Tumors, are a class of neoplasms that originate in the cells of the gastrointestinal stromal system. Despite their rarity, these tumors play a significant role in the oncological landscape. With a well-defined global prevalence, Brazil faces challenges in understanding their actual incidence, as it is not categorized independently but, due to its rarity, grouped under "other" cancers. This work aims to fill this gap by providing crucial data for the diagnosis and treatment of this neoplasm. **METHODS:** This is a literature review with studies available in the databases of the Virtual Health Library and PUBMED. The descriptors used were "tumor," "GIST," "Incidence," and "Surgery." Inclusion criteria involved studies available in full between 2010 and 2023. Articles with conflicting literature and repetitions in the databases were excluded. **RESULTS:** According to the consulted literature, GIST tumors, despite their rarity, represent approximately 1 to 3% of gastrointestinal neoplasms, 80% of mesenchymal tumors in the digestive tract, and 5% of all sarcomas. The worldwide incidence is 1.5 per 100,000 inhabitants, with 3 to 5 thousand new cases per year in the United States. In Brazil, the Ministry of Health estimates approximately 1800 new cases per year, with the actual incidence still unknown in the country. GIST affects almost the entire gastrointestinal tract, being more frequent in the stomach (40 to 70%), small intestine (20 to 50%), and 5% in the colon, rectum, and esophagus. Additionally, it is classified according to the predominant cell type, being spindle-shaped (75%), epithelioid (20%), and mixed (5%). **CONCLUSION:** Therefore, GIST tumors, though considered rare compared to other neoplasms, have a significant incidence, including in Brazil with around 1800 cases per year. Thus, further epidemiological studies are necessary to precisely define these data in the contemporary Brazilian scenario, in order to better understand these types of tumors and characterize their risk factors and treatments.



135. **URINARY TRACT INFECTIONS IN PREGNANCY: A LITERATURE REVIEW**

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**INTRODUCTION:** Urinary Tract Infections (UTIs) are characterized by the presence of pathogens causing clinically relevant tissue damage, constituting a prevalent condition that affects approximately 2 million people annually in Brazil. UTIs have implications that compromise both the pregnant woman and the fetus, stemming from highly impactful infectious agents in human health. The review aimed to describe the clinical complications of UTIs in pregnant women from 2015 to 2023, specifically focusing on infections affecting the urogenital system and compromising maternal-fetal health. **METHODS:** A literature search was conducted using the Scielo, Medline, and PubMed databases, along with data from the Brazilian Ministry of Health regarding UTIs in pregnant women and their impact on maternal-fetal health. The search terms "urinary tract infection", "clinical factors" and "epidemiology" were used to gather information for a structured spreadsheet, with separate results for "pyelonephritis", "cystitis", "urethritis" and "upper urinary tract infection". **RESULTS:** During the sample period, the review demonstrated that pregnant women, particularly adolescents, those with low socioeconomic status, illiterate individuals, and multiparous women, exhibited a heightened probability of UTIs with risks of compromising maternal-fetal health. UTIs were also identified in the context of inflammatory diseases, posing a risk of invasion and multiplication of microorganisms, especially those with high resistance, such as *E. coli*. The most common symptoms included dysuria, urgency, suprapubic pain, and polyuria, associated with fever and low back pain as confusing signs. Severe cases posed risks to the parturient, including spontaneous prematurity, pyelonephritis, anemia, bacteremia, respiratory and renal failure, and progression to sepsis, to the conceptus, mortality or cerebral palsy. **CONCLUSION:** UTIs during pregnancy require appropriate care and attention. Misinformation and non-adherence to prenatal care are among the primary causes of this problem, affecting both the mother and the fetus. Given that UTIs in pregnant women represent a serious public health issue, it is crucial to promote awareness, prevention, and treatment to ensure maternal and fetal well-being.

136. **INFLUENCE OF BODY DYSMORPHIC DISORDER ON MEN'S HEALTH: LITERATURE REVIEW.**

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**INTRODUCTION:** Body dysmorphic disorder (BDD) is characterized as a syndrome of image distortion or dysmorphophobia, in which there is an obsessive preoccupation with physical appearance and a distancing from the real image to the detriment of an idealized one. An increase in its incidence has been observed in males due to aesthetic and sociocultural pressures and desired physical performance, leading to persistent body dissatisfaction that generates consequences for the affected individual. Thus, this review aims to analyze the influence of body dysmorphic disorder on men's health. **METHODS:** The data was collected through a literature review using the descriptors "body dysmorphic disorder", "men's health" and articles published in the BVS, medline, lilacs and Google scholar. The inclusion criteria were original and review articles published in full in Portuguese and English, within the last 5 years, using the descriptors in the respective languages. The exclusion criteria were duplicate articles and those that did not address the theme. **RESULTS:** With regard to the evidence related to body dysmorphic disorder, the collection of literature showed a prevalence of this dysmorphism in men who practiced sports related to body weight, such as bodybuilding. Within this group, we analyzed the prevalence in young individuals, average age 18, who have been practicing regularly for at least 3 months, at least 3 times a week. As such, this age group is more vulnerable to the disorder, since they want to change their body image, hypertrophy or lose weight. In addition, there is a greater susceptibility to muscle dysmorphism in bodybuilders, since their performance is directly related to their physical appearance and not to their conditioning. As a result, in search of an aesthetic standard, there has been a search for alternatives such as anabolic steroids, as well as the development of eating disorders. **CONCLUSION:** This is a relevant social issue, as there are associated environmental, sociocultural and psychological factors that cause functional and organic damage to men with BDD. There was also a scarcity of literature during the search process, highlighting the need for studies on the subject.

**137. INFLUENCE OF ENVIRONMENTAL FACTORS ON CHRONIC HEART FAILURE**

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**INTRODUCTION:** Heart Failure is a complex clinical syndrome that negatively impacts the quality of life of affected patients and is concurrently influenced by cultural, social, political, economic, and environmental determinants. This study aims to describe the environmental characteristics of patients with HF, in order to analyze the clinical profile and its repercussions on quality of life and treatment responses. **METHODS:** This is an observational, cross-sectional, descriptive study. Patients diagnosed with Chronic HF with left ventricular ejection fraction  $\leq 49\%$ , aged 18 to 90 years, were included in the research (CAAE: 25756919.9.2004.5086), from July 2021 to July 2023. The sample comprises 180 patients from a University Hospital in the state of Maranhão, with information obtained from medical records and questionnaire application. Variables are presented as mean, relative, and absolute values. **RESULTS:** The sample consists of 123 male patients (68.33%) and 57 female patients (31.67%), with a mean age of 57.55 years. Statistical analysis results indicate that 84.44% (n=152) of the residences are owned by the occupants, with a high predominance of urban areas (77.22%, n=139). Regarding infrastructure, the majority have access to piped water supply (91.11%, n=164) and regular garbage collection (85.55%, n=154). However, 41.11% (n=74) of patients do not have access to sewerage services. Although the majority have internet access (78.33%, n=141), a considerable portion (21.66%, n=39) still do not have this resource. **CONCLUSION:** Most individuals reside in their own homes in urban areas, reflecting reasonable development in infrastructure, although there are still challenges affecting a significant portion of the sample, such as those related to sewerage and flood-prone areas. Internet connectivity is widely available, but there are still areas with little or no access. These factors not only influence the presence and distribution of risk factors but also the biological mechanisms related to HF pathogenesis. Therefore, the formulation of public policies focusing on infrastructure improvement, security, and digital inclusion becomes crucial. Thus, the health-disease process can be understood as a final product of individuals' social position and their relationships.

**138. RENAL FAILURE IN CHILDREN IN BRAZIL AND QUALITY OF LIFE AFTER TRANSPLANT**

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**INTRODUCTION:** Renal failure (RI) is a disease that consists of the inability of the kidneys to perform their functions. It can be classified as acute or chronic, according to the speed of loss of function. This work aims to carry out an epidemiological analysis of hospitalizations of children due to RI in Brazil, from 2020 to 2022, and to carry out a review regarding the quality of life after pediatric kidney transplantation. This topic is relevant due to the high prevalence of this pathology in Brazil, and the need to increase knowledge about it. **METHODS:** Using a quantitative methodological approach, an analysis of available data on RI in pediatric patients in the Hospital Information System (SIH/SUS) of the Department of Informatics of the Unified Health System (DATASUS) was conducted. Microsoft Excel software was used for graphical analysis. The data examined covers the entire national territory. A systematic literature review was also carried out on the Pubmed platform to investigate the quality of life of children after kidney transplantation. **RESULTS:** In 2020, 3825 hospitalizations were carried out: 352 patients under 1 year old, 604 between 1 and 4 years old, 660 between 5 and 9 years old, 898 between 10 and 14 years old, and 15 to 19 years old years were 1311. In that same year, the number of pediatric kidney transplants was 242. In 2021, 3990 hospitalizations were carried out: according to the age groups already described, there were, respectively, 334, 636, 716, 954, and 1350 hospitalizations, and the number of transplants was 307. In 2022, 4239 hospitalizations were carried out: according to the same age groups, there were 378, 694, 704, 1046, and 1417 hospitalizations, and the number of transplants was 265. The questionnaire The most used in studies was PedsQoL 4.0, and all articles analyzed in this literature review showed an increase in quality of life indexes after transplantation. **CONCLUSION:** There was a trend towards an increase in hospitalizations for renal failure in children in Brazil during the period studied. Kidney transplantation is also pointed out as the main measure to increase the quality of life of these patients. However, the number of pediatric kidney transplants remains low relative to demand. Therefore, there is a need to encourage organ donation and strengthen kidney transplant treatment strategies to ensure a better quality of life for these patients affected by RI.

139. **ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS OF SKIN CANCER: A LITERATURE REVIEW**

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**INTRODUCTION:** Skin cancer is defined by the abnormal proliferation of skin cells, and its traditional diagnosis relies on clinical examinations and biopsy. Benign alterations often occur, leading to confusion with malignant lesions. Implementing Artificial Intelligence (AI) aims to assist healthcare professionals in achieving more accurate diagnoses. Given dermatology's visual nature and numerous databases with photographic records, there is significant potential for this implementation. This study seeks to understand how AI can aid in skin cancer diagnosis. **METHODS:** This literature review utilized the databases of the Virtual Health Library and Google Scholar. Descriptors included "Artificial Intelligence," "Diagnosis," "Dermatology," "Skin Cancer," and "Carcinoma." Inclusion criteria encompassed relevance to the study and publication within the last 5 years. All freely accessible articles were thoroughly read. **RESULTS:** Dermatological AI is structurally based on convolutional neural networks and deep learning from databases containing physiological and pathological photographic records. This AI is developed to effectively and precisely classify skin diseases by identifying anomaly patterns in dermatological lesions. The option of using digitized histopathological samples for network training, utilizing high-quality stained slides for biopsy sample analysis, is also explored. Neural networks exhibit highly significant performance even in early diagnoses, with low false positive/negative rates. However, limitations include the binary response of AI, resulting in either acknowledging or negating pathology existence, and a lack of images representing diverse ethnic groups. Image classifiers exclusively trained with databases of clinical photographs labeled by non-medical professionals yielded unsatisfactory concordance levels with the actual clinical condition. **CONCLUSION:** AI proves effective, although limitations such as the lack of clinical databases encompassing ethnic diversity and the need for improvements in lesion sensitivity, specificity, and precision exist. Thus, AI should be used as a support tool for professionals rather than a diagnostic tool for skin cancer.

140. **HOSPITAL ADMISSIONS AND COSTS OF PULMONARY TUBERCULOSIS IN MARANHÃO BETWEEN 2018 AND 2022**

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**INTRODUCTION:** Tuberculosis (TB) is a chronic infectious disease caused by *Mycobacterium tuberculosis*, a bacillus that is transmitted by air and proliferates mainly in the lung, a place with ideal conditions for bacterial growth. Despite being a curable disease, it still has a high incidence mainly because of the lack of access to health services, late diagnosis, low adherence and abandonment of treatment, being considered a serious public health issue in Brazil and other developing countries. **METHODS:** The study aimed to analyze information on morbidity and hospital costs due to pulmonary tuberculosis, as well as its regional aspects, between the years 2018 and 2022 in the state of Maranhão. This is a descriptive quantitative study, carried out through the Hospital Information System of the Unified Health System (SIH/SUS), with data relating to hospitalizations, costs of hospital services and deaths from pulmonary TB, according to the year of processing and health region. The data was organized using the software Microsoft Excel to create tables. **RESULTS:** In Maranhão, in the last 5 years, there were 593 admissions for pulmonary TB and 2022 was the year with the highest number of hospitalizations (159). A total of 57 deaths were registered and, comparing 2018 with 2022, there was a 400% increase in the number of deaths between these years. Furthermore, there was an exponential growth in costs in the analyzed period, with the last year being the most expensive, corresponding to a cost of 103,040.40 reais, 27% of the total amount of hospital services (R\$ 380,285.30). The health regions of São Luís (185), Imperatriz (61) and Açailândia (53) were the majority in hospitalization numbers. São Luís was also responsible for most of the costs (R\$ 264,560.69) and mortality, corresponding to 15 deaths, followed by Bacabal with 8 deaths. **CONCLUSION:** The increase in morbidity and mortality from pulmonary TB in recent years highlights the need for external measures for the prevention, early diagnosis and treatment of this disease. In addition, more studies need to be developed to clearly understand tuberculosis in the context of Maranhão, in order to stop the increase in hospitalization and death rates, as well as reduce subsidies for the Unified Health System.

141. **HOSPITALIZATIONS AND MORTALITY FOR STROKES IN BRAZILIAN NORTHEAST FROM 2018 TO 2022**

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**INTRODUCTION:** Stroke consists in the blood supply occlusion for the brain. It can be classified into two main types: ischemic, which is the obstruction of blood vessels, and hemorrhagic, the rupture of blood vessels. Stroke is the main cause of cognitive deficits and incapacity, also an important death cause, which generates serious social and economic damage. Therefore, it is of great importance to analyze stroke hospitalization and mortality in the Brazilian Northeast.

**METHODS:** This is an ecological, cross-sectional and retrospective study with a descriptive approach which analyzed the Brazilian Northeast from 2018 to 2022 period. The data was collected from Departamento de Informática do SUS (DATASUS), organized in tables and studied according to the variables: regions, year of medical service, type of medical care, and deaths. For using secondary data and from public domain, Ethical Committee approval was unnecessary. **RESULTS:** In 2018 44.522 hospitalizations and 7.236 deaths were registered. Following, in 2019 the highest number of hospitalizations were registered (48.462) and, as expected, the highest death numbers, for the studied period, which means an increase of 8,84% in hospitalizations and 11,66% in deaths. In 2020, it should be noted the lowest number of hospitalizations during this period due to an 13,8% decrease, also, 7.355 deaths were registered. The following year, 2021, there was an increase of 9,63% in hospitalization numbers and 7,53% in deaths. In 2022 - the last year analyzed in this study - 48.079 hospitalizations were registered, which represents an increase of 5%, while the number of deaths reduced by 4,35% compared to the previous year, a total of 7,565 deaths.

**CONCLUSION:** It was found that 2019 was the year with the highest number of both hospitalizations and mortality. Although, the years that registered the greatest mortality compared to the hospitalization total were the following two years 2020 and 2021 with both reaching 17%, which can be justified by the pandemic. In 2022 there was an increase of stroke hospitalizations, however, it registered lower death numbers compared to hospitalization cases. Therefore, data analysis is essential to future studies, because it effectively directs politics and action health planning to prevention and stroke treatment.

142. **HOSPITALIZATIONS AND DEATHS DUE TO VIRAL ENCEPHALITIS BEFORE AND AFTER THE COVID-19 PANDEMIC IN MARANHÃO**

Luis Miguel Moraes Araujo<sup>1</sup>, João Pedro Pimentel Abreu<sup>1</sup>, Fernanda Karolynne Sousa Coimbra<sup>1</sup>, Camila de Carvalho Vieira<sup>1</sup>, Adna Cristina da Silva Pereira<sup>1</sup>, Isabela Carolyne de Melo Costa<sup>1</sup>

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**INTRODUCTION:** Encephalitis is an inflammation of brain tissue caused mainly by viral infections, which is characterized by symptoms such as fever, headache, mental confusion, convulsions and movement disorders. In the context of the COVID-19 pandemic, despite predominantly affecting the respiratory system, encephalitis has also been described as a serious complication of this condition. Therefore, the objective of the following work is to assess whether there was a trend towards an increase in the number of hospitalizations and deaths due to viral encephalitis in the period after the Sars-Cov-2 pandemic in Maranhão. **METHODS:** To carry out this study, data were collected and analyzed from DATASUS - SUS Hospital Information System (SIH/SUS) of the Ministry of Health. The data covers the period from January 2017 to December 2022, and concerns the number of hospitalizations and deaths per federation unit. As for Maranhão, we searched for hospitalizations and deaths by age group, sex and skin color, from January 2017 to December 2019, and January 2020 to December 2022. Subsequently, the option "viral encephalitis" was defined in the "CID-10" tab. **RESULTS:** The number of hospitalizations for encephalitis in the studied period was highest in 2019 (2436), showing a sudden drop in 2020 (1689), a slight drop in 2021 (1647) and an increase in 2022 (1977). The number of deaths, in turn, was higher in 2017 (131), with a drop from 2019 (123) to 2020 (106), reaching the minimum in 2021 (83). In Maranhão, there was also a drop from 2019 to 2020 in the number of hospitalizations (166 and 126, respectively) and deaths (11 and 9, respectively). There were more hospitalizations (n=483) and deaths (42) for males. Pre-pandemic, the most affected age group was between 30 and 39 years old (73), and, post-pandemic, it was between 1 and 4 years old (107). The brown population was the most hospitalized in the pre- (122) and post-pandemic (146) periods. **CONCLUSION:** There was a reduction, nationally and in the state of Maranhão, in hospitalizations and deaths due to viral encephalitis in the post-pandemic period. In the state scenario, in relation to hospitalizations and deaths, there was a predominance of males in both periods analyzed and the most affected age was 30 to 39 years in the pre-pandemic period and 1 to 4 years in the post-pandemic period. Brown people were the majority in hospitalizations in both periods, while yellow people were the majority in deaths pre-pandemic and there was no distinction between brown people and yellow people post-pandemic.

143. **HOSPITALIZATIONS DUE TO ACUTE MYOCARDIAL INFARCTION: EPIDEMIOLOGICAL PROFILE OF THE STATE OF MARANHÃO**

Rommayolle Costa Diniz de Sousa<sup>1</sup>, Sharon dos Santos Albuquerque<sup>1</sup>, Bruno dos Santos Albuquerque<sup>1</sup>, Rafael Castro Viegas<sup>1</sup>, Gustavo de Oliveira Silva<sup>1</sup>  
<sup>1</sup>Universidade Estadual do Maranhão (UEMA)

**INTRODUCTION:** According to data from the Federal Police's International Traffic System (STI), Brazil is currently home to more than 477,000 Venezuelan refugees. Most of the immigrants enter through the north of the country, in the state of Roraima (RR), and are initially concentrated in the cities of Boa Vista and Pacaraima. In these cities, refugees are welcomed, sheltered and receive health care. The aim of this study is to analyze the impact of spending approved for health care in two cities in Roraima. **METHODS:** This is a comparative study of the amounts approved for outpatient care in two cities in RR with a high number of Venezuelan refugees, between the periods 2011 to 2016 (1st period) and 2017 to 2022 (2nd period). The figures for care were obtained from DATASUS, the Ministry of Health, and the number of refugees in Brazil from STI. As this is a study using secondary data, approval by the Research Ethics Committee is not required. **RESULTS:** In the first period, the municipalities analyzed had a total of R\$257,679,943.08 approved for outpatient care. In the 2nd period, the amounts approved increased by 23% compared to the previous 6 years. This increase did not occur evenly over the years, with a lower amount approved in 2020 than in almost all the years of the 1st period. 2020 also saw the lowest number of Venezuelan refugees entering the country (47,661). The highest amounts approved for outpatient care occurred in 2022, 2018, 2017 and 2019, respectively, coinciding with the years with the highest influx of Venezuelan refugees. **CONCLUSION:** The results suggest a correlation between the influx of Venezuelan refugees and the increase in the amounts approved for health care in the municipalities that primarily receive them. Further research should be carried out to prove this hypothesis.

144. **THE IMPACT OF VENEZUELAN REFUGEES ON HEALTH SPENDING IN TWO RORAIMA CITIES**

Elder Teles Teixeira<sup>1</sup>  
<sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** According to data from the Federal Police's International Traffic System (STI), Brazil is currently home to more than 477,000 Venezuelan refugees. Most of the immigrants enter through the north of the country, in the state of Roraima (RR), and are initially concentrated in the cities of Boa Vista and Pacaraima. In these cities, refugees are welcomed, sheltered and receive health care. The aim of this study is to analyze the impact of spending approved for health care in two cities in Roraima. **METHODS:** This is a comparative study of the amounts approved for outpatient care in two cities in RR with a high number of Venezuelan refugees, between the periods 2011 to 2016 (1st period) and 2017 to 2022 (2nd period). The figures for care were obtained from DATASUS, the Ministry of Health, and the number of refugees in Brazil from STI. As this is a study using secondary data, approval by the Research Ethics Committee is not required. **RESULTS:** In the first period, the municipalities analyzed had a total of R\$257,679,943.08 approved for outpatient care. In the 2nd period, the amounts approved increased by 23% compared to the previous 6 years. This increase did not occur evenly over the years, with a lower amount approved in 2020 than in almost all the years of the 1st period. 2020 also saw the lowest number of Venezuelan refugees entering the country (47,661). The highest amounts approved for outpatient care occurred in 2022, 2018, 2017 and 2019, respectively, coinciding with the years with the highest influx of Venezuelan refugees. **CONCLUSION:** The results suggest a correlation between the influx of Venezuelan refugees and the increase in the amounts approved for health care in the municipalities that primarily receive them. Further research should be carried out to prove this hypothesis.

**145. ADMISSIONS FOR BRAIN INFARCTION IN MARANHÃO BETWEEN 2019-2023: AN EPIDEMIOLOGICAL ANALYSIS**

Luanna Stefanny Campos do Nascimento<sup>1</sup>, Mariana Clara Borges da Silva<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>1</sup>, Myrelle Salgueiro Porto de Sá<sup>1</sup>, João Henrique Xavier de Oliveira<sup>1</sup>, Alice Marques Moreira Lima<sup>2</sup>.

<sup>1</sup>Universidade Estadual da Região Tocantina do Maranhão

<sup>2</sup> Universidade Federal do Maranhão.

**INTRODUCTION:** Cerebral infarction or ischemic stroke (IS) is characterized by the obstruction of an artery in the brain, caused mainly by an atherosclerotic plaque or +embolus, resulting in compromised blood flow and cell death. The disease represents more than 70% of cerebrovascular problems and is one of the biggest causes of mortality worldwide. The objective of this study was to evaluate the profile of hospitalizations for cerebral infarction in Maranhão in the period between 2019 and 2023. **METHODS:** This is a retrospective descriptive epidemiological study based on secondary data made available by the SUS it department in the mentioned period. **RESULTS:** A total of 1,436 hospitalizations for cerebral infarction were reported in Maranhão in the period, with a sharp decline in hospitalizations from 2019 to 2020, with a reduction of 48.7%. The majority of hospitalizations were made in Imperatriz, where 20.33% of cases occurred. The age group from 60 to 79 years old was the most affected, representing 49% of notifications, with patients between 60-69 years old accounting for 22.6% of cases and those aged 70-79 years old, 26.4%. Regarding sex, the male population was predominant, representing 54.38% of hospitalizations. There were 179 deaths during the years evaluated, with a 57.14% drop in the number of deaths from 2019 to 2020. Among the total number of deaths, the age group over 70 years old, with 53.63%, represented the majority of cases and the mortality rate was 12.46%. **CONCLUSION:** The age group over 60 years old was most affected by the disease, while in those over 70 years old, mortality was more frequent. Males were the most affected, as this gender is associated with more risk factors for cerebral infarction. Considering the Coronavirus pandemic and its peak in 2020, notifications of hospitalizations and deaths due to stroke may have been underreported, which may also have been reflected in the low mortality rate. In addition to this factor, a possible improvement in health services in the prevention and management of patients with ischemic stroke may also be linked to lower mortality. In view of this scenario, it is extremely important to constantly invest in epidemiological studies on stroke, since by recognizing risk factors, it becomes possible to construct more effective preventive measures and improvements in patient care.

**146. HOSPITALIZATIONS FOR PULMONARY TUBERCULOSIS IN MARANHÃO, FROM 2018 TO 2022: EPIDEMIOLOGY**

Maria Fernanda Sousa Linhares<sup>1</sup>, Ana Clara Abreu Mendes<sup>1</sup>, Ana Lurdes Portela de Araújo<sup>1</sup>, Isadora Marçal Barbosa Fernandes<sup>1</sup>, Ivana Maria Batista dos Santos<sup>1</sup>, Marcella Esser Los<sup>1</sup>, Vítor Castro dos Santos<sup>1</sup>

<sup>1</sup>Universidade CEUMA.

**INTRODUCTION:** Tuberculosis (TB) is an infectious and transmissible disease, caused by the bacterium *Mycobacterium tuberculosis*, which can affect various organs and/or systems, with the pulmonary form being the most common and the main responsible for maintaining the disease's transmission chain. This disease, despite being old, continues to be an important public health problem in the world, with around 10 million new cases reported annually. Given this scenario, the objective of this work is to describe the epidemiological profile of hospitalizations for pulmonary tuberculosis in Maranhão over the last 5 years. **METHODS:** systematic descriptive epidemiological study, with a quantitative approach. Data from the SUS Hospital Information System (SIH/SUS) on pulmonary TB were analyzed, in the variables hospitalizations, year of processing, age group, sex, color/race, nature of care, deaths and mortality rate. The data was categorized and tabulated using Microsoft Office Excel 2016, organized into graphs and tables. **RESULTS:** a total of 593 hospitalizations for pulmonary TB were recorded, the highest in 2022 (26.81%), and the lowest in 2020 (15.18%). In the age group variable, the disease caused more hospitalizations in patients between 30 and 39 years old (21.42%), followed by the age group between 40 and 49 years old (20%). In relation to sex, males represent 67.62% of cases and females represent 32.38%. In the color/race variable, it is more common in brown people (49%), and less common in black people (2%). When seeking care, 28.84% were elective and 71.16% were urgent. In the evolution of cases, 57 died. The mortality rate has increased in the last 5 years, from 3.92 in 2018 to 12.58 in 2022. **CONCLUSION:** this study concluded that the sociodemographic and epidemiological profile of pulmonary TB hospitalized patients, in the period from 2018 to 2022, corresponds mostly , to patients between 30 and 49 years old, male and mixed race. Furthermore, it was evident that the majority of care was urgent, with a significant number of deaths, with a mortality rate of 9.61. Given this, the number of hospitalizations is alarming, therefore, it is essential to implement public policies in the area of health for early diagnosis and treatment of pulmonary TB, in addition to vaccination campaigns, which include the BCG vaccine, to prevent the severe form of TB. disease and, consequently, reduce the number of hospitalizations and deaths.



147. **VISCERAL LEISHMANIASIS IN MARANHÃO:  
EPIDEMIOLOGICAL PROFILE OF THE LAST 10 YEARS**

Ingrid Silva Medeiros<sup>1</sup>, Daniela Almeida da Hora, Laura Beatriz Eloi Vieira<sup>1</sup>, Lídia Souza Araújo<sup>1</sup>, Francisca Letícia Chagas da Silva<sup>1</sup>, Taylane Caroline Cunha Carvalho<sup>1</sup>, Gizele de Oliveira Santos Silva<sup>1</sup>

<sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Visceral leishmaniasis is a systemic disease, typical of tropical areas, which can be lethal when left untreated. Insects of the genus *Lutzomyia* are the disease vectors to humans in the Americas. In Brazil, the main species is *Lutzomyia longipalpis*. Over the years, this disease has shown a higher incidence in the rural areas of the northeastern region of the country, mainly in the states of Piauí and Maranhão. However, migratory movements, environmental transformations and urbanization progress have facilitated its expansion into urban areas of the Northeast region and other regions of the country. Thus, it is necessary to study this pathology in the state of Maranhão, due to its classification as an endemic area, aiming to improve early identification in the main risk groups. The objective of this study is to describe the epidemiological profile of visceral leishmaniasis in the state of Maranhão between the period of 2012-2022. **METHODS:** This is a descriptive, retrospective, and quantitative study on cases of Visceral Leishmaniasis in Maranhão between 2012 and 2022. Secondary data available at the Department of Health Informatics of the Unified Health System (DATASUS) were used, processed in the Microsoft Excel® program for analysis regarding sex, age, education level, race, parasitological and immunological diagnosis, health regions, and disease progression. **RESULTS:** Between 2012-2022, 5952 cases of visceral leishmaniasis were recorded in Maranhão, with the northern macro-region responsible for 55% of the state's cases. During this period, the state accounted for approximately 31% of cases in the Northeast Region. Around 66% (N=3920) were male, with 77% (N=4,597) being mixed race. The most frequent age group was 1-4 years, representing 30% (N=1778) of the cases. Regarding disease progression, 63% (N=3732) resulted in cure, and 7% (N=435) resulted in death. **CONCLUSION:** There was a predominance of cases in male patients, of mixed race, and age between 1 and 4 years. Despite the majority of cases progressing to clinical cure, lethality is still considerable. Therefore, a more effective disease control in the state is necessary, aiming for early identification and transmission reduction. Thus, the population should be involved in the prevention and control process of the disease through health and environmental educational actions, in order to optimize the effectiveness of surveillance and control actions of visceral leishmaniasis.

148. **PRECURSOR LESIONS AND CERVICAL CANCER IN BRAZIL  
– A LITERATURE REVIEW**

Antônia Letícia Nunes Pontes Lima<sup>1</sup>, Pedro Henrique de Oliveira Cavalcante<sup>1</sup>, Rebeca Grangeiro Barroso<sup>1</sup>, Priscilla Malena Albuquerque de Souza<sup>1</sup>, Lorrana Mirelley Pereira de Melo<sup>1</sup>, Gabriel Paes Landim Sousa<sup>1</sup>, Douglas Soares da Costa<sup>1</sup>

<sup>1</sup>Faculdade Pitágoras de Bacabal

**INTRODUCTION:** Cervical cancer (CC) is characterized by the abnormal proliferation of cells in the epithelial lining that covers the cervix. It ranks as the third most prevalent cancer among women in Brazil. Beyond its impact on the cervix itself, CC can infiltrate adjacent or distant structures. Consequently, the importance of diagnosing and monitoring precursor lesions linked to a common factor—the Human Papillomavirus (HPV)—has grown significantly. This study aims to analyse the primary risk factors associated with CC in women, considering their socioeconomic profiles, alongside early lesion detection strategies. **METHODS:** This integrative literature review focuses on original articles written in Portuguese and published in the MEDLINE, LILACS, and SciELO databases between 2019 and 2023. The study applies specific exclusion criteria to ensure compliance with pre-established parameters. **RESULTS:** The primary risk factors identified in the consultation sources were early and unprotected sexual intercourse, continuous use of contraceptive pills, exposure to HPV and other sexually transmitted infections, smoking, as well as the non-performance of regular gynecological consultations and examinations. Regarding the predominant profile of cervical cancer (CC) cases, studies have indicated that the most affected age group is 40 to 59 years old and had three or more pregnancies before diagnosis. Furthermore, the frequently encountered result in oncologic colposcopy examinations was high-grade squamous intraepithelial lesion (HSIL), and the prior diagnosis of these pre-malignant cervical changes provides a more favorable prognosis for cases of CC. It was also noted that the HPV subtypes most associated with persistent infections that can lead to CC are HPV-16 and HPV-18. Regarding the socioeconomic parameter, it is evident that women in socially vulnerable situations, with low levels of education and residing in rural areas, are more predisposed to develop this neoplasm. **CONCLUSION:** Consequently, the findings elucidate that perimenopausal age, exposure to HPV-16 and HPV-18 subtypes, early onset of sexual activity without condom usage, insufficient screening, and treatment of precursor lesions, multiparity, and low socioeconomic status are the predominant characteristics observed in women who develop cervical cancer (CC).

149. **DATA SURVEY ON BRACHIAL PLEXUS MICROSURGERIES IN BRAZIL FROM 2013 TO 2022**

Murilo Freitas e Silva Filho<sup>1</sup>, João Eduardo Gomes Barros<sup>1</sup>, Ohana Camila Lins Siqueira Almeida<sup>1</sup>, Leticia Maria Leal Barros<sup>1</sup>, Lucas Martins Castro<sup>1</sup>, Igor Gustavo da Silva Melo<sup>1</sup>, Diogo Silva de Morais<sup>2</sup>.

<sup>1</sup>Universidade Federal do Maranhão, student

<sup>2</sup>Hospital da Ilha

**INTRODUCTION:** Brachial plexus injury is a serious dysfunction in the upper limbs due to trauma that affects the roots of the cervical spine. They are frequently seen in motorcycle accidents, especially in young men. The evolution of the microsurgery technique has become a strong addition to treatment, providing advances in the dissection, alignment and grafting of peripheral nerves. This study aims to analyze the performance of brachial plexus microsurgeries in Brazil, over a decade-long period. **METHODS:** Ecological study with a quantitative approach. The collection was carried out by the Hospital Information System of the Unified Health System (SIH/SUS), made available by DATASUS. Procedures related to brachial plexus microsurgery with neurolysis and micrografting were included, from January 2013 to December 2022. The variables considered were "Year of Processing", "Hospitalizations", "Average Stay", "Mortality Rate" and "Region". After data extraction, statistical analysis was carried out using Microsoft Excel software. **RESULTS:** Regarding microsurgeries carried out nationwide in the period, 5,967 hospitalizations were identified, of which 3,001 (50.3%) are related to exploration and neurolysis procedures and 2,966 (49.7%) to micrografting procedures. As for the region, the Southeast predominated, with 49.3% (2,940) of the total, while the lowest value was the North, with 4.3% (257). In relation to the Year of Processing, the values maintained a pattern above 600 cases per year until 2019, the year with the highest number, with 676 (11.3%) hospitalizations, falling from 2020, the year with the lowest number, 380 (6.3%), converging with the recently experienced pandemic period. The average hospital stay was 3.4 days, with little fluctuation between years (SD=0.42). The average value of the procedures is equal to 1,241.43 reais, also showing little fluctuation (SD=31.16). Only 2 deaths were identified, in the years 2019 and 2020. **CONCLUSION:** It is inferred that, in the period in question, an equivalence was found regarding the technique chosen for microsurgery, in addition to the total predominance of the Southeast, indicating compatibility with socioeconomic factors. The procedure showed a decline after the pandemic period, pointing to a possible interference from this fact. Furthermore, it proved to be safe and provides quick recovery for patients, in addition to having an average value slightly lower than the minimum wage.

150. **YEASTS ASSOCIATED WITH THE DEVELOPMENT OF AUTOIMMUNE DISEASES: A LITERATURE REVIEW**

Livia Medrado Fialho<sup>1</sup>, João Pedro Cruz Nascimento<sup>2</sup>, Joana Tenorio Albuquerque Madruga Mesquita Meireles Teixeira<sup>1</sup>, Nathalia Chaves Bezerra<sup>1</sup>, Ana Clara de Carvalho Costa<sup>2</sup>, Marliete Carvalho da Costa<sup>1</sup>

<sup>1</sup>Centro Universitário do Maranhão

<sup>2</sup>Universidade Federal do Maranhão (São Luís)

**INTRODUCTION:** Understanding the role of fungi in the development of autoimmune diseases has become increasingly important in scientific research, as recent studies have revealed that fungal infections can trigger inflammatory and immune responses. Yeasts, such as *Candida albicans*, *Saccharomyces cerevisiae*, and the *Malassezia* genus, are microorganisms that coexist in our body, but emerging evidence suggests that, under certain circumstances, they play a crucial role in triggering autoimmune diseases. The aim of this study is to gather and analyze the main relationships between these fungi and the development of these diseases. **METHODS:** This study is a literature review guided by the survey and analysis of 20 articles, published between 2020 and 2023, through databases such as PubMed, LILACS, MEDLINE, SciELO, and Springer using the descriptors "yeast", "autoimmune", and "disease". **RESULTS:** In the literature survey, it was noted that the yeasts that stand out most in processes associated with autoimmune diseases are *Candida albicans*, *Saccharomyces cerevisiae*, and the *Malassezia* genus. *Candida albicans* and its enzymes can act in myelin degradation, a process characteristic of Multiple Sclerosis. Its presence in the central nervous system (CNS) can result in chronic inflammation and excessive production of beta-amyloid protein, characteristic of Alzheimer's Disease. Furthermore, still in the CNS, this yeast can lead to the activation of glial cells and production of neurotoxins associated with the death of motor neurons, worsening the development of Amyotrophic Lateral Sclerosis. *Malassezia* genus: The presence of *Malassezia* in the brain can lead to the activation of glial cells, production of melanin, and death of dopaminergic neurons, contributing to the progression of Parkinson's Disease. *Saccharomyces cerevisiae*: in this case, although anti-*S. cerevisiae* antibodies (ASCAs) are considered specific for Crohn's disease, a growing number of studies have detected elevated levels of ASCAs in patients affected by autoimmune diseases compared with healthy controls, including Systemic Lupus Erythematosus, Type 1 Diabetes, and Sjögren's Syndrome. **CONCLUSION:** With this survey, it is possible to highlight the role of these yeasts in the development of significant autoimmune diseases in health and the need for more studies in the area aiming at the modulation of mechanisms involving the interaction of these microorganisms with the human host.

151. **SYSTEMIC LUPUS ERYTHEMATOSUS WITH PULMONARY COMPLICATIONS AND HEART STUDY: A CASE STUDY**

Karla Valeria Lima Santos de Queiroz<sup>1</sup>; Anyelle Araujo Cardoso Bento<sup>1</sup>; Augusto Hipólito Chagas Freato<sup>1</sup>; Beatriz Lana Silva Souza<sup>1</sup>; Biana Laís Oliveira Cardoso<sup>1</sup>; Leandro Guimaraes Borges<sup>1</sup>; Maria Raimunda Chagas Silva<sup>1</sup>.

<sup>1</sup>Ceuma

**INTRODUCTION:** Systemic Lupus Erythematosus(SLE) is a inflammatory autoimmune rheumatic disease, multisystemic, chronic, characterized by production of antibodies directed against proteins of the organism itself. This condition affects predominantly women of age reproductive. Symptoms can vary widely and can affect different body systems. Your etiology includes the participation of hormonal factors, environmental, genetic and immunological emergence of the disease. The clinical characteristics are polymorphic, and evolution is usually chronic, with periods of exacerbation and remission. **DISCUSSION OF THE CASE:** A.C.A.A, 42 years old, female, domestic worker, resident of São Luís-MA was hospitalized due to respiratory decompensation, skin lesions, joint pain, alopecia, and weight loss, diagnosis of systemic lupus erythematosus with severe pulmonary hypertension and communication interatrial surgery, which chose to perform atrioseptoplasty with partial improvement of the condition. On physical examination, dyspneic in room air using a mask O2 4l/min concentrator. This case highlights the complexity of SLE and its manifestations variables that can affect different systems of the body. A multidisciplinary team is essential for management, given that professionals must work together to provide treatment coordinated and comprehensive. **FINAL CONSIDERATIONS:** The management of SLE, especially in severe cases with pulmonary and cardiac complications, requires a medical team and treatment carefully planned. Early diagnosis, effective treatment and regular follow-ups are crucial to improving the quality of life of affected patients and minimize the impact of its complications.

152. **MALARIA IN THE AMERICAS: EPIDEMIOLOGY, PREVALENCE AND GEOGRAPHICAL DISTRIBUTION**

Gamaliel Gama Sanches Silva Júnior<sup>1</sup>, Flávio Augusto de Alencar Oliveira<sup>1</sup>, Layra Giovana Carvalho Camara<sup>1</sup>, Layssa Ellen Marinho Barbosa<sup>1</sup>, Jheniffer Santos da Silva<sup>1</sup>, Sueli de Souza Costa<sup>1</sup>

<sup>1</sup>Universidade Federal do Maranhão – UFMA

**INTRODUCTION:** Malaria is an infectious disease transmitted by mosquitoes of the genus Anopheles and is considered one of the main causes of morbidity and mortality in various regions of the world. In the Americas, this disease affects millions of people and imposes a considerable socio-economic burden. The article therefore takes a comparative epidemiological view of malaria in the Americas, seeking to understand the risks and factors that influence the development of the disease. **METHODS:** An ecological, exploratory study with a comparative approach was carried out between 2010 and 2019. Data was collected through PLISA (Health Information Platform of the Americas) from information on the number of confirmed cases, hospitalizations and deaths among Pan-American countries. **RESULTS:** In the period analyzed, approximately 6.1 million cases were recorded, with an average of 600,000 cases per year. There is a significant variation between countries, with Venezuela accounting for 37% (n=2296191), Brazil for 32% (n=1984719) and Colombia for 11% (n=671508), which together account for approximately 80% of the total analyzed. Venezuela has the highest death rate (n=1068000). Brazil, despite the number of cases, had 481 deaths from the disease. As for transmission, the most common species is Plasmodium vivax (approximately 4.1 million), with a high incidence of Plasmodium falciparum (1.2 million) in the diagnostic profile. With regard to hospitalizations, Venezuela, Brazil and Nicaragua have high rates, together accounting for more than 90% of all hospitalizations. The coefficient of variation, expressed in percentage terms, is 133.65%. This high variability indicates the disparity between countries in terms of malaria incidence. **CONCLUSION:** The magnitude of the number of confirmed cases in countries with a low Human Development Index (HDI), such as Venezuela, intensified by precarious health approaches and prevention measures, limited access to medical services and excessive financial expenditure on hospitalizations, make this pathology a relevant health issue that needs greater visibility and appropriate support for the treatment of infected individuals. Government investment is therefore essential, not only in public health policies, but also in environmental and social ones, in order to guarantee a holistic approach to the disease.

**153. DERMAL REGENERATION MATRIX: A PROMISING OPTION IN BURN TREATMENT**

Maria Eduarda Brito Amaral<sup>1</sup>, Rayssa Yasmin Pereira Sauaia<sup>2</sup>, Bruno Eduardo Lopes de Macêdo<sup>1</sup>, Bruna Ory Pinto Bandeira<sup>1</sup>, Pedro Durante Junqueira<sup>1</sup>, Ingrid Victoria Borges Alberto<sup>1</sup>, Bismarck Ascar Sauaia<sup>1</sup>

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**INTRODUCTION:** Burns are traumatic injuries caused by thermal, chemical, electrical, biological, or radioactive agents and represent an important public health issue. Among the treatment possibilities, surgical procedures for skin reconstruction are used, employing grafts or substitutes such as dermal matrix, which enhances cell proliferation and preserves intrinsic skin properties, thereby reducing the chances of rejection. This study aimed to evaluate the evidence of dermal matrix as a relevant option in burn treatment. **METHODS:** A systematic review using scientific articles regarding the use of dermal regeneration matrix for burn injury treatment, constructed from publications found in the databases "PubMed," "Scielo," and "MDPI Journals." Six studies were selected in Portuguese and English, prioritizing those published in the last 5 years. **RESULTS:** The dermal regeneration matrix is formed by a porous layer composed of cross-linked bovine collagen and chondroitin-6-sulfate, serving as a model for skin regeneration. The process involves fibroblast infiltration into the matrix, forming a "neoderm" with gradual neovascularization. This structure may also include a silicone layer acting as the epidermis, controlling water loss and preventing infections. The literature indicates that the success of the technique is due to the decellularization process during its production, which minimizes immune-induced inflammation, hinders the biodegradation process of the transplanted material, and allows the patient's own cells to populate the matrix. Of the articles studied, 3 (n=50%) made comparisons between the use of the matrix and other types of treatment, confirming its validity as a successful option. Furthermore, the reduction in rejection rates was observed in all the articles (n=100%), demonstrating the therapeutic effectiveness in the rapid and functional recovery of burn patients. **CONCLUSION:** The matrix is a cutaneous substitute that promotes dermal regeneration, the deeper layer of the skin, with low rejection rates and infection prevention, conditions that affect the integrity of reconstructions. Therefore, the use of this technique proves to be an effective solution for treating sequelae in patients suffering from complex burns.

**154. MAXILLA AFFECTED BY OSTEOSARCOMA: CASE REPORT**

Geisyane Victória Barros Pereira<sup>1</sup>, João Paulo Dutra Lobo Sousa<sup>1</sup>, Cynthia de Araújo Torres<sup>1</sup>, Ilmarya Barros Pereira<sup>1</sup>, Augusto Hipólito Chagas Freato<sup>1</sup>, Maria Raimunda Chagas Silva<sup>2</sup>.

<sup>1</sup>Universidade Ceuma

<sup>2</sup>Docente Universidade Ceuma

**INTRODUCTION:** Osteosarcoma is one of the most common malignant tumors in childhood and adolescence, as it is characteristic of immature bone tissue. In this sense, histologically, it originates from osteoblast cells, which begin to show structural disorganization and various atypias, giving the tumor infiltrative capacity and rapid expansion. Clinically, it is associated with local pain, facial asymmetry, bone alterations and loss of function. The main sites of the pathology are in the long bones of the lower limbs, the axial skeleton to a lesser extent and, in the maxilla, which is more prevalent in males, this pathology is considered even rarer, difficult to treat and has an unfavorable prognosis. This report was authorized by the Research Ethics Committee (CEP) under registration number 5.085.992. **DESCRIPTION:** Patient V.S.R, male, 28 years old, who attended the outpatient clinic due to an increase in volume in the lateral region of the maxilla, which had progressed slowly and with no specific painful symptoms. Physical examination revealed a slight facial asymmetry with a slight bulging in the vestibular region of the premolars and molars on the left, with a hard consistency and no history of local trauma. After a CT scan and subsequent biopsy, he was diagnosed with osteosarcoma. Total resection of the lesion with safe margins is the gold standard treatment, often complemented by radiotherapy and chemotherapy in order to optimize the effectiveness of the results obtained. However, due to the late diagnosis and the postponement of treatment, the patient died, even after following the established protocol, since his case was quite complex and difficult to resolve due to the extent of the tumor. **CONCLUSION:** It is therefore clear that an early diagnosis is fundamental, since early detection of the disease makes it possible to implement treatment, resulting in greater chances of resolution. The main therapy is based on surgical extraction and chemotherapy, so that the patient can recover fully. However, it is recognized that depending on the extent of the lesion, the resection area can be substantial, which would invariably affect the quality of life of the affected patient.

155. **MENOPAUSE AND KLOTHO: NEW PERSPECTIVES FOR LONGEVITY AND HOMEOSTASIS**

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**INTRODUCTION:** Menopause, a significant biological milestone characterized by the cessation of menstruation, ushers in an era of metabolic and physiological challenges due to reduced ovarian activity. Simultaneously, the Klotho protein emerges as a regulatory bulwark in the aging process, crucial for longevity and resistance to age-related disorders. Hormonal disruption, especially the reduction of estrogen during menopause, has systemic consequences, increasing the propensity for cardiovascular complications and bone fragility. This study aims to carry out a bibliographical survey regarding the interaction between the pathophysiology of menopause and the involvement of Klotho proteins. **METHODS:** An active search was carried out in the Scielo and Pubmed databases during October 2023, applying the descriptors "menopause", "klotho", "menopausa", "klotho proteins", "climacteric", "estrogen", applied using the Boolean operator "AND" as an inclusion criterion, articles published in Portuguese from 2017 to 2023 were used. Duplicates and gray literature were excluded. **RESULTS:** The analysis shows that the action of the Klotho protein has a significant impact on the physiological manifestations of menopause. The complexity of the menopause-Klotho interaction is highlighted, underlining its potential relevance in innovative therapeutic strategies, especially in the context of exacerbated neurodegeneration during this period. The study points to a paradoxical window of therapeutic opportunities, enhanced by Klotho modulation, which emerges from hormonal dysregulation and metabolic and systemic changes concomitant with menopause. **CONCLUSION:** This research highlights the multifactorial interaction between menopause and the Klotho protein, illustrating a new frontier in biogerontology and translational medicine. It signals an urgency for subsequent research that deepens understanding of the symbiotic relationship between Klotho and estrogen. This exploration promises to inform the development of interventions that mitigate the risks associated with menopause, paving the way for significant advances in the management of women's health during menopause.

156. **INTESTINAL MICROBIOTA AND RISKS ASSOCIATED WITH CARDIOVASCULAR COMPLICATIONS**

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**INTRODUCTION:** From an early age we are colonized by developing communities. In the intestinal tract, they constitute the largest microbial ecosystem close to our heart: our inner microbes. The combination of gut microbiota and metabolic transformations in the host contribute to our overall metabolism and to inter-individual variations in metabolism. The microbiota adjusts itself as a filter of our environmental exposures. Thus, this study aims to describe the intestinal microbiota and the risks associated with cardiovascular complications. **METHODS:** This study is a literature review carried out using health databases such as the National Library of Medicine, Google Scholar, Scientific Electronic Library Online and the Virtual Health Library. A study was carried out in March and April 2023, where keywords were selected, following the Health Sciences Descriptors, selecting the most pertinent ones from the last five years. **RESULTS:** The intestinal wall houses both beneficial and pathogenic bacteria, forming the microbiome, and for the intestine to function properly there needs to be a balance between these populations. Since an imbalance results in the modification of this microbiota and an increase in pathogens that lead to a greater risk of cardiovascular disease (CVD), the metabolism subordinated to the microbiome can also lead to the production of metabolites such as N-oxide-trimethylamine (TMAO), a toxin whose accumulation can lead to a greater threat of thrombosis and atherosclerosis. Bacterial products such as short-chain fatty acids (SCFA), secondary bile acids and components of the cell membrane of Gram-negative bacteria can influence the pathogenesis of CVD. Also noteworthy are conditions such as inflammation, leaky gut, and the influence of the microbiome on adipogenesis, which plays an important role in the development of CVD, corroborating the emergence of metabolic and hemodynamic disorders that increase cardiovascular risk. **CONCLUSION:** CVD represents a serious public health problem, where the intestinal microbiota has a relevant impact on cardiovascular mortality. This study revisits the importance of this issue in order to understand and highlight the possible causes, therapeutic and prophylactic perspectives that can be elucidated from in-depth knowledge of the subject.

**157. MINI-PPLICATION FOR TREATMENT OF SMALL HORIZONTAL STRABISMUS**

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(CEP/CAAE Report: 80510117.1.0000.5086). **INTRODUCTION:** In this paper, we describe the application of the innovative surgical technique known as mini-plication - a procedure used for the treatment of small ocular deviations. Mini-plication involves increasing the tension of the rectus muscle - by means of a small pleating of its middle fibers - aiming to correct strabismus of small angles. This case report describes the experience of a patient undergoing this surgical technique, which resulted in the complete correction of his deviation. This article seeks to provide valuable observations on the reliability and benefits of the mini-plication technique in the treatment of small-angle strabismus. **CASE DESCRIPTION:** In June 2023, a 49-year-old male patient, without systemic alterations, with 12 prism diopters esotropia and horizontal diplopia in all nine gaze positions, with fusion in the objective measurement of the deviation, was operated using the mentioned technique. Mini-plication of both lateral rectus muscles was performed, following the technique described by an American ophthalmologist. **CONCLUSION:** The efficacy of mini-plication is evidenced by the success of this case, as the patient had his deviation corrected and did not present diplopia after the surgical intervention.

**158. MISOPHONIA AND ITS RELATIONSHIP WITH BEHAVIORAL DISORDERS: A LITERATURE REVIEW**

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**INTRODUCTION:** Misophonia is a neurological and behavioral syndrome characterized by physiological hyperstimulation of the brain and a negative and disproportionate emotional response caused by a decrease in auditory tolerance to certain patterns of noises and sounds. In view of the chronic difficulty in emotional regulation, a possible relationship has been identified between misophonia and the development of behavioral disorders such as anxiety, depression, obsessive-compulsive disorder (OCD), among others. This study aims to clarify this relationship. **METHODS:** This is a literature review in which scientific articles published in the PubMed database between 2019 and 2023 were selected. The descriptors "misophonia" and "behavioral disorders" were combined using the Boolean operator AND, according to the PRISMA guidelines. A total of 58 articles were found, of which 7 met the selection criteria and are therefore included in this study. **RESULTS:** The serial mediation analysis showed that difficulties in emotion regulation, anxiety and hostile attributions are significant mediators in the relationship between misophonia and some disorders. Studies suggest that its physiological basis is related to hyperactivity in regions of the insula, cingulate gyrus, amygdalae and motor areas of the brain. Anxiety disorders were the most prevalent category, with 56.9% of the sample meeting all the criteria for at least one current anxiety disorder, mainly social anxiety disorder (30.9%) and generalized anxiety disorder (24.6%). Mood disorders were the second most prevalent type of disorder, with 14.2% meeting full criteria for at least one current mood disorder, most notably persistent depressive disorder (7.6%) and major depressive disorder (6.6%). Rates of OCD were reported in 14% of patients with misophonia. **CONCLUSION:** Misophonia is a neurobehavioral syndrome whose symptom severity can be associated with various psychological symptoms and characteristics, and is mainly associated with anxiety and depression. However, it is not possible to define misophonia as a psychiatric disorder, since there is still little research on the subject, making it speculative to describe it as a characteristic or concomitant syndrome related to specific psychiatric disorders or classes of disorders.



159. **MONITORING PATIENTS WITH PSEUDOTUMOR CEREBRI: AN INTEGRATIVE LITERATURE REVIEW**

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**INTRODUCTION:** Pseudotumor cerebri, also described as idiopathic intracranial hypertension (IIH), is a clinical condition characterized by an abnormal increase in intracranial pressure (ICP) with no apparent cause. The clinical management of this disease is multifaceted, encompassing pharmacological strategies and invasive procedures. Monitoring IIH is essential for assessing ICP, involving methods such as lumbar puncture and neuroimaging tests. This review aims to address the various means of monitoring IIH and their influence on the management of patients with this condition. **METHODS:** Integrative literature review on the PUBMED and Biblioteca Virtual em Saúde (BVS) platforms, searching for articles published between 2018 and 2023 that fit the theme of our review, using the following sequence of descriptors: ((Assessment) AND (Pseudotumor cerebri)). **RESULTS:** The screening of studies compatible with our proposal resulted in 6 articles, 3 of which were extracted from PUBMED and 3 from the BVS. In the studies evaluated, the presence of neuroradiological signs of IIH on both MRI/MRV and CT/CT were highly specific ( $\geq 95\%$ ) and moderately sensitive ( $\leq 75\%$ ) for the diagnosis of IIH in patients with papilledema. MRI findings included partially empty sella, sheath distension and vertical tortuosity of the optic nerve, posterior flattening of the eyeball, size of the occipital emissary vein. The invasive techniques mentioned in the articles have allowed for a better assessment of the intracranial venous system, as they check for focal vascular stenoses that may require endovascular treatment. Current clinical follow-up allows ICP monitoring through methods such as telemetric ICP devices, verification of changes in papilledema seen on optical coherence tomography (OCT), as well as visual deterioration seen on visual evoked potentials (VEP) and the use of multifocal electroretinography (mfERG). **CONCLUSION:** Monitoring ICP in patients with IIH can be done by analyzing neuroradiological signals, which are highly specific but not very sensitive and should be used individually. In some patients, invasive analysis techniques may be more recommended. Furthermore, new studies focusing on strategies for the analysis and management of these patients are essential.

160. **CATARACT AND OTHER CRYSTALLINE DISORDERS MORBIDITY, IN MARANHÃO FROM 2018 TO 2022**

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**INTRODUCTION:** Cataracts are the world's leading cause of blindness, affecting around 10% of people. It can be congenital or acquired, the etiology of which is not yet well defined, but is related to infection during pregnancy, advanced age, use of toxic substances, metabolic syndromes, radiation, ophthalmopathies, among others. The first symptoms of the disease are related to the sensation of progressive loss of visual acuity and as it progresses, a white or yellowish spot can be seen in the center of the pupil. This work aimed to study the profile of hospital morbidity due to cataracts in Maranhão, from 2018 to 2022. **METHODS:** Epidemiological, quantitative, descriptive, time series study (2018-2022), with secondary data from TABNET-DATASUS-SUS Hospital Morbidity (SIH/SUS). Variables under study: Cataracts and other lens disorders; Service: Year; Character; Microregion according to IBGE; Sex; Age group; Race. **RESULTS:** There were n=6475 hospitalizations for cataracts in the period in Maranhão. The IBGE microregion with the most assistance was Codó (n=2301), followed by Caxias (n=1985), while the Urban Agglomeration of São Luís was third (n=1705). The years with the highest number of services were 2021 (n=2013), and 2020 (n=1806), which together represent 59% of total services. Regarding gender: female (n=3476); male (n=2999). Among the most affected age groups: 50 to 59 years old (n=1025), 60 to 69 years old (n=2635) and 70 to 79 years old (n=1889), which represented 85% of the sample. Regarding race: more common in brown (n=3452) and yellow (n=541), equivalent to 61%. **CONCLUSION:** The epidemiological profile of hospital morbidity due to cataracts in Maranhão follows the trend of other studies, with a predilection for females, more frequent in more advanced age groups and with an increase in demands in recent years, with less developed cities accumulating demands, without ease of execution of procedures. Therefore, it is necessary that the interior of Maranhão benefits from actions aimed at making the treatment of this disease viable, to provide a better quality of life for this portion of the population.

**161. HOSPITAL MORBIDITY FROM INTRACRANIAL TRAUMA IN BAIXADA MARANHENSE IN 2022**

Pedro Henrique Delfim Pessoa<sup>1</sup>, Brunna Araújo dos Santos<sup>1</sup>, Adeany Yasmim Morgado Reis<sup>1</sup>, Lucas Guilherme Macedo Guterres<sup>1</sup>, Marcelle Teixeira e Silva<sup>1</sup>, Emanuele Cristine Santos Marinho<sup>1</sup>

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**INTRODUCTION:** Intracranial trauma (ICT) is defined by a set of injuries, generally characterized by physical impact trauma. As a pathophysiological repercussion, it potentially affects the various tissues that make up the brain, in addition to having a notable debilitating capacity. Due to the cultural and public service context of Baixada Maranhense - marked by the use of motorcycles without wearing helmets, in addition to the incipience of municipal authorities in curbing this habit - ICT still appears as an important challenge for regional public health. Therefore, the present work aims to analyze the main characteristics involving hospital morbidity regarding ICT in Baixada Maranhense in the year 2022. **METHODS:** This is a descriptive and retrospective study, the execution of which is supported by a systematic search on the portal of DATASUS, in a specific segment for the TIC, in the area reserved for Intra-Hospital Morbidity, being further categorized according to the patient's color/race. **RESULTS:** During the period, there were a total of 192 Hospital Admission Authorizations (AIH), of which 186 (96.87%) referred to self-declared brown patients. These also cover a total of 8 deaths resulting from ICT, which represents a mortality rate of 4.30%. Regarding hospital stay, while brown patients spent an average of 5.2 days in hospital, white and black patients stayed, respectively, 17.5 and 17 days. Within the scope of the total values referring to AIH, white patients expressed an average cost of R\$5,592.07, while those of the black race, R\$672.72, which represents a ratio of 8.31 between such values. Regarding the value of professional services provided, despite the similarity between the average days of stay in a hospital context, black patients had an average cost of R\$101.96, while white patients R\$827.53. Furthermore, despite portraying all deaths due to ICT (8), brown patients obtained professional service coverage worth R\$235.17, expressing a ratio of 3.51 in relation to white patients. **CONCLUSION:** It is observed, therefore, that ICT is a pathological event that has nuances of a social nature, which can be noted through the analysis of discrepancies involved in the intra-hospital monitoring of patients of different color/race. Therefore, there is a need to carry out new studies to scrutinize these differences.

**162. MORTALITY RATE DUE TO MALIGNANT BLADDER NEOPLASMS IN BRAZIL OVER THE LAST 5 YEARS.**

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**INTRODUCTION:** Malignant bladder neoplasia (MBN) ranks as the tenth most common cancer globally and the second among genitourinary cancers. This study aims to examine epidemiological data related to MBN, identifying morbidity and mortality and analyzing the obtained results. **METHODOLOGY:** Epidemiological, descriptive study covering the period from January 2019 to August 2023, utilizing secondary data from the Hospital Information System (SIH). The analysis includes the number of hospitalizations and deaths due to MBN in Brazil, considering region, race, and gender. **RESULTS:** During the analyzed period, there were a total of 94,205 MBN-related hospitalizations and 5,867 deaths, resulting in a mortality rate of 6.22%. The Southeast region had the highest prevalence of hospitalizations (56.76%), while the North region had the lowest (1.99%). This regional pattern also applies to deaths. The disease's prevalence in the white population accounted for 52.69% of hospitalizations and 49.61% of total deaths. Males represented almost 70% of hospitalizations and 67.34% of deaths. Across age groups, there was a significant increase in cases from ages 40-49, peaking with over 30,000 hospitalizations in the 60-69 age group. Deaths were highest in the 70-79 age group, comprising 32% of total death. **CONCLUSION:** The data suggests a higher incidence of MBN in the Southeast, likely due to robust reporting with better organizational resources. Conversely, regions like the North exhibit underreporting, reflected in lower rates compared to the overall average. MBN predominantly affects the white population, aligning with existing literature. Males are more affected, largely attributed to high tobacco consumption, a primary risk factor. Elderly individuals are more susceptible due to weakened health and accumulated tobacco exposure. Cold analysis of these data underscores the need for improved reporting and more effective diagnostic means to serve the population.

163. **EPIDEMIOLOGICAL ANALYSIS OF MORBIDITY AND MORTALITY DUE TO UROLITHIASIS IN BRAZIL, A REVIEW OF THE LAST 5 YEARS**

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**INTRODUCTION:** Urolithiasis is the third most common cause of urinary tract disease; however, among all urinary tract conditions, it is the leading cause of morbidity. This pathology involves the formation of solid deposits composed of crystallized substances that are normally excreted in urine. Thus, considering that urolithiasis has a high impact on society, there is an extreme importance in epidemiologically analyzing its morbidity and mortality in the Brazilian territory. **METHODOLOGY:** A descriptive, quantitative study was conducted using secondary data from the Hospital Information System (SIH) on hospital morbidity from the Brazilian Public Health System (SUS) due to urolithiasis from August 2018 to August 2023. The variables studied were: "gender," "race," "region," "deaths," "year of hospitalization," and "detailed age group.". **RESULTS:** During the sample period, 60,128,322 hospitalizations due to urolithiasis were registered, resulting in 3,087,888 deaths. The years with the highest hospitalization cases were 2019 and 2022 with 12,185,437 and 12,363,072 cases, respectively. The age groups with the highest prevalence were 20-29 (N=10,291,055), 30-39 (N=8,287,297), and 60-69 (N=7,223,249). The Southeast (N=23,758,327) and Northeast (N=15,966,080) regions had the highest numbers, while the North region had the lowest with 5,136,577. The incidence was higher in women at 57.86% (N=34,795,103) and in browns at 41.86% (N=25,172,671). **CONCLUSION:** In view of the presented data, the importance of analyzing the morbidity and mortality of urolithiasis in Brazil is evident. Regarding age group, there is alignment with literature, as urolithiasis affects individuals aged 20 to 40, despite also observing an elevation in the older population. For the regional variable, there is a discrepancy with literature, which identifies hot and dry climate as a risk factor, while the survey shows lower incidences in warmer regions (Northeast and North) than the Southeast, possibly due to underreporting in these areas. Furthermore, the predominance in women and browns underscores the need for further investigation, considering that white men are generally associated with a higher likelihood of calculus formation according to literature. Therefore, these data underpin prevention and treatment plans aimed at reducing the social and economic impact of urolithiasis in Brazil.

164. **MORTALITY AND HOSPITALIZATIONS DUE TO CERVICAL CANCER: MARANHÃO IN THE REGIONAL SCENARIO**

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**INTRODUCTION:** Cervical cancer (CC) is the result of persistent infection with certain types of human papillomavirus, transmitted sexually. According to the National Cancer Institute, CC is the fourth leading cause of cancer death in women in Brazil. Thus, this study aims to describe mortality and hospitalizations due to cervical cancer in the state of Maranhão and compare it with the Northeast region of Brazil. **METHODOLOGY:** This is a descriptive time-series study on cervical cancer in the Northeast and Maranhão, comparing the two regions from 2015 to 2021. Data were obtained from the Unified Health System Hospital Information System (SIH/SUS) and the Cancer Mortality Atlas from INCA. The variables studied included mortality rate, total hospitalizations, age group of hospitalizations, and expenditures related to the disease. **RESULTS:** Maranhão had the highest CC mortality rate in all age groups for women aged 30 and older, with a crude rate of 9.59% between 2015 and 2021, while the entire Northeast maintained a crude rate of 6.79%. Additionally, Maranhão had 8,357 hospitalizations, representing 16% of the total in the Northeast, which was 51,513 hospitalizations for all ages during this period. Regarding hospitalizations by age group, Maranhão ranked third among Northeastern states in the number of hospitalizations for women aged 20 and older, behind Pernambuco and Bahia, respectively. In the 30 to 39 age group, the highlighted state recorded 1,844 hospitalizations, while Pernambuco had 2,972 and Bahia had 2,028. Finally, the highlighted state led in hospital expenses related to CC in the Northeast, representing about 22% of the total spent by all states in the region, equivalent to approximately BRL 24,025 million out of a total of BRL 106,848 million. **CONCLUSION:** Therefore, it is concluded that the state of Maranhão leads in mortality and hospital expenses related to malignant neoplasia of the cervix in the Northeast, also registering the third-highest number of hospitalizations for this disease in the region. This is due to the late diagnosis of cancer, resulting from a precarious healthcare system focused on cure rather than prevention. Thus, it is essential to promote health policies that encourage early diagnosis of this neoplasia, aiming to reduce the indicators of this study.

165. **HOSPITAL MORTALITY DUE TO ACUTE MYOCARDIAL INFARCTION IN MARANHÃO FROM 2013 TO 2023**Marcos Eduardo Santos Pereira<sup>1</sup>  
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**INTRODUCTION:** Acute myocardial infarction (AMI) is the necrosis of the myocardial cell due to ischemia resulting from the acute occlusion of a coronary artery. AMI occurs with characteristic symptoms, generally starting with retrosternal pain that radiates to the back, jaw or left arm, in addition to being accompanied by dyspnea, diaphoresis, nausea and/or vomiting. It is a disease with a high morbidity and mortality rate and, therefore, a challenge for public health. Therefore, the objective of the study is to analyze mortality due to AMI in the state of Maranhão in the last 10 years. **METHODS:** This is a cross-sectional and retrospective study of hospital deaths due to AMI between August 2013 and August 2023 in the state of Maranhão. Data from the Hospital Information System (SIH/DATASUS) were used, with analysis of the variables: age group, sex, race and hospital mortality. **RESULTADS:** Between August 2013 and August 2023, the state of Maranhão recorded a total of 1,854 deaths from acute heart attacks in hospital services, with 2021 being the year with the highest number of cases (n=220). In relation to age group, the most affected were elderly people between 70 and 79 years old with 27.4% (n=509). As for gender, males were the most affected, recording 57% (n= 1,059) of cases. Regarding race, the highest rate was related to brown people, with a total of 37% (n= 688) of deaths. **CONCLUSION:** Through epidemiological data taken from the SIH/DATASUS platform, it was possible to observe that AMI is an important cause of hospital mortality in the state of Maranhão, as well as the elderly male population being the most affected, according to the literature.

166. **HOSPITAL MORTALITY DUE TO HEART FAILURE (HF) IN MARANHÃO FROM 2013-2022**Bruna Assunção Albuquerque Nascimento<sup>1</sup>, Cecília Maria Camelo da Silveira<sup>1</sup>, Sharon dos Santos Albuquerque<sup>1</sup>, Rommayolle Costa Diniz de Sousa<sup>1</sup>, Gustavo de Oliveira Silva<sup>1</sup>, Silas Freire Pereira e Silva Junior<sup>1</sup>, Jerusa Rodrigues Bezerra<sup>1</sup>  
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**INTRODUCTION:** Heart Failure (HF) is a clinical syndrome characterized by the heart's inability to pump enough blood to attend the metabolic needs of tissues. It accounts for 4% of total hospital admissions in Brazil and 31% of cardiovascular-related admissions in the country. Considering the increasing prevalence of HF worldwide and the scarcity of research on the topic, the study aims to describe hospital mortality due to HF in the state of Maranhão from January 2013 to December 2022. **METHODS:** This is an epidemiological study with a retrospective, descriptive, and quantitative nature, through the analysis of data from the online platform of the Hospital Information System of the Brazilian Unified Health System (SIH/DATASUS). The data obtained were tabulated using the Microsoft Office Excel program. The variables considered were: death, age group, sex, health macro-region, city, race/ethnicity, and type of care. **RESULTS:** Maranhão has the highest number of hospital deaths due to HF among the Northeastern states, accounting for 8% of the total. The male population showed a higher mortality rate in hospitals (55%). Individuals aged 80 or older have the highest number of deaths (30%). An increase in the number of hospital deaths can be observed with increasing age groups, except for the percentage observed among those under 1 year old (0.74%) and those aged 1 to 4 years (0.32%), which have higher values than the 15 to 19 age group (0.54%) and the 5 to 9 age group (0.15%), respectively. There were more deaths as emergency cases (89%) compared to elective care. The Northern Macro-region (MRN) showed the highest hospital mortality rate (53%), followed by the Eastern Macro-region (MRL) (26%). The cities of São Luís, Imperatriz, and Caxias had the highest numbers of deaths - 27%, 12%, and 6%, respectively. The mixed-race population (38%) had the highest number of records, followed by the Asian population (3%). **CONCLUSION:** It is evident that the MRN and the city of São Luís have a significant number of deaths, which can be explained by easier access to healthcare centers. The high number of deaths as emergency cases may be related to decompensated cases with little adherence to both treatment and disease prevention. It is emphasized that more targeted public policies be formulated for mortality control and disease prevention.

167. **HIV/AIDS mortality in the state of sergipe by age group in the period 2001-2020**

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**INTRODUCTION:** Acquired Immunodeficiency Syndrome (AIDS) is a chronic infection caused by the HIV virus, which leads to immunosuppression and the development of opportunistic infections and/or neoplasms. In 1996, retroviral therapy (ART) was introduced into the Unified Health System (SUS), increasing the survival rate of HIV-positive patients. The aim of this study is to analyze AIDS deaths in the state of Sergipe by age group between 2001-2020. **METHODOLOGY:** This is an ecological, descriptive, quantitative study with a temporal approach. The data was obtained from DATASUS, referring to deaths registered from 2001 to 2020 in individuals up to 80 years of age. **RESULTS:** According to the Ministry of Health's protocol, HIV/AIDS is diagnosed using the fourth generation immunoassay test plus Western Blot or Immunoblot for confirmation. The semiology is characterized by lymphadenopathy, thrombocytopenia, diarrhea, headache, a decrease in CD4 cells and the appearance of opportunistic diseases. Treatment involves a combination of antiretroviral drugs, which has made it possible to reduce the patient's viral load. Between 2001 and 2020, 1,432 deaths from AIDS were recorded in the state of Sergipe, of which 0.9% were in children under 15 years of age. It was observed that 95% of deaths (1381) occurred in patients aged 20 to 59, of which the age group with the highest number was 30-39 years with 470, representing 32.82% of the total. The 40-49 age group had 372 deaths (25.98%) and 215 deaths were reported in the 50-59 age group. In 2009 there were 34 deaths in the 30-39 age group, the highest number recorded by age group in the period analyzed. From 2013 onwards, deaths exceeded 80/year, with 2014 standing out with 94. The following years showed a significant drop, with 81 deaths recorded in 2015 and 88 in 2016, but in 2017 and 2018, there was an increase in the number of deaths, with 100 and 102 deaths respectively, in 2020 113 deaths were reported. **CONCLUSION:** Despite the prevention policies adopted, such as the free distribution of antiretroviral drugs for continuous use, deaths from HIV are on the rise in Sergipe, especially in the 30-39 and 40-49 age groups. In this sense, additional studies are needed to assess the local factors related to the increase in deaths in the state in order to promote their effective reduction.

168. **MORTALITY FROM ACUTE MYOCARDIAL INFARCTION IN BRAZIL BETWEEN 2015 AND 2020**

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**INTRODUCTION:** Acute Myocardial Infarction (AMI) is an ischemic heart disease culminating in reduced blood flow caused by an obstruction, resulting in tissue hypoxia and, later, in myocardial tissue necrosis. Therefore, this study aims to characterize the epidemiological profile of mortality in Brazil due to acute myocardial infarction from 2015 to 2020 in order to reflect on its panorama in the country. **METHODS:** This is an observational, descriptive, retrospective and quantitative study of deaths from AMI in Brazil. Data were obtained from the Mortality Information System of the Unified Health System (SIM/TabNet Win 32 3.0) between the years 2015 to 2020, having as analysis parameters: region, sex and race. **RESULTS:** 8,109,956 deaths from AMI were reported in Brazil in the analyzed period. The Southeast region stands out with the highest number of deaths, 45.3% (n= 3,680,670), followed by the Northeast with 26.5% (n= 2,149,542) and the South with 15% (n= 1,223,186). Males stand out with 55.9% (n= 4,533,730) compared to females 44% (n= 3,572,524). The most comprehensive race was white 54.6% (n= 4,092,693), followed by brown 37.6% (n= 3,050,284) and black 7.8% (n= 633,593). **CONCLUSION:** It is observed that the Southeast, South and Northeast regions have a high mortality in Brazil, possibly due to the largest diagnostic and reporting centers in the country. Males were the most affected due to irregular health habits such as sedentary lifestyle, obesity, alcohol and other drug abuse compared to females. Finally, the white race stands out as the largest group of deaths, also possibly due to greater access to a more deleterious lifestyle, however, more comprehensive studies are needed in this perspective.



**169. MORTALITY FROM CHRONIC RENAL FAILURE IN MARANHÃO FROM 2012 TO 2021**

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**INTRODUCTION:** Chronic renal failure (CRF) is the final stage of chronic kidney disease (CKD), with a glomerular filtration rate using the CKD-EPI method  $\leq 15$  ml/min/1.73m<sup>2</sup>, due to the depletion of the number of functional nephrons by continuous injuries, mainly caused by systemic arterial hypertension (SAH) and diabetes mellitus (DM). At this stage, survival is reduced and, if left untreated, it develops into uremic syndrome, anorexia, nausea and vomiting, which can be fatal. Given this, the objective of this work was to analyze the profile of CRF mortality in Maranhão from 2012 to 2021. **METHODS:** Ecological, quantitative, time series epidemiological study (2012-2021), with data from TABNET - DATASUS – Information System on Mortality (YES). The variables were analyzed: deaths, year, age group, education, race, health region and sex. **RESULTS:** There were n=1784 deaths due to CRF, between 2012 and 2021, in Maranhão. Men represent 61.4% of deaths. The year with the most deaths was 2021 (n=220), followed by 2020 (n=219). As for the age group, the most affected was 60-69 years old (n=415). Regarding education: up to 3 years corresponded to 53.8%. The brown race represents 64% of the total. The health regions with the most records were: São Luís (n=314), Imperatriz (n=174), Caxias (n=172), Timon (n=94) and Presidente Dutra (n=91). **CONCLUSION:** There were more deaths in the elderly, due to the chronic and progressive aspect of CRF. The panorama of mortality due to CKD associated with its etiologies indicates the need for improvements in basic care actions such as health education and screening for hypertension and DM to prevent CKD.

**170. MORTALITY FROM ACUTE RESPIRATORY DISTRESS SYNDROME IN NEWBORNS IN MARANHÃO**

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**INTRODUCTION:** Newborn Respiratory Distress Syndrome (NRDS) occurs due to an imbalance in pulmonary surfactant supply, leading to diffuse alveolar atelectasis, cellular injury, and edema, followed by surfactant function inhibition caused by proteins. In premature infants, NRDS is the most common respiratory disorder, especially in preterm infants (<28 weeks), males, offspring of diabetic mothers, and those experiencing birth asphyxia. The neonate's condition is characterized by rapid reactive oxygen species formation, overwhelming the body's detoxification capacity due to antioxidant overload. Consequently, NRDS stands as a significant cause of morbidity and mortality in this age group. Therefore, this study aims to identify the epidemiological profile and mortality rates of patients hospitalized for sepsis in the state of Maranhão from 2018 to 2021. **METHODOLOGY:** This is a quantitative cross-sectional study covering the period from 2018 to 2021. Data were collected through the Mortality Information System (SIM) via the Department of Informatics of the Unified Health System (DATASUS). The sample comprised cases of deaths in children under one year due to newborn respiratory distress and severe acute respiratory syndrome (SARS) in the state of Maranhão. Variables analyzed included newborn age group, gestational age at birth, maternal age, sex, race, and number of deaths. Data tabulation, as well as graph and table construction, were performed using the Microsoft Excel platform. **RESULTS:** From 2018 to 2021, a total of 401 cases of infant deaths due to newborn respiratory distress were recorded in the state of Maranhão, with the highest rates in 2019 and the lowest in 2020. Regarding age group, newborns aged 0 to 6 days were the most affected (90.52%), followed by premature newborns, i.e., those born before completing 37 weeks of gestational age (77.30%). Additionally, cases were predominant among male newborns (52.61%) and those of mixed race (68.07%). Notably, data regarding weight showed a higher prevalence among those born weighing less than 2500g (80.54%). Furthermore, regarding maternal factors, cases were more prevalent among those aged between 10 and 19 years (29.92%), with an educational level of 8 to 11 years (54.36%). Moreover, NRDS was present in approximately 11% of deaths in infants aged 0–6 days. **CONCLUSION:** Consequently, key factors related to infant mortality due to NRDS in the Maranhão region were identified, with a prevalence among newborns aged 0 to 6 days and weighing less than 2500g. Moreover, inadequate or insufficient maternal care, along with inappropriate approaches and therapeutics for managing infants with severe acute respiratory distress, are risk factors for this condition. Therefore, it is crucial to emphasize preventive measures aimed at minimizing mortality from this pathology, along with early diagnostic approaches and appropriate interventions, as fundamental measures to improve outcomes in the state of Maranhão.



171. **MORTALITY FROM BEHAVIORAL AND MENTAL DISORDERS IN MARANHÃO (2012-2021)**

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**INTRODUCTION:** Mortality from mental and behavioral disorders is a growing concern worldwide, particularly in the state of Maranhão, given its social, cultural, and economic characteristics. Mental disorders such as depression, anxiety, schizophrenia, and bipolar disorder, along with related behaviors such as psychoactive substance use, have a significant impact on people's quality of life and population mortality. Thus, this study aims to characterize mortality from behavioral and mental disorders in Maranhão between 2012 and 2021. **METHODS:** This is an ecological study analyzing mortality from behavioral and mental disorders in Maranhão between 2012 and 2021. Data were acquired through SIM/DATASUS and tabulated using the TABWIN and TABNET system. The variables observed were: number of deaths, most affected municipalities, year, sex, age group, race/ethnicity, education level, marital status, place of occurrence, and cause of death. **RESULTS:** Through the analysis of data on mortality from behavioral and mental disorders in Maranhão, it is noted that there were a total of 2,864 deaths in the analyzed period. The three municipalities with the highest occurrence were São Luís (22%), Timon (5%), and Imperatriz (4%). During the study period, there was a gradual increase in the number of deaths, with a highlight for the years of the COVID-19 pandemic (2020 and 2021), which recorded a higher number of occurrences. Regarding sex, males were the most affected, accounting for 78% of cases. The most affected age group was 40 to 49 years old, with 19% of deaths. Regarding race/ethnicity, 78% were mixed race. In terms of education level, 31% had no years of schooling. Regarding marital status, the majority (49%) were single. Death occurred at home in 48% of cases. About 81% of deaths were due to mental and behavioral disorders caused by the use of psychoactive substances, of which 68% were due to alcohol use. **CONCLUSION:** It is evident that the profile of mortality from mental and behavioral disorders in Maranhão is characterized by men, aged 40 to 49, declared mixed race, with no education, single, whose death occurred at home, and whose cause was mental and behavioral disorders due to the use of psychoactive substances (mostly alcohol). Therefore, identifying this profile is of great importance for the development of public health strategies to address this issue.

172. **NEGLIGENCE IN THE MANAGEMENT OF WORK-RELATED PNEUMOCONIOSIS IN BRAZIL**

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**INTRODUCTION:** Pneumoconioses are occupational lung diseases that involve exposure to harmful substances in the workplace. It is closely associated with the inhalation of dust containing metals, oxides and other salts. It mainly involves silicosis and asbestosis, however, it can also be triggered by coal, iron, manganese, zinc, bauxite, limestone and others. It can cause coughing and dyspnea and affects workers in different industrial and mining sectors, therefore, it is important to analyze the different management involving these lung diseases. **METHODS:** This is a descriptive and quantitative research using data from the DATASUS/TABNET platform. From SINAN NET, notifications of work-related pneumoconioses were selected regarding conduct recorded in the period from 2013 to 2022, which are subdivided into: agent removal, adoption of change, collective protection, removal from the site, individual protection, none and others. Data analyzes and comparisons were made between each year and between each conduct adopted. **RESULTS:** Data were found relating to 3720 patients from 2013 to 2022, with a preponderance of non-adoption of any measures related to pneumoconioses. Among those who adopted at least one conduct, the least adhered to was collective protection, by 70 patients, followed by the removal of the agent, with 475, and individual protection, with 779, essentially neglected in 9 of the 10 years studied. On the other hand, the most prevalent was personal protection, with a positive value of 779. In second place is the removal of the agent and the removal from the location, with 475 and 370 patients. Some of the sections studied showed absence of data from 2018 to 2022, which hinders the analysis, namely: collective protection, removal from the location and others. **CONCLUSION:** Failure to adopt changes and failure to provide collective protection are the main behaviors that were neglected, which may suggest underreporting of informed conduct or may represent failures and/or negligence in conduct regarding patient care with pneumoconioses. Therefore, it becomes essential to establish an increase in health prevention strategies related to occupational diseases, with the aim of increasing data collection, improving the rates of conduct taken and, therefore, increasing the patients' life quality.

173. **DIABETIC NEUROPATHY AND ITS MAIN CLINICAL REPERCUSSIONS**

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<sup>1</sup>Universidade Uniceuma

**INTRODUCTION:** According to data from the Federal Police's International Traffic System (STI), Brazil is currently home to more than 477,000 Venezuelan refugees. Most of the immigrants enter through the north of the country, in the state of Roraima (RR), and are initially concentrated in the cities of Boa Vista and Pacaraima. In these cities, refugees are welcomed, sheltered and receive health care. The aim of this study is to analyze the impact of spending approved for health care in two cities in Roraima. **METHODS:** This is a comparative study of the amounts approved for outpatient care in two cities in RR with a high number of Venezuelan refugees, between the periods 2011 to 2016 (1st period) and 2017 to 2022 (2nd period). The figures for care were obtained from DATASUS, the Ministry of Health, and the number of refugees in Brazil from STI. As this is a study using secondary data, approval by the Research Ethics Committee is not required. **RESULTS:** In the first period, the municipalities analyzed had a total of R\$257,679,943.08 approved for outpatient care. In the 2nd period, the amounts approved increased by 23% compared to the previous 6 years. This increase did not occur evenly over the years, with a lower amount approved in 2020 than in almost all the years of the 1st period. 2020 also saw the lowest number of Venezuelan refugees entering the country (47,661). The highest amounts approved for outpatient care occurred in 2022, 2018, 2017 and 2019, respectively, coinciding with the years with the highest influx of Venezuelan refugees. **CONCLUSION:** The results suggest a correlation between the influx of Venezuelan refugees and the increase in the amounts approved for health care in the municipalities that primarily receive them. Further research should be carried out to prove this hypothesis.

174. **NOTIFICATION OF HOSPITAL ADMISSIONS OF WOMEN WITH HIV IN MARANHÃO BETWEEN 2018 AND 2023**

Mariana Alencar Bisinotto<sup>1</sup>, Ana Carolina Celidonio Almeida Campos<sup>1</sup>, Jouwsen Henrieth Reis Andrade Nascimento<sup>1</sup>, Kellen de Jesus Farias da Luz<sup>1</sup>, Layanne Silva Oliveira<sup>1</sup>, Erika Krogh<sup>1</sup>  
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**INTRODUCTION:** Human immunodeficiency syndrome (HIV) is a pathology caused by a retrovirus that provides a diversity of clinical manifestations and different spectrums according to the destruction of CD4 + T cells. In its advanced phase, acquired immunodeficiency syndrome (AIDS), opportunistic diseases and neoplasms appear, representing serious health problems. The main form of transmission is sexual and has a high transmission and incidence rate. It is a disease that has no defined cure, but there is treatment that significantly reduces the course of the disease, however adherence is not always ideal, which makes HIV control difficult. Therefore, the objective of the work is to trace the impact of HIV on women based on the analysis of cases of hospital admission by the Unified Health System (SUS). **METHOD:** This is a descriptive epidemiological study based on data made available by the Department of Informatics of the Unified Health System (DATASUS). The studied population consisted of cases of hospital admissions to the SUS of women with human immunodeficiency virus (HIV) disease, in the state of Maranhão, Brazil, reported between the period from July 2018 to July 2023. **RESULTS:** During the period analyzed, 861 hospitalizations attributed to HIV were reported in the state of Maranhão, with 592 of the cases concentrated in the North macro-region. The years 2021 and 2019 were those with the highest number of occurrences, with 20.2% and 9.74% of the total, respectively. Regarding the nature of care, 56.56% were classified as urgent, and the average hospital stay was 14.9 days. Furthermore, 115 deaths were recorded, with a higher incidence in the age groups of 30 to 39 years old, in which there were 43 cases, and 40 to 49 years old, in which there were 38. **CONCLUSION:** Given this, it is possible to infer that there are still many complications triggered by this infection, which can result in the death of the patient. Although there is no cure for HIV, there are many scientific advances in this area that allow people with the virus to have quality of life, so these people are possibly not having access to them. Furthermore, these numbers show that studies and investments are needed in the area to combat these results.

175. **NEW PERSPECTIVES OF TREATMENT FOR ALZHEIMER: A BIBLIOGRAPHIC REVIEW**

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Robertha Hallana Rodrigues Farias<sup>1</sup>; Myrella Evelyn Turbano<sup>1</sup>;  
Pedro Holanda<sup>1</sup>

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**INTRODUCTION:** Alzheimer is a progressive neurodegenerative disease, causing great harm to quality of life. The accumulation of Tau protein, a possible consequence of neuronal damage, is proposed as a trigger to clinical symptoms and accumulation of beta-amyloid (A $\beta$ ). The disease is manifested by a decline in cognitive capacity, changes in behavior and severe neuropsychiatric symptoms to the point of interfering with activities of daily living. Clinical diagnosis is based on the assessment of cognitive domains and functional impairment. Treatment of Alzheimer's Disease (AD) does not promote a cure. Currently, cholinesterase and NMDA receptor inhibitors are used to combat symptoms. The aim of the work is to analyze the new pharmacological management of AD. **METHODOLOGY:** This is an integrative, qualitative, retrospective and bibliographic literature review, analyzing around 8 articles from 2019 to 2023, extracted from Google Scholar, Scielo and Lilacs, about new treatments for AD with the descriptors "New", "Treatments", "Alzheimer" and Boolean operators "AND" and "OR". **RESULTS:** The therapy is considered palliative and the study seeks to address this shortcoming. Initially, the studies were aimed at modifying risk factors. Nilvadipine, used for hypertension, has been shown to act on the hippocampus, reducing blood pressure and regulating blood flow, probably stabilizing its functioning. The highest dose of Metformin was associated with an increase in total memory on the Selective Recall Test. Furthermore, studies with cannabinoid derivatives show prevention of neurotoxicity, hyperphosphorylation of Tau protein and promotion of neurogenesis in the hippocampus. Some approaches to reducing A $\beta$  load have been developed through gamma-secretase and beta-secretase inhibitors, the removal through immunotherapy is also a reasonable strategy. Finally, the monoclonal antibody Donanemab significantly delayed clinical progression in those with low/medium Tau and in the combined low/medium and high Tau pathology population. **CONCLUSION:** Although there is still no cure for Alzheimer, advances in medicine have provided AD patients with a new therapeutic perspective, which is based on risk factors, reduction of neurotoxicity, A $\beta$  and Tau protein load. These new approaches can provide a better quality of life for these individuals undergoing palliative treatment.

176. **PREGNANT WOMEN'S KNOWLEDGE ABOUT THE USE OF MEDICINAL PLANTS DURING PREGNANCY**

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Vitor Oliveira Da Graça<sup>2</sup>, Maria Kéren Ribeiro Sousa<sup>2</sup>, Raquel  
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**INTRODUCTION:** Medicinal plants have bioactive principles in their composition with prophylactic or therapeutic properties used by traditional medicine for centuries. Consequently, they are commonly used during the gestational period, however, the risk involved in this therapy during pregnancy should be highlighted. Therefore, this work seeks to analyze and describe the knowledge of pregnant women about the use of medicinal plants during pregnancy. **METHODS:** This is an integrative literature review research carried out in the LILACS and Medline scientific databases, using Decs/Mesh and their respective translations in English and Spanish, in addition to Boolean connectors: ((Knowledge) OR (Know)) AND ((Pregnant women) OR (Pregnant women) OR (Parturient women) OR (Parturient women)) AND ((Medicinal plants) OR (Medicinal herbs)). Out of 1,026 studies were retrieved and after reading and evaluating the inclusion and exclusion criteria, 10 articles were obtained. **RESULTS:** It should be noted that although the use of medicinal plants during pregnancy is common, scientific evidence indicates that the use occurred without professional guidance. The studies highlighted the lack of knowledge among pregnant women about the toxic effects of medicinal plants. The most used species were Chamomile (*M. chamomile*), to promote a calming effect, reducing nausea and vomiting. Ginger (*Z. officinale*), to promote a calming effect, reducing nausea and vomiting. Fennel (*F. vulgare*), to relieve heartburn, colic, constipation and flatulence. Mint (*M. piperita*), to relieve colic, pelvic pain and flatulence. *P. boldus* Molina, to relieve discomfort, diarrhea, constipation. However, the researchers emphasized the risk involved in using medicinal plants during pregnancy. They also explained that *M. chamomile* increases the risk of premature birth and low birth weight of the newborn; *Z. officinale* is associated with the risk of congenital anomalies, placenta previa and pre-eclampsia; *F. vulgare* has abortive and galactagogue action; *M. piperita* and *P. boldus* have teratogenic and abortifacient effects. **CONCLUSIONS:** Despite the beneficial effects of medicinal products, the importance of knowledge regarding the use of this therapy is highlighted, as well as guidance regarding professional preparation and delivery, especially during the gestational period, which is more delicate due to the risk of miscarriage and teratogenicity.

177. **THE IMPACT OF LEPROSY IN THE LAST 5 YEARS IN THE STATE OF MARANHÃO: AN EPIDEMIOLOGICAL STUDY**  
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Pedro de Carvalho Figuerêdo<sup>1</sup>, Ana Luiza Fernandes Raposo  
Martins<sup>1</sup>, Mateus Oliveira Viana<sup>2</sup>

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**INTRODUCTION:** Leprosy (Hansen's disease) is a chronic infectious illness caused by *Mycobacterium leprae*, a microorganism that has tropism for the skin and peripheral nerves, with neurological damage being the main responsible for its characteristic sequelae. It is part of the group of neglected diseases, caused by infectious agents and considered endemic in populations living in poverty, contributing to the maintenance of inequalities. **METHODS:** This is a descriptive quantitative epidemiological study, carried out by collecting data from the Hospital Information System of the Unified Health System (SIH/SUS), covering the period from January 2018 to December 2022. The variables were: processing year, sex and age. The data obtained was categorized using the software Microsoft Excel to create tables. **RESULTS:** A total of 2710 admissions for leprosy were registered in Maranhão in the analyzed period, with an increase between the years and 2022 being the one with the highest number of hospitalizations (691). Regarding mortality, there were 77 deaths and there was an increase of 228.5%, which went from 7 to 23, between 2018 and 2022. Regarding age, leprosy has a prevalence in patients over 15 years old, with the most affected being those between 20 and 59, which corresponded to 66.9% of hospitalizations. The deaths occurred mostly in the age group of 30 to 49 years, with 44 deaths. Furthermore, 72.5% of hospitalizations were male, which also corresponded to the highest number of deaths (46) and costs (R\$ 1,739,606.00). Regarding the amount of hospital services, the total was 2,411,949 reais, with 2022 being the most expensive year (R\$ 692,530.60). **CONCLUSIONS:** The increasing number of hospitalizations and deaths due to leprosy in recent years, as well as the high costs caused by it, highlight the need to understand the regional context of the disease. In this perspective, more studies are needed to carry out measures aimed at early diagnosis and treatment, in order to reduce the rates of hospitalizations and deaths of these individuals in Maranhão, as well as reducing costs for the Unified Health System.

178. **THE IMPACT OF HEGEMONIC MASCULINITY ON THE LATE DIAGNOSIS OF PENIS CANCER IN MARANHÃO**  
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**INTRODUCTION:** Hegemonic masculinity deprives men of full health, since illness is considered, from this perspective, as a sign of fragility and "feminization". In Maranhão, the state that leads the death rates from penile cancer (PC) in Brazil and the world, these stigmas of masculinity, associated with other factors, are more accentuated. Thus, the objective of this work is to evaluate the impact of hegemonic masculinity on the late diagnosis of PC in Maranhão. **METHODS:** 30 patients diagnosed with PC treated in three reference hospitals in Maranhão were selected and interviewed to apply a questionnaire to collect sociodemographic and behavioral data throughout the execution of the research project "PHYSIOPATHOLOGICAL AND MOLECULAR PROFILE OF PENIS TUMORS ASSOCIATED WITH HUMAN PAPILOMAVIRUS INFECTION", approved by CEP-HUUFMA under opinion no. 4.228.789 and CAAE 30760420.3.0000.5086. For all collections, an Informed Consent Form was signed with authorization from patients to use their data in derivative research, such as this study. **RESULTS:** Around 36.6% patients reported a delay of 6 to 12 months in seeking a doctor from the onset of symptoms, 23.3% a delay of less than 6 months, 20% a delay of more than 24 months and 16.6% from 12 to 24 months. The majority of patients (83.3%) reported negligence as a reason for delay in seeking medical care even with symptoms and 16.6% reported the reason as shame. Around 43.3% of patients reported more than 10 sexual partners in their lives, 30% reported five or fewer partners, 13.3% reported 6 to 10 partners and 13.3% were unable to provide information. **CONCLUSION:** In this study, the majority of participants reported a delay of more than 6 months from the onset of symptoms to seeking medical help. The patients' justifications for this delay were negligence and shame and many had high-risk sexual behavior, with multiple partners, but still abstained from medical consultation. This scenario highlights the unconscious fear of the male individual, the denial of his own vulnerability, and the search for medical care only when there is some symptomatological manifestation and/or illness already established, especially if related to diseases of the genitourinary system, such as CP, delaying the diagnosis of the disease. Therefore, studies in this area are important to support future updates of public policies for men's health care.

179. **THE IMPACT OF IMMUNOBIOLOGICS ON THE TREATMENT OF ATOPIC DERMATITIS: A LITERATURE REVIEW**

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**INTRODUCTION:** Atopic dermatitis (AD) is a chronic and recurrent skin disease characterized by eczema, inflammation, and itching. It is often associated with elevated levels of IgE, as well as other allergic conditions such as asthma and rhinitis. Recent discoveries in the immunopathogenesis of AD include a better understanding of the role of Th1 and Th2 lymphocytes and their cytokines in disease development, leading to therapies targeted at these specific mechanisms, such as immunotherapy and immunobiologics, leading to therapeutic precision and the possibility of individualizing treatment, ushering in a new era in AD management. This review aimed to evaluate the impacts of immunobiologic compounds in the treatment of atopic dermatitis. **METHODS:** This is a descriptive literature review, based on the databases Scielo, PubMed, and Scopus. The following descriptors were used to search for articles: "Atopic Eczema", "Immunotherapy", and "Biologicals". Inclusion criteria for article selection were: articles published in Portuguese and English, available in full text, and published and indexed in the aforementioned databases between 2019 and 2023. **RESULTS:** There are numerous monoclonal antibodies used to treat AD. Dupilumab, approved for clinical use by the Food and Drug Administration (FDA) in the United States and by the National Health Surveillance Agency (ANVISA) in Brazil in 2019, is indicated for moderate to severe forms of the disease in adults and adolescents aged 12 and older. Tralokinumab, authorized in the European Union, is used in adults with moderate to severe AD. Nemolizumab is in phase III studies, lebrikizumab in phase II, and fezakinumab in clinical trial phase. Studies have shown greater efficacy of the mentioned immunobiologics, both as monotherapy and in combination with topical treatment, compared to placebo, with significant reduction in eczema area and severity and improvement in itching. The medications were well tolerated, and adverse effects were mostly local, transient, and mild to moderate. **CONCLUSION:** It was possible to analyze the positive impact of immunobiologics in the treatment of atopic dermatitis, with several new drugs emerging as therapeutic options. However, especially in Brazil, there is an urgent need to strengthen studies on these drugs in order to effectively translate their effects and alleviate the current difficulty of access to immunotherapy.

180. **THE ROLE OF MEDICAL SCHOOLS IN PROFESSIONAL INTEGRATION AND IMPROVING HEALTH CARE**

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**INTRODUCTION:** Multiprofessional integration in medical training is essential for a more comprehensive and holistic approach to treating patients, in order to meet the complex demands of the health system. This model encounters obstacles in medical schools, either due to the prevalence of the traditional model or the neglect of interprofessional collaboration in clinical practice. With this in mind, the aim was to synthesize the evidence found in the literature on medical education in relation to multi-professional integration and its role in improving healthcare. **METHODOLOGY:** A bibliographic survey was carried out to review the literature in the LILACS and SciELO databases using the Health Sciences Descriptors (DeCS): Health education; Medical education; Multiprofessional integration. Five articles relevant to the topic were selected, written in Portuguese and available in full for reading. **RESULTS:** Medical education has a core field in interdisciplinarity, especially at the time of the implementation of the national curriculum guidelines. It is clear that the importance of interprofessional medical education is evident and the lack of in-depth studies confirms the scarcity of approaches to the subject. Obstacles to the implementation of this educational model include curricular rigidity and inflexibility in the movement between disciplines. The implementation of common disciplines, research and extension projects for health courses is presented as a strategy for developing professionals capable of working in an inclusive and collaborative way, where members know each other's areas of activity and are able to take on part of their duties. **CONCLUSION:** Current medical training in Brazil has yet to integrate a holistic and interprofessional approach in a concrete way. Institutional obstacles, inflexible curricula and professional corporatism are obstacles to including a culture of collaboration and teamwork, considering care, comprehensiveness and ethics. Dialogue between universities and the creation of shared learning spaces are important for breaking down academic barriers and professional stigmas, contributing to a more reflective medical education that is aware of the complexity of the demands of the health system. In view of this, the proper handling of overlapping roles and respect for the functions of each professional is crucial to establishing solid communication between the areas.



**181. THE USE OF ARTIFICIAL INTELLIGENCE IN SUPPORT OF CLINICAL DECISION-MAKING**

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**INTRODUCTION:** In healthcare, clinical decision-making is a complex process influenced by factors such as professional fatigue and difficulty analyzing large volumes of data related to patient conditions. The use of Artificial Intelligence (AI) in conjunction with the experience and knowledge of healthcare professionals emerges as a solution to address these issues, assisting in the analysis of available data and possible variables that may alter the patient's diagnosis or clinical outcome. This study aims to analyze the possibilities of using AI to support clinical decision-making. **METHODS:** This study is an integrative literature review developed from the analysis of articles indexed in the PUBMED and SCIELO databases. The investigation involved using the Health Sciences Descriptors (DeCS): "Artificial Intelligence" and "Clinical Decision", combined with the Boolean operators "AND" and "OR". A total of 154 studies were found that met the inclusion criteria: full articles, freely accessible, and published between 2018 and 2023. After analysis, 4 articles were selected that fit the purpose of this study. **RESULTS:** AI tools are developed to analyze large datasets, and the use of this tool in predicting diagnoses, clinical outcomes, risk of complications, and other variables is particularly relevant in medical conditions with a large amount of information available. AI enables improvements in clinical decision-making, making the process more efficient and faster. However, the integration of AI into clinical decision support systems must be done with caution to ensure that healthcare professionals have control over the decision-making process. Additionally, it is essential to pay attention to the quality of the data used, as biases in the recommendations may inadvertently be perpetuated, resulting in possible failures related to the use of this tool. **CONCLUSION:** In summary, AI in healthcare is a useful tool for improving clinical decision-making, offering more accurate diagnoses, identification of health risks, and personalized treatments. However, it is fundamental to address challenges and concerns as this technology advances to ensure its beneficial use in patient care.

**182. THE USE OF ACETYLSALICYLIC ACID AS A PROPHYLAXIS FOR PRE-ECLAMPSIA IN HIGH-RISK PREGNANCIES**

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**INTRODUCTION:** Pre-eclampsia (PE) is a multisystem disorder with major clinical repercussions, characterized above all by high blood pressure levels associated with target organ damage, diagnosed from the 20th week of pregnancy onwards. In women who develop PE, there is an inadequate invasion of trophoblasts into the spiral arteries in the placentation process, resulting, among other alterations, in increased platelet aggregation and decreased vascular flow. Understanding this pathophysiological mechanism has led to studies analyzing the effectiveness of platelet antiaggregants as a way of preventing or delaying the onset of PE. Acetylsalicylic acid (ASA) has therefore been used in low doses as a prophylactic measure in women who have added risk factors - such as diabetes, previous hypertension and lupus. The aim of this study is therefore to review the available literature on the impact of using ASA in pregnant women at high risk of developing pre-eclampsia, to explain the recommended dose and the ideal time to prescribe it, and to investigate which tests can in fact refine PE risk screening. **METHODS:** This is a literature review based on articles available on the UptoDate, Google Scholar and SciELO platforms. A total of 7 articles published between 2017 and 2023 were analyzed and considered eligible for the study. **RESULTS:** The analysis showed that, although the studies still differ, the preventive use of ASA has made a significant contribution to the management of patients at high risk of developing this complication. The results were more satisfactory in those who started treatment early - before 16 weeks of pregnancy - and the ideal dosage varied between 80 and 150 mg a day. On the other hand, there are still doubts on which PE predictive tests are effective in defining risk and thus selecting patients who should take the drug. **CONCLUSION:** There are still questions about the use of ASA in pregnant women. However, based on clinical analysis and previous pathophysiological knowledge, the use of the drug is justified in women whose risk of pre-eclampsia is considered significant. In addition, there is no consensus on a marker that can, in isolation, reliably predict which pregnant women should be submitted to prophylaxis, which is why a careful and individualized assessment of each patient is important.



183. **USE OF CANNABIDIOL AS A THERAPEUTIC METHOD IN EPILEPSY**Mariana Soares<sup>1</sup>, Melissa Clementino Sousa<sup>1</sup>, Maria Clara Pereira Nogueira da Cruz<sup>1</sup><sup>1</sup>Universidade CEUMA

**INTRODUCTION:** Cannabis sativa has several therapeutic properties and has been used for millennia for healing purposes. Among its benefits are analgesic, antiemetic and tranquilizing effects, acting strongly on the nervous system. **METHODS:** A systematic literature review, using bibliographic searches carried out in the electronic databases LILACS, PubMed and SciELO with the descriptors "cannabidiol" and "epilepsy". Of 1645 searches found, 06 were used in the study. **RESULTS:** Epileptic seizures can be generalized or partial and are determined by the affected area. The treatment for epilepsy are drugs that decrease the arousal capacity of neural tissue and a significant percentage of individuals cannot control them with traditional drugs alone. Endocannabinoids work in response to epileptiform activity, to activate CB1 receptors for excitatory neurons, to contain excess neuronal activity, which occurs during seizures. It is proven that patients who use it do not have toxic adverse effects. In Brazil, Cannabis is a controlled drug and the fact that it is imported, interfere in the treatment, who is interrupted while patient waits the new dosage. **CONCLUSIONS:** The importance of cannabidiol as a target for research and studies is verified, as it has ample potential in the treatment of epilepsy and reduces brain damage caused by it. In order that patients with epilepsy, have improvements in their quality of life.

184. **THE USE AND LIMITS OF ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS OF SERIOUS DISEASES IN PEDIATRICS**Graziela Gama da Conceição Gomes<sup>1</sup>, Safira Pontes de Almeida Costa<sup>1</sup>, Ana Mariza dos Santos Gonçalves<sup>1</sup>, Cláudio de Azevedo Gonçalves Junior<sup>1</sup>, Hígina Cristina da Silva Araújo<sup>1</sup>, Sarah Gonçalves Torres de Sá<sup>1</sup>, Laina Luiza Pitombeira Rocha<sup>1</sup>.<sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Artificial Intelligence (AI) consists of the ability of virtual systems to reproduce human cognitive functions. This technological field has been useful in identifying serious pediatric conditions today, a fact that motivates discussion regarding the uses and limits of its use. **METHODOLOGY:** This is a narrative review that used the descriptors "artificial intelligence", "medicine", "pediatrics", "diagnosis" and "serious diseases" in two databases (PubMed and Google Scholar) in October 2023. Articles written in Portuguese or English published between 2018 and 2023 were included. In total, 25 articles were found, of which 4 were in line with the objectives of this work. **RESULTS:** The articles analyzed indicate that the use of algorithms has helped in the classification of patients, by associating clinical data with possible diagnoses of critically ill patients. Thus, technologies can examine broad sets of data and create predictive models that expand human skills, supporting professionals in decision-making. In this way, AI's competence in predicting the worsening of critical patients is based on the correlation, carried out by software, between the results of laboratory tests, imaging tests and vital signs, which is useful in reducing care time and optimizing care. However, regarding the limits of the use of AI in the given context, the materials highlighted the challenge in training the algorithms, given that pediatric patients constitute a heterogeneous and small population, which implies the quantity and quality of available data. Furthermore, ethical and legal issues are important barriers to the applicability of AI resources, as they concern patient privacy as well as information security. **CONCLUSION:** Therefore, there is a need for more studies on the subject to expand the data available for algorithm training, in addition to leading to the improvement of software and other devices, in order to guarantee safer applications. In this context, the discussion of ethical and legal issues must be considered for greater usability of the technology. However, artificial intelligence does not replace pediatricians, but it can assist and increase the efficiency of care for critically ill patients.

**185. OBESITY AND RISKS IN PLASTIC SURGERY: A LITERATURE REVIEW**

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**INTRODUCTION:** The World Health Organization defines obesity as a nutritional state in which the BMI is equal to or greater than 30 kg/m<sup>2</sup>. This condition affects various body systems and has implications, especially for patients requiring plastic surgery, extending from the preoperative to the postoperative period. In plastic surgery, high BMI is a risk factor for wound complications and adverse events, particularly in breast procedures and reconstructive/cosmetic procedures in other areas of the body. It is in this context, where understanding the risks that the nutritional state poses to obese patients undergoing surgical procedures is relevant, that the research was conducted. **METHODS:** The systematic review of scientific articles on the impact of obesity on plastic surgeries was constructed from searches in the "Pubmed" and "SciELO" databases, with a final selection of 08 English-language papers published between 2016 and 2023 according to the descriptors: obesity, plastic surgery, and complications, excluding those outside the mentioned period and in another language. **RESULTS:** The analyzed articles showed that fat accumulation poses risks to quality of life, especially in the surgical context. Obese patients undergoing plastic surgeries have an increased risk of complications: deep vein thrombosis, pulmonary embolism, and reoperations. Elevated BMI is also associated with other specific complications: infections and delayed wound healing. Furthermore, it is reported that procedures such as breast reconstruction may improve the quality of life of obese individuals, but they also increase the risk of seromas and necrosis of the breast flap, with the choice of surgical technique being a factor of great influence in minimizing complications. Thus, it was observed that obesity is not an absolute contraindication for plastic surgery, but patients and the surgical team should be aware of the associated risks and consider them when making decisions about surgical procedures in obese individuals. **CONCLUSION:** Obesity represents a serious public health problem and, in the field of plastic surgery, increases complication rates and the incidence of reoperations. However, careful evaluation and the use of appropriate surgical techniques can benefit the quality of life of obese patients and enhance understanding of the risks involved.

**186. DEATHS FROM MALIGNANT CERVICAL NEOPLASMS: EPIDEMIOLOGICAL STUDY IN THE STATE OF MARANHÃO**

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**INTRODUCTION:** Cervical cancer (CCU) is a malignant neoplasm that affects women and develops from persistent infection caused by certain types of human papillomavirus (HPV). Environmental, social, behavioral, genetic, and immunological risk factors are also associated with the development of this condition. In Brazil, CCU is the third most common cancer in women, excluding non-melanoma skin tumors. In an analysis of the Northeast region, Maranhão has one of the highest CCU rates, with a prevalence of 21.71 cases per 100,000 women. Regarding mortality, the disease has a rate of 4.60 deaths per 100,000 women in Brazil. In 2020, the standardized mortality rate in Maranhão was estimated at 8.47 cases per 100,000 women. Given the above, CCU is considered a significant public health problem, and this study aims to analyze the distribution of deaths from malignant cervical neoplasia in the state of Maranhão between 2018 and 2022. **METHODS:** This was a descriptive and retrospective epidemiological study, and the data were obtained from the Hospital Information System of the Unified Health System (SIH/SUS), provided by DATASUS, in the state of Maranhão, from 2018 to 2022. The following variables were analyzed: age group, race, number of hospitalizations, and deaths by health region. **RESULTS:** During the analyzed period, 773 deaths from cervical cancer were reported in the state of Maranhão. Most of these occurred in women aged 50 to 59 years, with 206 (26.64%) deaths. The race most affected by the neoplasm was *parda* (mixed race), with 441 (57.05%) deaths. Also, during this period, the total number of hospitalizations for neoplasia in the state was 5029. Furthermore, the highest percentages of deaths were concentrated in the major health regions, such as the city of São Luís, with 576 (74.22%), followed by the city of Imperatriz with 138 (17.78%) of the deaths. **CONCLUSION:** In summary, the study results indicate a higher prevalence of deaths in women aged 50 to 59, of mixed race, in the city of São Luís. It is worth emphasizing the importance of studies focused on early detection of CCU, and consequently, the reduction of the number of deaths in the state of Maranhão.

187. **GUIDELINES BASED ON THE ERAS PROTOCOL IN PERIOPERATIVE MEDICINE IN BRAZIL**

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**INTRODUCTION:** The ERAS protocol is a set of measures that aim to mitigate responses to surgical stress, resulting in lower morbidity and mortality, lower costs and greater patient satisfaction. Characterized by evidence-based medicine, it was introduced in the 90s and inspired the creation of the ACERTO protocol in Brazil. Therefore, this work aims to gather general guidance on ERAS protocols for the most relevant areas in Brazil. **METHODS:** This is a narrative review of the literature on perioperative medicine and optimized recovery in Brazil. To this end, the ERAS society guidelines were pre-selected. Then, using the DataSUS digital platform, hospital production data in Brazil was collected regarding the fields covered in the guidelines. After that, themes that had very inferior, conflicting data or that did not apply to the country were excluded. In this way, a group was obtained with the 10 most relevant ERAS society axes for Brazil, representing a sample of 14 articles, which were analyzed and form the basis of this review. **RESULTS:** With regard to preoperative guidelines, there were recommendations for the following issues: pre-admission education and information, pre-operative optimization, fasting from solids of up to 6 hours, with specific cases of 8 hours, and from clear liquids within 2 hours, treatment with carbohydrates, prophylaxis against deep vein thrombosis, with pharmacological and/or mechanical methods, reduction of surgical site infections through the use of first generation cephalosporins, avoidance of the routine use of sedatives and anxiolytics and long-acting opioids and prophylaxis of nausea and vomiting. Intraoperatively, the recommendations were: an individualized anesthetic strategy, minimally invasive surgical techniques, maintenance of euvoolemia and, in moderate to high-risk patients, goal-guided fluid therapy and maintenance of normothermia. In the postoperative period, the following were highlighted: urinary drainage, opioid-sparing multimodal analgesia, regular diet within the first 24 hours and early ambulation. **CONCLUSION:** The ERAS protocol represents a set of measures that aim to make the surgical process more efficient. Being an example of evidence-based medicine, the guidelines presented imply positive results and better practice of perioperative medicine, so their recommendations must be followed.

188. **THE ADVANCES OF ULTRASONOGRAPHY IN THORACIC INTERVENTIONS: A LITERATURE REVIEW**

Gehorgan Oliveira dos Reis<sup>1</sup>, João Pedro Cruz Nascimento<sup>2</sup>, Mateus Oliveira Viana<sup>2</sup>, Ana Clara de Carvalho Costa<sup>2</sup>, João Pedro Coutinho de Oliveira Pascoal<sup>2</sup>, Lívia Medrado Fialho<sup>1</sup>, Leonardo Antônio Fecury Braga<sup>1</sup>.

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**INTRODUCTION:** With the advancements in ultrasonography (USG), various areas of medicine have been revolutionized, particularly in thoracic interventions. USG is capable of providing real-time images with precise guidance, coupled with a critical role in improving patient care and clinical outcomes, especially in patients with various types of pleural effusions. However, despite the significant expansion of this strategy, the full integration of USG advancements into clinical practice remains a challenge. Therefore, this study aims to shed light on the importance of ultrasonography advancements in thoracic interventions, highlighting their transformative effects on diagnostic accuracy and treatment, as well as patient safety. **METHODOLOGY:** This is a descriptive literature review, using the Scientific Electronic Library Online (SciELO), Medical Publications (PubMed), and Scopus databases. The following descriptors were used for article search: "Pleural Drainage," "Thoracic Ultrasound," "Thoracentesis". The inclusion criteria for article selection were: articles published in Portuguese and English, available in full text, and published and indexed in the aforementioned databases between 2018 and 2021. **RESULTS:** Ultrasonography is an imaging technique that utilizes sound waves reflecting off structures within the body to form images. Ultrasound is characterized by its ability to guide various types of procedures. One of the main ultrasound-guided intervention procedures at the thoracic level would be pleural diseases, as it assists in thoracentesis with greater precision and less patient damage, in addition to ensuring a better investigation of the type of pleural disease. Furthermore, it has ensured greater precision, safety, and efficacy in biopsies, fluid drainage, and needle-guided procedures. This ensures greater patient safety during the procedure and reduces the risks and damages to the patient. **CONCLUSION:** Advancements in ultrasonography for thoracic interventions in recent years demonstrate a revolution in medical practice. Thus, procedures such as thoracic drainage have benefited from the use of ultrasound associated with the procedure.

**189. THE CHALLENGES OF TUBERCULOSIS IN MARANHÃO: AN EPIDEMIOLOGICAL ANALYSIS FROM 2019 TO 2023**

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**INTRODUCTION:** Mycobacterium tuberculosis is the bacterium responsible for Tuberculosis (TB), a disease transmitted from person to person that primarily affects the lungs. In Brazil, combating tuberculosis remains a major challenge for public health, with the country currently having the highest number of reported cases in the Americas. In Maranhão, there was a significant increase in the number of cases between 2020 and 2021, rising from 2,608 to 3,046. Early diagnosis is crucial to initiate treatment promptly and increase the chances of cure. This study aims to outline the epidemiological profile of tuberculosis in Maranhão from 2019 to 2023. **METHODS:** It is a retrospective descriptive study analyzing tuberculosis cases in Maranhão between 2019 and 2023. Data were obtained through queries to the Diseases Notification Information System (SINAN) database available at the Health Department Information System (DATASUS) and processed using Microsoft Excel® for descriptive statistical analysis. **RESULTS:** From 2019 to 2023, 11,944 cases of tuberculosis were diagnosed in Maranhão. Regarding age group, individuals aged 20 to 39 years predominated, accounting for 42.50% (n=5076), followed by those aged 40 to 59 years, with 31.49% (n=3761). Concerning race, the most diagnosed ethnic group was pardo (71.41%), followed by self-declared Black individuals (14.22%). In terms of gender, males prevailed (68.19%). Regarding education, 7.70% were illiterate (n=920), and approximately 40% (n=4781) had incomplete primary education. Regarding diagnosis, 63.61% were laboratory-confirmed (n=7598), with 48.57% (n=5802) through the first sputum bacilloscopy and 6.44% (n=769) through sputum culture. Additionally, directly observed treatment confirmed 18.29% (n=2185) of the total cases. Pulmonary form was the most common clinical presentation, representing 90.87% of diagnoses. **CONCLUSION:** A predominance of cases in men, pardo individuals, aged 20 to 39 years was observed. Despite the established and freely provided treatment by the Unified Health System, TB remains a public health issue in Maranhão. Current combat strategies need to be reconsidered and adapted. Educating both the healthcare team and the population is crucial to promote early diagnosis and better treatment adherence, ultimately reducing the number of cases and complications.

**190. LANDSCAPE OF CUSHING'S SYNDROME TREATMENT IN BRAZIL: A NARRATIVE REVIEW**

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**INTRODUCTION:** Cushing's Syndrome (CS) encompasses a set of signs and symptoms resulting from excessive and prolonged exposure to glucocorticoids (GC). The most common cause is exogenous exposure, such as indiscriminate use of oral medications or topical steroids. CS is classified into primary (hypersecretion of adrenocorticotropic hormone [ACTH] and corticotropin-releasing hormone [CRH] by the hypothalamic-pituitary axis) and secondary (exogenous form). Its exact incidence is uncertain, but a global average of 0.12 to 0.24 cases per 100,000 people is estimated, with about 80% related to external GC use. Despite understanding the disease's pathophysiology, therapeutic management remains challenging. Thus, this study aims to review the landscape of CS treatment in Brazil. **METHODS:** This is a descriptive narrative review study conducted between September and October 2023. The SciELO, PubMed, and LILACS databases were consulted using the keywords "Cushing's syndrome" and "treatment." We included freely accessible articles written in English, Portuguese, or Spanish, published between 2018 and 2023, totaling 7 selected articles. **RESULTS:** Cushing's Syndrome presents with distinctive signs such as "moon face," flushing, and hirsutism. Current guidelines recommend confirming hypercortisolism through laboratory tests, such as overnight salivary cortisol or 24-hour urinary cortisol. The one-milligram overnight dexamethasone suppression test evaluates cortisol production inhibition capacity but may yield false positives in cases of anxiety, depression, uncontrolled diabetes, and alcoholism. Literature emphasizes the importance of reducing external steroids to preserve adrenal function after their suppression. Drug therapy includes pasireotide, mifepristone, and cabergoline, combined with treating comorbidities. In cases where CS is caused by an ACTH-secreting tumor, which cannot be completely removed, bilateral adrenalectomy, along with GC and mineralocorticoid replacement, is essential. **CONCLUSION:** Proper management of Cushing's Syndrome requires detailed investigation, precise diagnosis, and etiological classification. Treatment should be instituted according to the syndrome's cause, ranging from medical to surgical therapy. This approach is essential for improving patients' quality of life and controlling the adverse effects of prolonged GC exposure.

191. **DIABETIC FOOT: A COMPLICATION OF TYPE II DIABETES MELLITUS - CASE REPORT**Emilly Conceição Ribeiro<sup>1</sup>, Douglas da Costa Siqueira<sup>1</sup>,  
Viktória Araújo da Costa<sup>1</sup>, Gabriela Dantas Carvalho<sup>2</sup>.<sup>1</sup>Discentes Universidade Federal do Maranhão<sup>2</sup>Docente de Medicina da Universidade Federal do Maranhão.

**INTRODUCTION:** The Global Burden of Disease Study (2013) lists diabetes mellitus (DM) as a cause associated with shorter life expectancy. In Brazil, there are impacts on public health, since, according to the National Health Survey (2013), the self-reported prevalence of DM was 6.2%. Among the main complications is diabetic foot, with a high rate of amputations and high hospital costs. Therefore, this work aims to describe a clinical case of diabetic foot and the therapy adopted. The research took place in the municipality of Pinheiro-MA, between April and June 2023, governed in accordance with Resolution of the National Health Council 466/12, approved by the Ethics Committee on Research with Human Beings of the Federal University of Maranhão and under the opinion number 70382923.4.0000.5087. The patient validated her participation by signing the Informed Consent Form. **CASE DESCRIPTION:** Patient L.R.M, female, 62 years old, black, with a history of DM diagnosed in 2018. Denies previous illnesses and smoking. She claims to be sedentary and alcoholic. The patient started treatment with gliclazide (30 mg), but continued to have unregulated blood glucose and food intake for 1 year. Due to the lack of glycemic control, gliclazide was associated with metformin (1 g), however, without correct adherence to the suggested therapy. In April 2023, he suffered an injury to his right ankle, followed by hyperemia, necrosis, asthenia, headache, and fever, which were remedied with benzetacil (1200 IU), 5 doses of ceftriaxone (1 g) and 1 dose of cefuroxime (10 mg), but without success. After 1 month, with no improvement in healing, she sought specialized care, being treated with 5 doses of ceftriaxone (1 g), topical papain, laser (2x/week) and ozone therapy (1x/week), at each dressing change. Furthermore, the patient underwent daily blood glucose control, dietary changes and treatment to control atherosclerosis with atorvastatin (10 mg). The last follow-up took place on June 8, 2023, when the ulcer, although with exposure of the peroneus longus muscle, continued to heal. The patient remains normoglycemic with the same pharmacological and complementary therapy. **CONCLUSION:** It is noteworthy that the therapeutic plans in this report are consistent with recommendations in the literature. As such, glycemic control, patient commitment and adequate adherence to pharmacological and non-pharmacological therapy are necessary to improve the patient's prognosis and avoid possible complications.

192. **EPIDEMIOLOGICAL PROFILE OF HOSPITALIZATIONS DUE TO STROKE BETWEEN 2018-2022 IN THE STATE OF MARANHÃO**Lucas Gabriel Feitosa da Exaltação<sup>1</sup>, Eduardo Leandro de Almeida Lima<sup>1</sup>, João Pedro Cruz Nascimento<sup>1</sup>, Ingrid Silva Medeiros<sup>1</sup>, Mateus do Carmo Brige<sup>1</sup>, Mariana Alencar Bisinotto<sup>1</sup>, Layanne Silva Oliveira<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Stroke is one of the most prominent causes of hospitalization, death, and disability worldwide. According to the World Health Organization, approximately one-third of annual stroke cases result in mortality, while another third leads to permanent sequelae. It manifests as a reduction or interruption of blood flow to a cerebral area, exhibiting signs and symptoms dependent on the affected region. Stroke can be classified as hemorrhagic or ischemic, with the latter being more prevalent. Prognosis varies individually and may entail significant motor and cognitive sequelae, posing a major public health challenge globally. **METHODS:** A cross-sectional and retrospective study was conducted to analyze the epidemiological profile of stroke-related hospitalizations in the state of Maranhão between 2018 and 2022. Data were obtained from the Department of Health Informatics of the Unified Health System (DATASUS), involving the analysis of variables related to associated factors, age group, gender, race, and health microregion. The guidelines outlined in Resolution 510/2016 of the National Council of Ethics in Research were adhered to. **RESULTS:** The analysis of the age distribution of stroke hospitalizations in the state of Maranhão reveals a predominance of admissions in older age groups, particularly after the age of 60. Additionally, when examining the gender of hospitalized patients, there was a relatively balanced distribution between males and females. Regarding racial analysis, a higher number of brown-skinned patients were observed. The examination of the hospitalization landscape notably highlights the predominance of the Urban Agglomeration of São Luís, accounting for a significant portion of 21.8% of admissions. Following closely, Imperatriz represents 12.72%. **CONCLUSION:** Based on the findings, the epidemiological profile of stroke hospitalizations in the state of Maranhão is centered around elderly individuals of both genders, predominantly of brown race. Furthermore, the high prevalence of hospitalizations in major urban centers underscores the need for a more specialized approach to the management of this medical emergency.



193. **PROFILE OF VACCINATION AGAINST COVID-19 AND INFLUENZA IN CHILDREN IN MARANHÃO BETWEEN 2019 AND 2023.**

Mariana Alencar Bisinotto<sup>1</sup>; Celso Antônio Magalhães Ramos<sup>1</sup>; Kellen de Jesus Farias da Luz<sup>1</sup>; Layanne Silva Oliveira<sup>1</sup>; Fernando Vinícius Brandão Rocha de Almeida<sup>1</sup>; Débora Cristina Ferreira Lago<sup>1</sup>

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**INTRODUCTION:** Covid-19 and Influenza are viral infections with the potential to evolve into severe acute respiratory syndromes (SARS), with high morbidity and mortality in the infant population. Fortunately, such diseases are preventable by vaccination, however, they have not reached the ideal coverage to protect the target audience that would have an impact on reducing severity and incidence. **METHODS:** This is a descriptive epidemiological study based on data about Covid-19 and Influenza immunological coverage that are available in the National Immunization Program Information System (SI-PNI). The population studied was children under one year old for Influenza and children and adolescents for Covid-19. The study was carried out in the state of Maranhão, Brazil, from 2019 to 2023. **RESULTS:** In relation to immunization for Influenza, 807,923 doses were applied in the Northeast region of the country, with more than 50% applied in 2020 (432,959 doses); the majority of these doses (92%) were applied in a single dose and 2% of the total (16,401 doses) were applied to children under one year of age. In Maranhão, the same pattern was followed, with a predominance of single doses (41,919 doses), with 1.62 doses in children under one year of age. Regarding vaccination for Covid-19, the applied doses of monovalent and bivalent vaccines were analyzed separately. Doses of monovalent vaccines were predominant, with 11,048,752 doses applied to children between 12 and 17 years old, 8,249,231 in those between 5 and 11 years old, in addition to around 2 million in children under four years old. Regarding the bivalent vaccine, 62,044 children between 12 and 17 years old were vaccinated. The number of children between 6 months and 11 years old vaccinated with the bivalent vaccine totaled 2,128 doses. **CONCLUSION:** Influenza vaccination saw a drop in vaccination coverage from 2020 onwards, with a low percentage of doses applied to children under one year of age, making it necessary to establish strategies to increase vaccination coverage in this population. As for Covid-19, the results demonstrate that monovalent vaccines reached a wider audience, which can help in the adoption of vaccination strategies and increase coverage of specific groups.

194. **PROFILE OF HOSPITALIZATIONS FOR SEPSIS IN CHILDREN IN MARANHÃO FROM 2018 TO 2023.**

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**INTRODUCTION:** Sepsis is a dysregulated organic response to an infection, which generates serious and potentially lethal clinical conditions. It begins when the immune system reacts inappropriately to an infection, resulting in a cascade of events that can lead to endothelial damage, which will be responsible for multiple organ dysfunction. Sepsis is one of the main causes of morbidity and mortality in hospital environment and, if not treated promptly, can result in death. Symptoms of sepsis include fever, mental confusion, tachycardia, respiratory distress and decreased blood pressure. The condition is a medical emergency that requires immediate intervention, including administration of antibiotics and other supportive treatments. **METHODS:** This is an epidemiological, retrospective, quantitative and descriptive study based on data made available by the Department of Informatics of the Unified Health System (DATASUS). The studied population consisted of cases of hospital hospitalizations due to sepsis, in the state of Maranhão, between the period from July 2018 to July 2023, with individuals under 1 year old up to 14 years old. The correlated variables were: number of hospitalizations, year of care, sex, age group, deaths, average number of days of hospitalization. **RESULTS:** During the period studied, 1,764 hospitalizations were carried out, with a predominance of the age group under 1 year old with 1,149 cases (65%), followed by those aged 1 to 4 years old with 314 (17.8%). The year with the most hospitalizations was 2022 with 454, followed by 2021 with 309. Males were the most affected, with a total of 999 hospitalizations (56.6%). The average stay of hospitalizations was longer in individuals under 1 year of age, with an average of 14.4 days, followed by children aged 5 to 9 years, with an average of 11.5 days. The overall average stay was 13.2 days. Regarding deaths, 440 (24.9% of total cases) children died due to septicemia, with the majority in the age group under 1 year old, with 328 (74.5%), followed by those aged 1-4 years old, with 63 cases (14.3%). In relation to gender, the majority of deaths were among men, with 258 (58.6%). **CONCLUSION:** This study provides an important overview of the scenario of hospitalizations for sepsis in children in Maranhão from 2018 to 2023. It was shown that sepsis significantly affected children under 1 year of age, requiring special attention and preventive strategies for this group. The increase in hospitalizations in 2022 raises the need for additional resources and a possible worsening of the situation. The predominance of cases in boys highlights the importance of studying the reasons that generate this difference between genders. Furthermore, the high mortality rate, especially in babies, highlights the severity of sepsis and the urgency of interventions. Therefore, it is essential that health professionals and those responsible for health policy take these findings into account in order to reduce the impact of sepsis on the health of the pediatric population in Maranhão.



195. **CLINICAL-EPIDEMIOLOGICAL PROFILE OF AGRICULTURAL PESTICIDE POISONING IN MARANHÃO**

Max Danilo Bezerra Policarpo Sousa<sup>1</sup>, Alessa Samya Sérvulo Rodrigues<sup>1</sup>, João Batista Padilha Filho<sup>1</sup>, Marianna Sousa Costa<sup>1</sup>, Marla Maria de Sousa<sup>1</sup>, Nielson Amorim Frota<sup>1</sup>, Damylla Garreth Alves de Sousa<sup>1</sup>  
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**INTRODUCTION:** Exogenous intoxication is a common public health problem in hospital emergencies, characterized by contact and the body's reaction to chemical substances that cause organic imbalance, culminating in clinical symptoms and/or laboratory alterations. Among these substances, agrottoxins or agricultural pesticides are gaining prominence as the intensification of their use in Brazil highlights the risks that exposure to these products can pose to the health of the population. In view of the limited nature of surveillance of this disease, this study aims to outline the prevalent clinical-epidemiological profile in cases of agricultural pesticide poisoning in Maranhão, a state lacking literary data on the subject, from 2018 to 2022. **METHODS:** This is a cross-sectional, descriptive, retrospective and quantitative study, based on data from the Notifiable Diseases Information System (SINAN), provided by **DATASUS**, with the following variables: sex, race, age group, circumstance, type of exposure, confirmation criteria and evolution. These were gathered in Microsoft Excel spreadsheets for analysis. **RESULTS:** In the period studied, 224 cases of agricultural pesticide poisoning were reported in Maranhão, with the highest occurrence (30.35%) in 2021. The majority of the victims were men 153 (68.30%), brown-skinned 192 (85.71%), and predominantly in the age group of 20-39 years 91 (40.62%). As for the circumstances of the poisonings reported, the majority were suicide attempts 74 (33.03%) followed by accidental poisonings 69 (30.8%). It was observed that most cases occurred as a result of acute exposure to a single dose 180 (80.35%) and were confirmed by clinical criteria 116 (51.78%). Evolution to cure without sequelae was the most prevalent 181 (80.80%) and death was seen in 10 (4.46%) of the cases. **CONCLUSION:** Agricultural pesticide poisoning in Maranhão mainly affects adult and brown-skinned men. Most of them are classified as suicide attempts due to single-dose exposure. Clinical diagnosis stands out as a screening method and cases have a high percentage of cure without sequelae. Therefore, knowledge of the epidemiology of occurrences in the state contributes to the formulation of effective actions for the care of intoxicated victims, as well as prevention/control of exposure to agricultural pesticides, which should be coordinated between the Health sector and Maranhão society in general.

196. **EPIDEMIOLOGICAL PROFILE OF SCHISTOSOMIASIS IN MARANHÃO BETWEEN 2018 AND 2022.**

Marcelle Teixeira e Silva<sup>1</sup>; Stephanie Freire Soares de Farias<sup>1</sup>; Bruna De Oliveira Montes do Rosário<sup>1</sup>; André Aquim Salgado Prazeres Picanço<sup>1</sup>; Hanna Célia Almeida Serra<sup>1</sup>; Maressa Chagas Oliveira<sup>1</sup>; Laura Rosa Carvalho Dias<sup>1</sup>.  
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**INTRODUCTION:** Schistosomiasis is an infectious parasitic disease in Brazil caused by worms of the species *Schistosoma mansoni*, in which the parasite utilizes snails of the genus *Biomphalaria* as intermediate hosts to evolve into its infective form. This parasitic disease primarily affects populations that have frequent contact with rivers, as freshwater serves as the habitat for the vector, and areas lacking basic sanitation, due to the ease of disease transmission. Therefore, this study aims to investigate the epidemiological profile of patients with schistosomiasis in the state of Maranhão. **METHODOLOGY:** This is a descriptive and quantitative epidemiological study, for which data from DATASUS/TABNET were utilized, using the indicator of Notifiable Diseases and Health Problems from 2007 onwards. Schistosomiasis was selected as the health problem, Maranhão as the area of interest, and the variables of gender, race, age group, and education level were chosen, considering confirmed cases during the period from 2018 to 2022. **RESULTS:** During the study period, 110 cases were recorded, with the highest number in 2018 (n= 54). It should be noted the lower number of records during the pandemic period, given the priority of attention to COVID-19, with 7 records in 2020, 20 records in 2021, and 16 records in 2022. Regarding gender, there was a prevalence of males compared to females, at 69.1% and 30.9%, respectively. Among racial groups, self-declared pardos predominated, comprising approximately 64.5% of cases. Regarding education level, individuals with incomplete primary education (1st to 4th grades) predominated (n= 40). Finally, concerning age groups, individuals aged 20 to 59 years were the most affected (n= 73). **CONCLUSION:** Therefore, men of working age with low educational attainment emerge as the target audience for the intensified health promotion efforts, particularly among socioeconomically disadvantaged populations lacking access to basic sanitation, riverside communities, and individuals reliant on freshwater fishing due to their contact with rivers. Thus, there is a discernible need to focus on this segment of the population in combating the spread of this disease.

197. **MORTALITY PROFILE FROM ARTERIAL EMBOLISM AND THROMBOSIS IN MARANHÃO FROM 2013 TO 2022.**

Paulo Victor Nascimento Silva<sup>1</sup>, Douglas Da Costa Siqueira<sup>1</sup>, Lissandro Marlon Castro Santos<sup>1</sup>, Suzana Patricia Santos Rodrigues<sup>1</sup>, Carolinne Sousa Dourado<sup>1</sup>, Raphael de Matos Lima<sup>1</sup>, Kathyusses Caldas Galvao<sup>1</sup>

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**INTRODUCTION:** Embolism occurs as a consequence of a thrombus, which can be formed in both the venous and arterial systems. In which it comes off and, depending on its location, can block arteries, making it difficult to oxygenate important tissues or organs. Thrombosis can occur after surgical procedures or even due to lack of exercise for a prolonged period of time. It is more common in women, aged between 20-40 years, and due to greater exposure to risk factors, such as contraceptives and pregnancies. In this sense, the study aims to analyze the increase in the mortality rate related to embolism and arterial thrombosis in Maranhão. **METHODS:** Epidemiological study of the mortality profile in the State of Maranhão on embolism and arterial thrombosis from 2013 to 2022. The online platforms of the Ministry of Health of the Department of Informatics of the Unified Health System (DATASUS) were used by the Morbidity and Hospital System of the SUS (SIH/SUS). The related data were stratified into: race/color, age group, nature of care and sex. **RESULTS:** The mortality rate due to embolism and arterial thrombosis in Maranhão was 8.62 deaths per Hospital Admission Authorization (deaths/AIH) from 2013 to 2022, with emphasis on 2020, with 13.25 (deaths/AIH). In the age group, there was a higher prevalence for children under 1 year old (33.33 deaths/AIH) and between 10-14 years old (16.61 deaths/AIH), followed by 80 years and over (13.38 deaths/AIH). Regarding race/color, there was greater emphasis on self-declared yellow women, with 12 deaths/AIH), followed by brown women (10.37 deaths/AIH) and white women (6.52 deaths/AIH). Regarding the number of deaths by type of care, there was a predominance of urgency, with 103 deaths, compared to elective deaths, with 17 deaths. Furthermore, with regard to sex, there is a slight emphasis on females, with 8.67 deaths/AIH compared to 8.58 deaths/AIH among males. **CONCLUSION:** Individuals of yellow race/color, under 1 year of age, female and requiring emergency care in the period between 2018 and 2022 represent the epidemiological profile of mortality due to embolism and arterial thrombosis. Furthermore, there is underreporting regarding black race/color. This analysis favors the increase of actions in urgent and emergency care, through continued education of professionals and improvement in technical knowledge on the subject, as a way of promoting better behavior for the patient in order to reduce the mortality rate.

198. **EPIDEMIOLOGICAL PROFILE OF DENGUE IN BAIXADA MARANHENSE FROM 2018 TO 2022**

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**INTRODUCTION:** Dengue is an acute viral infection very present in tropical and subtropical regions. The dengue virus (DENV) has four serotypes (DENV-1, DENV-2, DENV-3 and DENV-4), which cause different clinical manifestations, and are transmitted through mosquitoes of the genus *Aedes*, and in Brazil it stands out *Aedes aegypti*. This study aims to outline the epidemiological profile of dengue in the Baixada Maranhense microregion from 2018 to 2022. **METHODS:** Epidemiological, quantitative, time series study (2018-2022), with secondary data from TABNET-DATASUS-Disease Information System of Notification (SINAN). Variables under study: Dengue; Year of notification; gender, age group, race and education. **RESULTS:** 606 cases were reported in Baixada Maranhense from 2018 to 2022. The year with the most notifications was 2022 (n=290), followed by 2019 (n=151). The most prevalent age groups were 20-39 years (n=210) and 40-59 (141), which together represent approximately 58% of notifications. The level of education with the highest number of cases was completed secondary education (n=141). The race with the highest occurrence was self-declared brown (n=438) with more than 70% of cases. There was a balance between the sexes, but with a higher occurrence in females (n=334) than in males (n=272). **CONCLUSION:** It can be inferred that the population most affected by the virus are women, mixed race, with complete secondary education, aged 20 to 39 years. This profile may be caused by women doing more domestic work and spending more time in the house, in addition to the fact that the population of Maranhão is mostly self-declared mixed race. As shown in the results, dengue continues to be an important public health problem and demonstrates the need to intensify actions for prevention and health promotion, mainly for the population most affected by the virus, in addition to measures aimed at controlling the vector.

199. **EPIDEMIOLOGICAL PROFILE OF OSTEOARTICULAR TUBERCULOSIS IN NORTHEAST BRAZIL FROM 2018 TO 2023.**

Camila de Carvalho Vieira<sup>1</sup>, Fernanda Karolynne Sousa Coimbra<sup>1</sup>, Wesley do Nascimento Silva<sup>1</sup>, Ana Carolina Silva Rocha<sup>1</sup>, Pedro Victor Aguiar Carvalho<sup>1</sup>, Gabriela Antônia Baquil Telles<sup>2</sup>, Leopoldina Milanez da Silva Leite<sup>1</sup>

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**INTRODUCTION:** Tuberculosis (TB) is an infectious and contagious disease primarily caused by *Mycobacterium tuberculosis*, a bacterium that can be transmitted through speech, sneezing, or coughing and mainly affects the lungs but can also manifest extrapulmonary involvement, affecting other regions of the body, including the skeletal and articular system. Osteoarticular TB may manifest as arthritis and/or osteomyelitis, with joint inflammation affecting vertebrae in the spine. In Brazil, TB still has a high prevalence, with the Northeast (NE) region being one of the main contributors to the disease's mortality coefficient. Given this background and the scarcity of recent studies on TB with osteoarticular involvement in the Northeastern population, this study aims to outline the epidemiological profile of this condition in the region. **METHODS:** This is a descriptive epidemiological study, utilizing data obtained from the Unified Health System Hospital Information System (SIH/SUS), linked to DATASUS, between July 2018 and July 2023. Variables included are hospitalization by region and federative unit, gender, race/ethnicity, age group, and deaths. Due to the use of secondary data, approval from the Research Ethics Committee was not required. **RESULTS:** In the period from July 2018 to July 2023, a total of 507 hospitalizations for osteoarticular TB were observed in Brazil, with the Southeast (235) and Northeast (158) being the most frequently reported regions. This could be linked to the high population density in these areas, leading to an increased number of diagnoses and registrations. The majority of patients were male (57.6%), of brown skin color/ethnicity (75.3%), and aged between 35 and 39 years, findings consistent with previous research on TB in the country. In the NE, the majority of cases were reported in Pernambuco, accounting for 52 hospitalizations, approximately 32.9% of the region's total. Additionally, during the period, a total of 4 deaths were recorded in this area, with two reported in Rio Grande do Norte and two in Pernambuco. **CONCLUSION:** This study showed that the epidemiological profile of hospitalizations for osteoarticular TB in the Northeast is predominantly composed of men of brown skin color/ethnicity, aged between 35 and 39 years.

200. **PROFILE OF WORK-RELATED MENTAL DISORDERS IN MARANHÃO, 2012-2022.**

Mariana Clara Borges da Silva<sup>1</sup>, Luanna Stefanny Campos do Nascimento<sup>1</sup>, Myrelle Salgueiro Porto de Sá<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>1</sup>, João Henrique Xavier de Oliveira<sup>1</sup>, Alice Marques Moreira Lima<sup>2</sup>

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**INTRODUCTION:** Work-Related Mental Disorders (TMRT) are a set of pathologies that present work as the main triggering and stressful factor, which can establish the transposition of physical and psychological limits in the work environment, causing mental fatigue, excessive sadness, inefficient professional results, between others. Today, it is a growing problem in Brazilian public health. Thus, the objective of this study was to analyze the profile of patients with TMRT in Maranhão between 2012 and 2022. **METHODS:** This is a retrospective, quantitative and descriptive study, in which secondary data were collected from the Health Disease Information System. Notification (SINAN/SUS) available at the Information Technology Department of the Unified Health System (DATASUS). In this way, the race, sex and education of the patients were analyzed. **RESULTS:** 76 cases of TMRT were reported, mainly mood and neurotic disorders and Burnout Syndrome. In this sense, the period of greatest incidence was the period 2020-2022, representing around 62% of cases. Of this total, 49 cases progressed to temporary disability and only 0.03% progressed to cure. In relation to color/race, the brown population was the most affected, representing 59.2% of notifications. Now, turning to sex, the majority were female, with 67.1% of the records. It was also found that the population with completed higher education was the most impacted, as it represents 34.2%, followed by those with completed secondary education, with 18.4%. **CONCLUSION:** In short, with the analysis carried out it is possible to verify that the COVID-19 pandemic period impacted the mental health of workers, who presented financial instabilities associated with social isolation, in addition to the problem of professionals in relating mental disorders with the work may have caused the failure of the therapeutic process, resulting in the evolution being so limited to a cure. Furthermore, according to IBGE, Maranhão has a majority of brown population, which is why this color/race is highly affected, women are possibly more impacted by gender inequality, in addition to harassment in the workplace. Furthermore, the excessive pace of work and reduced time are factors that justify the higher rates in patients with completed higher education. Finally, it is important to maintain a healthy work environment as a way of guaranteeing the population's quality of life.

**201. SEPSIS HOSPITALIZATION PROFILE IN THE NORTHEAST FROM 2016 TO 2023.**

João Pedro Coutinho de Oliveira Pascoal<sup>1</sup>; João Pedro Dos Santos Silva<sup>1</sup>; Bruna De Oliveira Montes do Rosário<sup>1</sup>; Robson Emmanuel Silva Sampaio<sup>1</sup>; Gehorgan Oliveira dos Reis<sup>1</sup>, João Pedro Cruz Nascimento<sup>1</sup>; Gabriel Almeida Teixeira<sup>1</sup>

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**INTRODUCTION:** Sepsis is a severe generalized infection requiring immediate medical attention, caused by pathogens such as fungi, bacteria, and viruses. It occurs when the immune system attempts to counteract the attack of these microorganisms, triggering an inflammatory response that, adversely, leads to exaggerated reactions and complications in other organs. In this context, it is pertinent to analyze the hospitalization profile in the Northeast region over the past 8 years, aiming to explore prevention and early treatment alternatives in hospitals. **METHODS:** This is an observational epidemiological study conducted using the Tabulation Tool (TABNET) available on the DATASUS digital platform. Selected categories from the Hospital Morbidity of the Unified Health System (SUS) were examined, focusing on the Northeast region of Brazil, including hospitalization data from January 2016 to August 2023. Data were also stratified by gender, age group, race/ethnicity, and care nature. **RESULTS:** During the analyzed period, the Northeast region accounted for 26.64% (23,923,857) of the nation's total. The year with the highest number of observed cases was 2022 (14.13%). Urgent care (78.72%) significantly exceeded elective care (20.36%) overall, consistently across all states, with notable figures in Ceará (81.98%), Bahia (78.71%), and Pernambuco (76.68%). Stratified profiles indicated a higher incidence in the 20-29 age group (18.84%), predominantly in females (61.14%), and individuals of pardo ethnicity (82.67%), excluding those with unspecified race/ethnicity. **CONCLUSION:** In light of the findings, there is a notable increase in sepsis hospitalizations in the Northeast, particularly among women, individuals of pardo ethnicity, and the 20-29 age group. Consequently, preventive measures such as up-to-date vaccinations, maintaining hospital hygiene, and secure wound care are imperative. Regarding treatment, enhanced training for professionals in antibiotic management and therapies is crucial for timely and effective intervention.

**202. PROFILE OF CHILDREN'S HOSPITALIZATIONS FOR INFLUENZA IN MARANHÃO BETWEEN 2018 AND 2022**

Safira Pontes de Almeida Costa<sup>1</sup>, Graziela Gama da Conceição Gomes<sup>1</sup>, Sarah Gonçalves Torres de Sá<sup>1</sup>, Katarina Costa Silva<sup>1</sup>, Ana Mariza dos Santos Gonçalves<sup>1</sup>, Stephanie Freire Soares de Farias<sup>1</sup>

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**INTRODUCTION:** Influenza, caused by the influenza virus, is easily confused with other illnesses due to symptoms similar to other illnesses. Because of this, there is great difficulty on the part of society in understanding the identification of flu-like symptoms in children, a fact that favors the maintenance of transmission of the virus. Therefore, the study aims to analyze data on hospitalizations, aged 0 to 14 years, due to Influenza in Maranhão. **METHODS:** This is an epidemiological, quantitative and descriptive study. The information was obtained through the Notifiable Diseases Information System (SINAN), in October 2023 and made available through the DATASUS/TABNET platform, through the SUS Hospital Morbidity indicator, adopting Maranhão as the place of hospitalization. Furthermore, "Influenza (flu)" was selected in the ICD-10 Morbidity List, for annual assessment in the period from 2018 to 2022, taking into account: Age Group (from 0 to 14 years), Health Region (CIR), Sex and Color/race. **RESULTS:** During the period studied, 5,436 cases of hospitalizations for Influenza were registered in Maranhão, of which 46.26% correspond to the age group of 1 to 4 years, being the interval with the highest occurrence. Furthermore, 15.32% of cases correspond to the age group of 10 to 14 years, being the lowest occurrence. Regarding the health region, São João dos Patos represented the largest number of records (n = 976) in the state. Regarding sex, 52.91% of cases are male children. Finally, of the registered incidents, 29.32% did not provide data on color/race, and of those that did, 89.15% were mentioned in the system as mixed race. The analysis was hampered by the lack of information in the system. Thus, Influenza is a disease that has a hospitalization profile for male children, aged 1 to 4 years old, of mixed race. **CONCLUSION:** Therefore, the epidemiological representation allows us to observe that the age group with the highest occurrence coincides with the moment in which children are placed in daycare centers and schools, which makes them more susceptible to the virus contagion. For this reason, it is possible, through this analysis, to perceive the group most vulnerable to the disease, thus allowing the creation of targeted social assistance policies that are more effective in combating the transmission of the virus and the consequent hospitalization.

203. **CAESAREAN PROFILE IN MARANHÃO BASED ON THE ROBSON CLASSIFICATION (2017-2021)**

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**INTRODUCTION:** Cesarean section is an essential procedure in contemporary obstetrics, but high rates pose risks to maternal and neonatal health. The Robson classification is used to compare this rate in various obstetric populations, providing an overview of delivery practices in different population strata. The aim of this study is to explore the profile of cesarean sections in Maranhão between 2017 and 2021, evaluating variations in patterns and main affected Robson groups. **METHODS:** This is a descriptive, cross-sectional, quantitative study, with information collected from the Department of Informatics of the Unified Health System (DATASUS) from 2017 to 2021, in Maranhão. Data on live births were analyzed, focusing on the type of delivery performed in association with maternal education and the Robson group. Records with incomplete or missing data were not considered. **RESULTS:** The state recorded 556,678 births during the period, of which 49.43% were cesarean sections, a rate lower than the national average of 56.45% cesarean sections for the same period. There was a progressive increase in the cesarean section rate during the period, from 46.33% in 2017 to 52.00% in 2021. The Robson groups with the highest rates of cesarean sections were groups 5, 1, and 3, representing 32.49%, 23.97%, and 14.07% of the total cesarean sections performed, respectively. Additionally, even among primiparous women in group 1, nearly half of their deliveries (49.24% of the total 126,913) were through cesarean section. It was also observed that higher maternal education is associated with a lower proportion of vaginal deliveries and an increase in cesarean sections. Among mothers with no education (4,921), 72.20% of deliveries were vaginal and 27.80% were cesarean. In contrast, for mothers with  $\geq 12$  years of education (60,697), only 22.45% of deliveries were vaginal, while 77.55% were cesarean. Furthermore, 82.70% of cesarean deliveries occurred in mothers with more than 8 years of education. **CONCLUSION:** There was an increase in the cesarean section rate in recent years in the state, with a higher prevalence in Robson groups 5, 1, and 3. Moreover, there is a significant number of cesarean sections in primiparous women who ideally could have vaginal deliveries. Additionally, the disparity in cesarean section rates based on education level highlights the role of education in decision-making related to childbirth. These findings raise questions about the need for more rigorous obstetric practices based on scientific evidence.

204. **EPIDEMIOLOGICAL PROFILE OF HOSPITALIZATIONS FOR INTRACRANIAL HEMORRHAGE IN THE NORTHEAST**

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**INTRODUCTION:** Intracranial hemorrhage is characterized by initial bleeding in the brain parenchyma, which can affect the meningeal space and later the ventricles, causing focal neurological deficits, usually with sudden onset of headache, nausea and altered consciousness. The aim of this study is to show an epidemiological survey of hospitalizations for intracranial hemorrhage in the Northeast region between 2012 and 2022. **METHODS:** This was an epidemiological, quantitative, cross-sectional and retrospective study. Data was collected from the SUS Hospital Information System, made available by DATASUS (SIH/SUS) from 2012 to 2022. The variables analyzed were: geographical and annual distribution of hospitalizations, gender, race, age group and deaths. **RESULTS:** In the period analyzed, 316,698 hospitalizations for intracranial hemorrhage were reported in Brazil, with the Northeast region accounting for 24.16% (n=76,542) of this total, ranking 2nd in hospitalizations among Brazilian regions, with an average of approximately 6,958 cases per year. The states of Pernambuco and Bahia stand out, with 17,682 and 13,180 hospitalizations, in that order, representing 40.32% of the total. The state of Maranhão came 4th in total hospitalizations with 13.44% (n=10,294). The years 2012 and 2013 are noteworthy for having the highest number of hospitalizations with 10,488 and 7,743, respectively. The most affected age group was 50 to 69 years old, which accounted for 40.02% (n=30,839) of all hospitalizations. With regard to deaths, the Northeast had 16,157 cases, with 2012 and 2022 having the highest fatal outcomes, with 2,057 and 1,670 deaths respectively. Another parameter analyzed was the prevalence between the sexes, which showed a difference between the two of 682 hospitalizations, with females being more affected. Regarding color/race, the most affected were brown people with 46.48% (n=35,577) of hospitalizations. **CONCLUSION:** This study shows that hospitalizations for intracranial hemorrhage occurred predominantly in the states of Pernambuco and Bahia in 2012 and 2013. The most affected individuals are in the 50-69 age group, with a higher incidence among females and the brown population, confirming the greater susceptibility of these groups to this condition.



205. **EPIDEMIOLOGICAL PROFILE OF CUTANEOUS LEISHMANIASIS IN THE BAIXADA MARANHENSE FROM 2018 TO 2022.**

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**INTRODUCTION:** Cutaneous leishmaniasis is an anthroponosis that can affect the skin and mucosa of individuals. This disease affects people all over the world, particularly in tropical and subtropical regions. This study aims to investigate the profile of patients with cutaneous leishmaniasis in the Baixada Maranhense from 2018 to 2022, understanding their distribution within this region according to different categories, as well as their most prevalent clinical characteristic. **METHODS:** This is a descriptive quantitative study based on secondary data from the Department of Informatics of the Unified Health System (DATASUS), outpatient production (SINAN/SUS) on the number of confirmed cases of cutaneous leishmaniasis per municipality in the Baixada Maranhense region during the years 2018 to 2022, with the observation of different incidences according to the variables: schooling, race, sex and age group, as well as clinical manifestations. **RESULTS:** The study revealed a high occurrence of cutaneous leishmaniasis in the Baixada Maranhense during the period studied, especially in the municipality of Pinheiro-MA, which presents 96 of the 335 cases recorded. The most affected ethnicity is brown, as these make up 70% of the patients, when analyzing the prevalence in individuals with different levels of education, it was observed a greater involvement of those with low education, about 22% do not have complete elementary school, when comparing the most affected sex it is noted that the male suffers more frequently, with a percentage of 72, 8% contamination, analyzing the age group of the sick, it was noticed that the elderly and children are little infected, with only 68 infected individuals, while among adults there were 267 people with the disease. Depending on the clinical manifestation, the most prominent form is cutaneous, with 317 cases, that is, a total of more than 95% of the patients had this manifestation of the disease, compared to 5% with the mucosal form. **CONCLUSION:** Thus, it is concluded that the cutaneous form of cutaneous leishmaniasis is more prevalent in the region of Baixada Maranhense, especially in Pinheiro-MA. In addition, different groups affected by the disease are identified, with the most affected being brown people, the majority of the population in this region, as well as adult men with less schooling, factors that should be taken into account to direct the implementation of preventive strategies, aiming at improving the quality of life in the region studied.

206. **EPIDEMIOLOGICAL PROFILE OF NEONATAL MORTALITY IN BRAZIL BETWEEN 2011 AND 2021**

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**INTRODUCTION:** Neonatal mortality is a global health concern that consists of the number of deaths of newborns occurring within the first 27 days of life. It is an indicator of the quality of maternal and child care in a society, reflecting not only medical advancements but also socioeconomic factors and access to health services. Thus, this study aims to analyze the national epidemiological panorama of neonatal mortality between 2011 and 2021. **METHODS:** This is a descriptive and ecological study, analyzing the epidemiological profile of neonatal mortality in Brazil between the years 2011 and 2021. The data used were obtained through SIM/DATASUS and tabulated by TABWIN and TABNET. The variables analyzed were region, year, cause and place of death, sex, race/ethnicity, birth weight, gestational age, and type of gestation. **RESULTS:** When analyzing data on neonatal mortality in Brazil, a total of 280,037 deaths were observed, with approximately 35% occurring in the Southeast region, followed by the Northeast (32%), North (12%), South (11%), and Midwest (8%). In 2021, compared to 2011, there was a decrease of approximately 19% in occurrences. Early neonatal mortality represented about 75% of deaths. Regarding sex, 55% were male. Mortality by race/ethnicity followed this order: mixed race (47%), white (38%), black (2%), indigenous (1%), and yellow (<1%). Concerning the place of occurrence, approximately 96% of deaths occurred in hospitals. Gestational duration was between 22 and 27 weeks in 27% of cases, while full-term births (37 to 41 weeks) accounted for 21%. Singleton pregnancies accounted for 84% of deaths. About half (51%) of births were vaginal. Regarding birth weight, approximately 30% were between 500 and 999g. As for the cause of death, 27% corresponded to specific respiratory and cardiovascular disorders of the perinatal period. **CONCLUSION:** It is noted that the number of neonatal deaths is still high, although it has decreased in the analyzed period. The epidemiological profile of neonatal mortality in Brazil is characterized by male neonates, mixed race, singleton pregnancies, occurring in a hospital setting, in the Southeast region, with early neonatal mortality, in a situation of extreme prematurity, and predominantly low birth weight. Thus, identifying this epidemiological profile is of great importance for the creation of public health policies aimed at reducing neonatal mortality in Brazil.



207. **MORTALITY PROFILE OF VIRAL AND BACTERIAL PNEUMONIA IN MARANHÃO FROM 2017 TO 2021**

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**INTRODUCTION:** The most common infections that affect humans are respiratory tract infections. Pneumonia is one of the main causes of hospitalization in Brazil, especially affecting the pulmonary alveoli, often leading to the death of the patient. There are several types of pneumonia, but the most common are bacterial, caused mainly by the bacteria *Streptococcus pneumoniae*, and viral infections, caused mainly by the Influenza A and B viruses. Therefore, this study aims to analyze the mortality profile due to viral and bacterial pneumonia in the state of Maranhão from 2017 to 2021. **METHODS:** This is a cross-sectional and descriptive study of mortality caused by viral (category ICD 10 - J12) and bacterial (category ICD 10 - J15) pneumonia in the state of Maranhão, in which the data obtained was collected by the Departamento de Informática do Sistema Único de Saúde (DATASUS) in the period from 2017 to 2021. The variables age group, sex, color/race and municipality were analyzed. In the age group variable, the "ignored age" data was discarded. **RESULTS:** Analyzing these 5 years, 3,069 deaths were observed, 849 (27.6%) from viral pneumonia and 2,220 (72.4%) from bacterial pneumonia. Both diseases affect the elderly more, especially those over 80 years of age, with 242 deaths from viral pneumonia and 969 deaths from bacterial pneumonia in this age group. There is also a higher mortality rate among males who self-declare as brown. São Luís, capital of the state of Maranhão, was the city with the highest number of recorded deaths, accounting for 355 deaths from viral pneumonia and 436 deaths from bacterial pneumonia, totaling 791 deaths, equivalent to approximately 26% of total deaths in the state. **CONCLUSION:** In the time period analyzed, there is a greater mortality caused by bacterial pneumonia compared to viral pneumonia. The population that died most from pneumonia was elderly people over 80 years old, males who declared themselves mixed race. This can be explained by a decrease in the competence of the immune system with increasing age and also by the greater number of brown people in the population of Maranhão. In this way, the study shows the most vulnerable social group, enabling greater attention from public bodies responsible for health promotion, with the aim of mitigating complications from pneumonia and avoiding possible deaths.

208. **PROFILE OF ADMISSIONS FOR HEART FAILURE IN MARANHÃO BETWEEN 2018 TO 2022**

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**INTRODUCTION:** Heart failure (HF) is a very complex syndrome with high morbidity and mortality rates, in which the heart loses its ability to pump blood, limiting the functioning of tissue metabolism. This condition can be caused by structural or functional changes in the heart, which present typical signs and symptoms resulting from high filling pressures or reduced cardiac output. Therefore, this study aims to update the profile of hospitalizations for HF in the state of Maranhão from 2018 to 2022. **METHODS:** This is an epidemiological, quantitative and descriptive study. The information was obtained through DATASUS/TABNET, using the SUS Hospital Morbidity indicator, adopting Maranhão as the place of hospitalization. Furthermore, All Categories in the Health Region (CIR) and Heart Failure in the ICD-10 Morbidity List were selected for annual evaluation from 2018 to 2022, taking into account: age group, sex and race. **RESULTS:** During the period studied, there were a total of 17,353 hospitalizations for HF in Maranhão, with 2022 being the year with the highest number of cases (4,622) and 2020 being the year with the lowest number of cases (2,583). Furthermore, 22.3% occurrences occurred in São Luís, making it the health region most affected in the study; As it is the capital of Maranhão, it is the city with the largest population and a more complex health system. In the age group, from 5 years of age onwards, the growth of cases is linear, with patients over 80 years of age having the highest incidence rate (n = 4,122). Of the total, 55.7% are male and 44.3% are female. Regarding color/race, 42.1% of cases have no information and, despite this, 45.5% are self-declared mixed race and 12.4% are listed as white, black or yellow color/race. Thus, HF is a disease whose admission profile is male, mixed-race and elderly patients. **CONCLUSION:** Thus, HF is a syndrome that is linked to good physiological functioning of the body, with the passage of age, these aspects are influenced by exogenous and endogenous factors, thus, the risks of acquiring this disease are greater. Therefore, it is essential to carry out more research so that it is possible to outline an effective public policy to prevent the disease and thus prevent it from reaching an advanced stage.

**209. EPIDEMIOLOGICAL PROFILE OF HOSPITALIZATIONS FOR LEPROSY IN MARANHÃO FROM 2012 TO 2022**

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**INTRODUCTION:** leprosy is an infectious disease, with a chronic evolution, caused by the bacteria *Mycobacterium leprae*. It mainly affects the skin, mucous membranes and peripheral nerves (arms and legs), with the capacity to cause neural injuries and irreversible damage if diagnosis is late or treatment is inadequate. Brazil ranks 2nd in the world among countries that register new cases, therefore, the disease remains an important public health problem in the country, requiring compulsory notification and mandatory investigation. Given this scenario, the objective of this work is to describe the epidemiological profile of hospitalizations for leprosy in Maranhão over the last 10 years. **METHODS:** systematic descriptive epidemiological study, with a quantitative approach. Data from the SUS Hospital Information System (SIH/SUS) on leprosy were analyzed, in the variables hospitalizations, year of processing, age group, sex, color/race, nature of care, deaths and mortality rate. The data was categorized and tabulated using Microsoft Office Excel 2016, organized into graphs and tables. **Keywords:** ipsa, consequatur, galisum. **RESULTS:** a total of 4,630 hospitalizations for leprosy were recorded, with the highest number being in 2022 (14.9%), followed by 2021 (13%) and 2020 (12.9%). In the age group variable, the disease caused more hospitalizations in patients between 30 and 39 years old (19.4%), followed by the age group between 40 and 49 years old (17.2%). In relation to sex, males represent 71.8% of cases and females 28.1%. In the color/race variable, 72.4% were not informed and 25.3% were mixed race. When seeking care, 9% were elective and 91% were urgent. In the evolution of cases, 114 died. The lowest mortality rate was 0.67 in 2014 and the highest was 3.53 in 2019. **CONCLUSION:** this study concluded that the epidemiological profile of leprosy hospitalized patients, in the period from 2012 to 2022, corresponds mostly to patients between 30 to 49 years old, male without identification of color/race. Furthermore, it was evident that the majority of care was urgent, with a significant number of deaths, with an average mortality rate of 2.46. Given this, the number of hospitalizations is alarming, therefore, it is essential to implement public policies in the area of health for early diagnosis and treatment of leprosy, to prevent the severe form of the disease and, consequently, reduce the number of hospitalizations and deaths.

**210. DEMOGRAPHIC PROFILE OF OBESITY IN ADULTS BETWEEN 2019 AND 2023 IN IMPERATRIZ CITY, MARANHÃO: A GENDER-BASED ANALYSIS.**

Larissa de Sousa Miranda<sup>1</sup>, Larissa Saboia de Freitas Diógenes<sup>1</sup>, Débora Gonçalves de Oliveira<sup>1</sup>, Beatriz Cardoso Ferreira<sup>1</sup>, Pedro Lucas Baía da Paixão<sup>1</sup>, Bruno Luiz de Paula Pereira<sup>1</sup>, Alice Marques Moreira Lima<sup>1</sup>

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**INTRODUCTION:** Obesity is a chronic and multifactorial disease characterized by an excess of body fat. According to the 2019 National Health Survey conducted by the Brazilian Institute of Geography and Statistics (IBGE), the proportion of obese individuals in Brazil aged 20 or older increased between 2003 and 2019, reaching 30.2% for females and 26.8% for males. Despite this national trend, there is a dearth of municipal-level studies in Brazil. Therefore, this study aims to analyze the demographic profile of obesity in adults in Imperatriz City, Maranhão, between 2019 and 2023, with a focus on gender. **METHODS:** This research adopts a cross-sectional and quantitative approach, examining the adult obese population of Imperatriz. Data collection from 2019 to 2023 utilized the Food and Nutritional Surveillance System (SISVAN). Absolute and percentage values of obese adult citizens, categorized by gender, were compiled and tabulated using Microsoft Excel to delineate the demographic profile in the specified municipality. **RESULTS:** Analysis of the collected data in Imperatriz between 2019 and 2023 revealed a prevalence of obesity, irrespective of severity, among females. In 2019, out of 4,586 individuals with some degree of obesity, 92.89% were females, while only 7.11% were males. In 2020, out of 3,505 obese individuals, 86.36% were females and 13.64% were males. In 2021, out of 4,357 obese individuals, 85.44% were females and 14.56% were males. In 2022, out of 9,855 individuals, females constituted 77.99%, and males were 22.1%. Finally, in 2023, out of 8,731 obese individuals, the female percentage was 78.35%, while the male percentage was 21.65%. **CONCLUSION:** The data suggests that, despite a decrease in the percentage of obese females each year and an increase in males, the trend of female obesity predominance persisted, consistently exceeding 75% of the total. These findings align with the national demographic profile conducted by the IBGE in 2019, emphasizing the need for public policies that address the underlying reasons that make women more susceptible to excess weight. Furthermore, the lower number of males in the SISVAN data highlights the urgency of intensifying health programs targeting male populations for more comprehensive care.

211. **PROFILE OF DISCHARGE IN ADMISSIONS FOR MENINGITIS IN MARANHÃO FROM 2017 TO 2022.**

André Aquim Salgado Prazeres Picanço<sup>1</sup>, Paulo Cesar Santos Filho<sup>1</sup>, Juliana Gomes Santos<sup>1</sup>, Biatriz Costa Diniz<sup>1</sup>, Laina Luiza Pitombeira Rocha<sup>1</sup>, Thatyelen Soares Tavares<sup>1</sup>, Evilyn Amorim Dantas

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**INTRODUCTION:** Meningitis is a global public health problem caused by inflammation of the meninges, which can have different etiologies such as viruses, fungi and bacteria. Due to its inflammatory nature being located in the CNS, some forms of meningitis make the disease more serious and lethal. In Brazil, the fatality rate is around 21%. Given the scenario presented, due to the damage to Brazilian health, the objective was to define the situation in Maranhão in the treatment of meningitis by comparing the numbers of hospitalizations and hospital discharges. **METHODS:** This is a retrospective descriptive study, in which the data used were collected from the SUS Hospital Information System (SIH/SUS) available by the Department of Informatics of the Unified Health System (DATASUS). For the delimitation of the epidemiological profile, hospitalizations for meningitis in Maranhão that occurred between 2017 and 2022 were considered, with the variables: sex, age group and race/color of patients. **RESULTS:** During the period studied, Maranhão recorded 751 hospitalizations for meningitis, of which 474 were discharged from hospital. Given this, it is observed that 63.9% of male patients admitted were discharged, a figure very similar to female patients, with 62%. In terms of age groups, people between the ages of 65 and 69 showed the lowest percentage of upward progression with only 27% of total hospitalizations, while in more extreme groups of the age spectrum – specifically from 1 to 4 years of age and with 80 years or more – both continued with around 80% of positive evolution. Furthermore, with regard to race/color, there is also a significant disparity in values, the group of black people accounted for just over 55.8% of hospitalizations that increased, compared to other values – whites (71.4%), Yellows (66.6%), mixed race (62.3%) and indigenous people (100%) – a certain disparity can be seen. **CONCLUSION:** Therefore, the profile of patients with the best prognosis in the face of hospitalization for meningitis are people aged 1 to 4 years or over 80 years of age, there is no great disparity between the sexes, regarding race/color, indigenous people have the greatest upside potential. On the other hand, black people and elderly people aged 65 to 69 have the worst prognosis. In this way, the identification of the epidemiological profile helps to define the treatment approach, especially in groups at greatest risk when hospitalized.

212. **PROFILE OF ADMISSIONS FOR THE USE OF PSYCHOACTIVE SUBSTANCES IN MARANHÃO FROM 2018 TO 2023**

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**INTRODUCTION:** The use of psychoactive substances constitutes an important public health problem in Brazil, especially as it affects the vast majority of young people, in addition to being associated with psychiatric disorders, which can often make their daily life and work activities difficult or disabling individuals. It is observed that the time frame of the SARS-COV2 pandemic directly influenced the increase in the number of cases and hospitalizations, especially in the most urbanized macro-region of the state. The objective of the work is to analyze the profile of international interactions due to the use of psychoactive substances, except alcohol, in Maranhão. **METHODS:** This is an epidemiological, retrospective, quantitative and descriptive study based on data made available by the Department of Informatics of the Unified Health System (DATASUS). The studied population was recorded by cases of hospital admissions due to the use of psychoactive substances, with the exception of alcohol, in the state of Maranhão, between the period from July 2018 to July 2023. The correlated variables were: number of hospitalizations, year of service, sex, color/race, age group, amount spent. **RESULTS:** During the training period, 3,293 hospitalizations were observed and the North macro-region had the highest rate with 2,410 (73.18%). The year 2022 stood out for the highest number of hospitalizations with 823 cases. The most affected race was brown with 2,130 (64.68%), however, 727 (22.07%) records did not inform the color/race. Males had a higher incidence in 83.63% hospitalizations. The most affected age group is from 20 to 29 years old with 1,082 (32.85%) followed by 1,050 cases (31.88%) from 30 to 39 years old, with disorders such as schizophrenia and dependence syndrome due to use of cannabinoids. The amount spent on hospitalizations had a progressive increase when compared to 2018 and 2019 of approximately 59%, as R\$ 985,969.27 and R\$ 1,567,109.85 were spent respectively. **CONCLUSION:** Given the data, the high prevalence of hospitalizations for the use of psychoactive substances in Maranhão is notable. Mental disorders and behaviors resulting from the use of these substances are responsible for repercussions throughout society. Therefore, it is necessary to implement preventive measures and health education to address this issue, thus contributing to preventing health problems as well as minimizing social costs and public spending.

**213. EPIDEMIOLOGICAL PROFILE OF ADMISSIONS FOR DIABETES MELLITUS IN MARANHÃO BETWEEN 2020 TO 2022**

Elias Freitas de Carvalho<sup>1</sup>, Jorge Victor Coelho de Sousa<sup>1</sup>,  
Luiz Eduardo Albuquerque da Silveira<sup>1</sup>, Rayanne Dutra  
Gonçalves<sup>1</sup>, Vinicius Freire Pereira<sup>1</sup>, Winicius Jansen Araujo<sup>1</sup>  
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**INTRODUCTION:** Diabetes Mellitus (DM) is characterized as a group of non-communicable and heterogeneous chronic diseases that have as a common characteristic hyperglycemia for a long period of time. These high serum glucose levels result in several micro and macrovascular complications and are responsible for high morbidity and mortality. Diabetes can be divided into three main types: type 1 DM; Type 2 DM and gestational DM. As it is a highly disabling disease, this study seeks to understand the epidemiology of hospitalizations for diabetes mellitus in the state of Maranhão between the years 2020 and 2022. **METHODS:** The present study is of an observational cross-sectional analytical type in which data collected on the DATASUS platform were used. The variables used were sex, race and age group. The population studied was patients hospitalized for diabetes mellitus in the period from 2020 to 2022. **RESULTS:** When analyzing the cases of hospitalization for diabetes in Maranhão in the period from 2020 to 2022, it is clear that there was a higher incidence in the brown population, with a percentage of 63.7%, while there was a lower incidence in the white population, representing 2.6%. In relation to the age group, it is observed that the incidence in the age group over 50 corresponds to 78.63%, which may suggest a much greater predominance of hospitalizations caused by type 2 diabetes than type 1. Comparing the genders, there was a small predominance of females, with 51.8%. **CONCLUSION:** Based on what was presented, it is clear that there is a greater predominance of hospitalizations for diabetes mellitus in the brown population and in the age group over 50 years of age. There was little discrepancy in data regarding the affected male and female population. Therefore, understanding the epidemiological profile of these hospitalizations in the period from 2020 to 2022 is very important to outline public strategies to control and reduce hospitalizations caused by diabetes mellitus in Maranhão.

**214. PROFILE OF ADMISSIONS FOR RHEUMATIC HEART DISEASE IN MARANHÃO IN THE LAST DECADE**

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Paulo Gabriel Silva Castro Campos<sup>1</sup>, Paulo Victor de Aguiar  
Ribeiro<sup>1</sup>, Lucas Martins Castro<sup>1</sup>, Jordson Henrique Campos  
Silva<sup>1</sup>, Luiz Fernando Carvalho Camapum<sup>1</sup>  
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**INTRODUCTION:** Rheumatic fever arises as an autoimmune response to pharyngitis caused by infection with group A  $\beta$ -hemolytic streptococci. The main chronic complication is Chronic Rheumatic Heart Disease, which occurs in genetically susceptible individuals who had a delayed immune response. It is characterized by valve fibrosis and calcification. In this study, our objective is to analyze the pattern of hospitalizations related to chronic rheumatic heart diseases in the state of Maranhão. **METHODS:** Initially, data was collected from DATASUS - SUS Hospital Information System (SIH/SUS) of the Ministry of Health. The information analyzed corresponds to the period from January 2012 to December 2022. The data corresponding to the number of hospitalizations, deaths and mortality rates caused by chronic rheumatic heart disease were compared according to characteristics such as year, type and regime of care, age group, sex, color/race and average length of stay. **RESULTS:** During the studied period, there were 1442 hospitalizations and 75 deaths due to chronic rheumatic heart disease, with annual averages of 131.09 and 6.81, respectively. The 70-79 age group in 2021 had the highest incidence (8.6 per 100,000), while mortality was highest in those aged 80 and over in 2022 (2.5 per 100,000). In 2021-2022, 41.33% of deaths occurred. The incidence was higher among women in 2014 (3.21 per 100 thousand) and in men in 2012 (2.67 per 100 thousand). Absolute total deaths were more frequent in men (42) than in women (33), with the highest mortality rates of 0.284 and 0.247 per 100 thousand in 2022, respectively. **CONCLUSION:** Therefore, it is clear that hospitalizations for chronic rheumatic heart disease are more common in the elderly population, especially in women. However, despite the lower incidence, it is possible to identify a higher mortality rate in the male population. In this sense, it is expected that the present work will help to provide a general understanding of the panorama of hospitalizations for chronic rheumatic heart disease in Brazil and that it can serve as a basis for current literature regarding this condition.

**215. PROFILE OF ADMISSIONS AND DEATHS FROM GASTRIC AND DUODENAL ULCERS IN MARANHÃO FROM 2017 TO 2022**

Marcelle Teixeira e Silva<sup>1</sup>; Stephanie Freire Soares de Farias<sup>1</sup>; Bruna De Oliveira Montes do Rosário<sup>1</sup>; André Aquim Salgado Prazeres Picanço<sup>1</sup>; Hanna Célia Almeida Serra<sup>1</sup>; Maressa Chagas Oliveira<sup>1</sup>; Laura Rosa Carvalho Dias<sup>1</sup>.

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**INTRODUCTION:** Peptic ulcers are lesions that result in localized tissue loss in the affected area, with the main etiologies being *Helicobacter pylori* infection, responsible for 95% of duodenal ulcer cases and 80% of gastric ulcer cases, and the use of NSAIDs. Complications of this condition can lead to death, including: upper gastrointestinal bleeding, perforation, and pyloro-duodenal obstruction. Thus, the study aims to analyze hospitalizations and deaths due to gastric and duodenal ulcers over a period of 5 years in Maranhão. **METHODS:** Epidemiological study, quantitative and descriptive in nature, conducted utilizing data from DATASUS/TABNET, employing the SUS Hospital Morbidity indicator, with Maranhão regarded as a State Administrative Division. Gastric and duodenal ulcers were specifically chosen from the ICD-10 morbidity list, considering age group, gender, and race. Hospitalizations and fatalities occurring between the years 2017 and 2022 were included in the analysis. **RESULTS:** During the studied period, there were 3,075 hospitalizations and 241 deaths. Among these data, the peak of hospitalizations occurred in the 30 to 39 age group (n= 520), with a mortality rate of 7.20%. The highest percentage of deaths was recorded in the 70 to 79 age group, at 16.02%. Regarding gender, male hospitalizations totaled 57.79%, while female hospitalizations were 42.21%, with mortality rates of 66% and 34%, respectively. With respect to ethnicity, there were 52.84% of individuals of mixed race, however, with 32.3% of records lacking information. In fatalities, 30.7% were individuals of mixed race, with the majority (56.43%) lacking information. **CONCLUSION:** It is noted that, despite the higher number of hospitalizations occurring in the third decade of life, deaths still prevail in an older age group, indicating how other health conditions can influence prognosis. Furthermore, males appear to be the most affected by both hospitalizations and deaths, while individuals of mixed race are predominant. Therefore, accurate data accounting is essential for informing public actions so that prevention can occur in a targeted and, consequently, more efficient manner.

**216. EPIDEMIOLOGICAL PROFILE OF LEPTOSPIROSIS IN NORTHEASTERN BRAZIL BETWEEN 2018 AND 2022.**

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**INTRODUCTION:** Leptospirosis is an acute febrile illness caused by the spirochete *Leptospira interrogans*, with global relevance and significant impact on public health. The transmission occurs mainly through contact with water or soil contaminated with urine from infected animals, especially rodents, and is particularly prevalent in with precarious basic sanitation conditions. Thus, the present work aims to trace the epidemiological profile of leptospirosis in the northeastern region of Brazil among the years 2018 and 2022. **METHODS:** This is an epidemiological, cross-sectional study, descriptive and quantitative based on data obtained from the Diseases Information System of Notification (SINAN), available at the Department of Informatics of the Unified System of Health (DATASUS). Using the data tabulator (TABNET) to select and analyze the information. **RESULTS:** During the period analyzed, there were 2667 notifications of leptospirosis in the Northeast region. In 2020, the lowest number of cases was recorded (10.7%, n=288) and, in 2022, the highest quantity (36.2%, n=968). The most affected population was from the males with 2141 occurrences (80.27%), with the age group being 20 to 39 years older prevalent. Regarding the level of education, there was a predominance of individuals with the 5th to 8th grade incomplete of elementary school, with 272 cases of the disease. In relation to Regarding the distribution by race/color, the brown (67.8%) and black (7.7%) populations are the most affected. In addition, there was a higher incidence of the disease in the urban area with 1246 cases, while in the rural area there were only 225 notifications. With regard to the evolution of the pathology, about 73.9% (1973 cases) progressed to cure, while the death rate by notification rate in the analyzed period was 13.8% (370 cases). It was found that the state of Pernambuco had the highest number of confirmed cases of leptospirosis (45.8%), while Piauí had the lowest number (1.6%). **CONCLUSION:** It is inferred, therefore, that Leptospirosis is correlated with socioeconomic variables. In this way, it was observed that the disease in the Northeast occurred mostly in the State of Pernambuco, in the age group from 20 to 39 years, in the brown population and in the male sex, who live in areas of vulnerable to pathogen circulation. In this way, by recognizing the most important groups and regions susceptible, it is feasible to guide prevention, diagnosis and treatment interventions, with in order to contain the spread of this disease.



**217. EPIDEMIOLOGICAL PROFILE OF EMERGENCY ADMISSIONS FOR EPILEPSY IN MARANHÃO FROM 2018 TO 2023**

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**INTRODUCTION:** In ancient times, epilepsy was related to spiritual possessions and mysticism, promoting false beliefs about the pathology in question, as well as compromising its treatment. Due to sociocultural factors, it is clear that such myths about epilepsy persist to this day. However, it is clear that this disease has a neurological origin and a genetic or acquired etiology and can manifest itself in different ways. This pathology can be prevented and controlled in up to 70% of patients. Severe cases due to epilepsy are still present in hospital emergencies, and the lack of rapid and adequate intervention can cause serious harm to the patient's health.

**METHODS:** This is an epidemiological, descriptive, and quantitative study referring to the epidemiological profile of emergency hospitalizations for epilepsy in Maranhão from 2018 to 2023. The data used in this research is in the public domain, available on the DATASUS (IT Department of the Brazilian Health System). The variables analyzed were gender, age group, average hospital stay (in days), expenditure on care, and deaths. **RESULTS:** Between 2018 and 2023, 6,097 emergency hospitalizations occurred in Maranhão due to epilepsy, a number that represents 2.29% of cases reported across the country. The epidemiological profile of the patients consists of a majority of males (56.53%), aged between 1 and 4 years (17.48%), who, on average, remained hospitalized for around 4.8 days. It is worth mentioning that, in children under one year of age, the average hospital stay was almost double - 8.4 days -, which had a direct impact on the increase in the cost of hospitalizations, which exceeded the average expenditure by 22% annual amount of around 410,849.94 reais. As for the prognosis, in general, 1.82% of these patients die, and the most affected age group is the elderly between 60 and 69 years old (5.14%). **CONCLUSION:** There is a prevalence of males in emergency admissions, with a peak incidence in the children's age group, which is the one that requires the most hospitalization time. The role of primary and secondary care in referring cases to specialized services is essential. Furthermore, the high mortality rate among the elderly (which is three times higher than the average) calls for strict management and monitoring of this age group to avoid emergency crises and complications.

**218. EPIDEMIOLOGICAL PROFILE OF COINFECTION VISCERAL LEISHMANIASIS AND HIV IN MARANHÃO FROM 2018 TO 2022.**

João Eudes Pereira Filho<sup>1</sup>, Isabella Teixeira Lopes<sup>1</sup>, Mariana Mendonça Claudino<sup>1</sup>, Mayara Bottentuit Nogueira<sup>1</sup>, Layna Louise Cardoso Gonçalves Travassos<sup>1</sup>

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**INTRODUCTION:** Visceral leishmaniasis (VL) is a neglected tropical protozoan infection whose clinical disseminated infection includes prominent splenomegaly, hepatomegaly, anemia, thrombocytopenia, neutropenia, and hypoalbuminemia. In endemic areas, up to 30% of the population usually presents the oligo or asymptomatic form of the infection. However, the persistence of viable parasites makes it possible for them to reactivate in the face of immunosuppression, such as malnutrition or HIV infection. In this sense, VL emerged as a prevalent opportunistic infection in the acquired immunodeficiency syndrome (AIDS) epidemic. VL-HIV co-infection is a condition of high morbidity and mortality since VL amplifies HIV immunosuppression, accelerating the progression of the disease, and this tends to predispose atypical manifestations of leishmaniasis, defining AIDS.

**METHODS:** This is a descriptive study referring to the epidemiological profile of cases of co-infection Visceral Leishmaniasis (VL) and HIV in Maranhão from 2018 to 2022. The collected data is from the Information System Information on Notifiable Diseases (SINAN), available through the Department of Informatics of the Unified Health System platform (DATASUS). The variables analyzed were sex, age group, evolution, and type of admission. **RESULTS:** Between 2018 and 2022, 357 cases of VL-HIV co-infection occurred in Maranhão (a number that represents 97.5% of cases reported throughout the country), with 2022 being the year with the most reported cases (92 in total). The epidemiological profile of patients consists of a male (82.3%), aged between 20 and 59 years old (89.9%) and in primary infection (70.8%). As for the prognosis, approximately 10% of patients with LV-HIV co-infection died, while 80.9% survived the leishmaniasis infection. **CONCLUSION:** Therefore, those numbers attest to the importance of Maranhão in the national epidemiological scenario of VL-HIV co-infection, since most cases occur in this state. Furthermore, there is a growing number of reported cases, which can be worrying for the state's health system, given that this disease, despite having a substantial cure rate, also has a considerable fatality rate.



219. **MORTALITY PROFILE DUE TO CONDUCTION DISORDERS AND CARDIAC ARRHYTHMIAS IN MARANHÃO.**

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**INTRODUCTION:** Cardiovascular diseases are one of the most prevalent pathologies throughout the world and, in Brazil, represent the main cause of death. Conduction disorders and cardiac arrhythmias (TCACs) are one of them, which represent changes in the cardiac conduction system and affect the formation and/or conduction of electrical impulses. They have great clinical variability, as their carriers can be asymptomatic or have a major impact on quality of life. Due to this variation, knowledge about the mortality profile associated with TCACs is important in order to identify and act on the most vulnerable groups and reduce morbidity and mortality. **METHODS:** Epidemiological study of the mortality rate due to conduction disorders and cardiac arrhythmias in Maranhão from 2018 to 2022. The data listed were stratified into: gender, race/color, age group and type of service. For the research, the Ministry of Health's online platform was used through the SUS Hospital Information System (SIH/SUS). **RESULTS:** The mortality rate from TCACs in Maranhão between 2018 and 2022 was 11.91 deaths/Hospital Admission Authorization (AIH) – focusing on 2021 (15.2 deaths/AIH). In relation to gender, males (12.77 deaths/AIH) stand out in relation to females (10.94 deaths/AIH). In relation to race/color, white women stood out (11.96 deaths/AIH), followed by black women (11.11 deaths/AIH) and brown women (10.86 deaths/AIH). In the age group, emphasis was placed on young people aged 15 to 19 years (15.79 deaths/AIH) - with the second highest value between ages in 2021 (38.46 deaths/AIH) -, and 20 to 29 years old (14 .29 deaths/AIH), but there is also emphasis on children under 1 year of age (13.33 deaths/AIH) – the highest value between ages in the period in 2021: 40 deaths/AIH -, and for those aged 70 to 79 years (13 .29 deaths/AIH). In type of service, emergency care predominated (310 deaths) compared to 41 deaths in elective care. **CONCLUSION:** Males, of white race/color, aged 15 to 19 and receiving emergency care represent the predominance of TCAC deaths from 2018 to 2022. The year 2021 stands out, with the highest mortality rate in the period of analysis and the 2nd highest among ages. The emphasis on white and young people may indicate underreporting and difficulties in accessing healthcare for disadvantaged social groups. Therefore, this situation reinforces the need for prevention and health promotion actions in the search for improving the morbidity and mortality situation related to TCACs.

220. **EPIDEMIOLOGICAL PROFILE OF TUBERCULOSIS IN VULNERABLE POPULATION IN MARANHÃO FROM 2018 TO 2022**

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**INTRODUCTION:** Tuberculosis (TB) is a pathology whose etiological agent is *Mycobacterium tuberculosis*, also known as Koch's bacillus. It is endemic in Maranhão and is directly related to the region's precarious socioeconomic conditions, with significant prevalence in certain communities, such as homeless population (HP), people deprived of liberty (PDL), HIV-positive people and diabetics. Therefore, this work aimed to analyze the epidemiological profile of tuberculosis cases in vulnerable populations in the State of Maranhão between the years 2018 to 2022. **METHODS:** This is a descriptive epidemiological study, with a quantitative approach, using data provided by the Notifiable Diseases Information System, on the platform of the Department of Informatics of the Unified Health System (DATASUS), from 2018 to 2022. The groups studied were: HP, PDL, HIV-positive and diabetics, relating them to the variables: age group, sex, education, form of tuberculosis, type of entry and closure situation. **RESULTS:** 14,049 cases of TB were registered in Maranhão, with 383 are HP, 1,068 are PDL, 1,170 are HIV-positive and 1,554 are diabetic. In the PDL, HP and HIV-positive groups, individuals aged 20 to 39 years old, male, with incomplete primary education prevailed. The profile was repeated in the diabetic category, except for the age group, in which people aged 40 to 59 predominated, the age that diabetes diagnoses increased. The most important form of tuberculosis was pulmonary with 3,863 cases, followed by peripheral tuberculous lymphadenitis and pleural tuberculosis, with 115 and 67 records, respectively. In the variable "types of entry", it was found that the majority are new cases; however, among the groups, HP have the highest rate of re-entry after treatment abandonment. Corroborating with these data, in the "closure situation" category, the highest rates of deaths and treatment abandonment stand out (8.3% and 37%, respectively) in HP, in contrast to the others, which have high rates of cure. **CONCLUSION:** Maranhão is a State with a significant prevalence of TB cases in the vulnerable populations described, with similarities and differences in relation to the people profile and results found. Therefore, each of them has particularities that require specific public policies to combat the disease.

**221. EPIDEMIOLOGICAL PROFILE OF HOSPITALIZATIONS FOR ASTHMA IN MARANHÃO IN THE LAST DECADE**

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**INTRODUCTION:** Asthma is the protagonist among respiratory public health problems, with a prevalence of more than 23% in the Brazilian population. It is one of the most recurrent diseases of this group in Brazil, therefore, the present study seeks to evaluate the epidemiological pattern of hospitalizations for asthma in the Health Macroregions of Maranhão in the last 10 years and its implications.

**METHODS:** This is an epidemiological, cross-sectional, retrospective, descriptive study, with quantitative presentation, with data collection from the Department of Informatics of the Sistema Único de Saúde (DATASUS), between January 2013 and July 2023, on hospitalizations for asthma occurring in the Health Macroregions of Maranhão.

**RESULTS:** In the last 10 years, Brazil recorded 955,098 hospitalizations for asthma. Of this total, 6.98% (66,702) occurred only in Maranhão, distributed among the Health Macroregions: North, East and South, with the North standing out with 49.7% of cases. The highest record was in 2013, 16.2% of hospitalizations, the period from 2013 until 2021 showed a slight reduction, on the other hand, from 2020 until 2021, there was an abrupt drop of more than 1,000 cases. So, 131 died, 63.3% women and 36.6% men, affecting female and male audiences with 60+ aged people, with 48.8% and 35.9%, respectively, with equal frequency, 6.1%, in both sexes from 20 to 59 years old. Regarding the days in hospital, women spent 96,896 days, while men spent 81,023. Furthermore, 12.6% of the demands were elective and 87.3% were urgent, with the majority, 55.5%, being brown skinned people and the minority, indigenous, with 0.37%. All of this generated a cost of R\$32,855,680.38 to the health system. **CONCLUSION:** Considering these data, it is clear that women were the most affected, especially elderly women, even requiring longer hospitalization than men. Furthermore, there was a significant change in the quantitative pattern of hospitalization before and during COVID-19 pandemic. This sudden drop may be a reflection of the pandemic itself, which resulted in underreporting of several diseases in the period mentioned, but it calls for studies that better quantify this phenomenon. In the following years, there was a tendency towards normality in annual variations related to the period before the pandemic. Therefore, it is clear that asthma is still a public health problem in the state, which affects the quality of life of patients, which can lead to death and generates significant costs for the state.

**222. EPIDEMIOLOGICAL PROFILE OF HOSPITALIZATIONS DUE TO BRONCHIECTASIS EXACERBATION IN MARANHÃO**

Ingrid Raquel de Sousa Silva<sup>1</sup>, Jely Caroline de Amorim Coutinho<sup>1</sup>, Francilio Gomes da Silva Junior<sup>1</sup>, Maria Clara Santos Araujo<sup>1</sup>, Marlane Lisboa Soares<sup>1</sup>, Ana Carolina Leal Melo<sup>1</sup>, Byanka Teles Menezes<sup>2</sup>

<sup>1</sup>Universidade Federal do Maranhão, student

<sup>2</sup>Universidade Federal do Maranhão, teacher.

**INTRODUCTION:** Anatomical and functional alterations in the respiratory system can have negative repercussions on health. In this context, bronchiectasis is related to irreversible bronchial dilation, observed in high-resolution chest tomography, typically linked to chronic airway infection and inflammation. Thus, this study aims to analyze the epidemiological profile of hospitalizations due to bronchiectasis exacerbation in Maranhão. **METHODS:** This is a descriptive and quantitative study, based on data from the Department of Health Informatics of the Unified Health System (DATASUS). The analyzed period was from January 2013 to December 2022, and the variables used were age group, gender, race, hospitalizations, nature of care, and costs. **RESULTS:** During this period, (n=307) cases of hospitalizations due to bronchiectasis exacerbation were confirmed. In the distribution by age group, a prevalence was noted in the 40 to 49 age group, with 11.72% of cases. Following this, the age groups of 1 to 4 years, 60 to 69 years, and 70 to 79 years also showed significant incidences, with 11.07%, 11.07%, and 10.74% of cases, respectively. Additionally, the average length of hospital stay was 2.72 days for children, 8.31 days in the adult population, and 8.78 days in the elderly population. Regarding gender, the female population predominated, representing 60% of hospitalizations. This was also evidenced in duration, where women occupied 60.31% of the hospitalization time. Regarding self-declared race, the data shows that unidentified individuals (n=140 cases) led, followed by mixed-race individuals (n=135 cases), while the white population represented only (n=19) cases. These variables indicate a significant disparity between mixed-race and white categories, although there is a considerable amount of undeclared cases. Moreover, out of (n=307) hospitalizations, (n=84) were considered elective and (n=224) were urgent, resulting in a total cost of R\$246,766.78 for the state. **CONCLUSION:** In summary, the results highlight the significant occurrence of bronchiectasis in Maranhão, mainly in middle-aged adults, with a predominance among women. Furthermore, the disparity in racial identification of cases, with a higher incidence among mixed-race individuals and a significant number of unidentified cases, underscores the need for greater attention to respiratory health and precise data collection to effectively address this issue in the region.

223. **EPIDEMIOLOGICAL PROFILE OF ADMISSIONS FOR ACUTE MYOCARDIAL INFARCTION IN SÃO LUÍS-MA**

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**INTRODUCTION:** Acute Myocardial Infarction (Acute MI) is one of the most common diseases in the world. In Brazil, it is estimated that between 300 and 400 thousand cases occur annually, according to data from the Ministry of Health in Brazil, thus representing a challenge for public health. The research aimed to describe the epidemiological profile of Acute Myocardial Infarction in the city of São Luís, Maranhão, Brazil. **METHODS:** This is an epidemiological, cross-sectional, retrospective and descriptive study, with quantitative presentation and data collected from the Information Technology Department of the Public Health Care System (DATASUS), between the years of 2018 and 2022. **RESULTS:** In the city of São Luís, 2960 cases of Acute Myocardial Infarction were confirmed between 2018 and 2022, with 2022 and 2020 being the years with the highest and lowest number of cases, 743 and 464, respectively. The main age group in Acute MI hospitalizations were adults aged from 60 to 69 (994 cases, representing 31,5% of total). Regarding gender, there was a great predominance considering male hospitalizations (2004) in comparison to female ones (996). Furthermore, considering the 2970 hospitalizations analyzed, only 1219 had also race as data, with the highest hospitalization rate being of people that identify as mixed race (1106), and the second highest being of people who identify as white (92). **CONCLUSION:** The cases of Acute Myocardial Infarction were prevalent in individuals with ages between 60 and 69 years old, male and mixed race. Records also showed that between 2020 and 2022 there happened an increase in the number of hospitalizations of Acute MI, which may be linked to a throwback in prophylactic measures and a failure to diagnose the disease in early stages. Despite the mentioned increase, the reduction in hospitalizations between 2019 and 2020 may be related to the COVID-19 pandemic, which may have caused a divergence between data and reality. However, additional studies are needed to understand this possible relationship.

224. **EPIDEMIOLOGICAL PROFILE OF EXOGENOUS POISONING IN MARANHÃO FROM 2018 TO 2022**

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**INTRODUCTION:** Exogenous poisonings are important causes of mortality from external agents and frequently appear in emergency departments. However, preventive measures can prevent these conditions from occurring. For prevention to be viable, it is important to know the profile of these occurrences, in order to define priority audiences and crucial prevention measures. In this sense, the objective of this study was to characterize the epidemiological profile of exogenous poisonings in the state of Maranhão. **METHODS:** This is a descriptive and quantitative epidemiological study, with data on the age group, toxic agent and circumstances of exogenous poisonings in the state of Maranhão from 2018 to 2022, obtained from the "Sistema de Informação de Agravos de Notificação (SINAN)", accessed through the "Departamento de Informática do Sistema Único de Saúde (DATASUS)" system. **RESULTS:** During the study period there were a total of 5,280 reports of exogenous intoxication, 1,850 involving suicide attempts, 1,054 accidental and 550 due to substance abuse. Of the total notifications, 2,423 had medicines as the toxic agent, 846 were caused by food and drink, 485 did not have the toxic agent registered and 270 were caused by household products. The most affected age groups were 20-39 years of age, followed by the 40-59, 15-19 and 1-4 years of age ranges. Poisoning in the event of a suicide attempt was more prevalent among those aged 20-39 years and the most common toxicants in these situations were medications. Medications were also the cause of 33.11% of accidents. Poisoning from household products was responsible for around 45.18% of cases in children aged 1-4 years. **CONCLUSION:** Suicide attempts were the biggest cause of poisoning in adults in Maranhão, with a large use of medication for this purpose. This finding indicates the relevance of promoting mental health among young people and adults, while corroborating the importance of medical knowledge about specific antidotes to medications. The results among children reinforce the importance of keeping medicines and cleaning products out of the reach of children, a recommendation that should be communicated to parents and guardians.

**225. EPIDEMIOLOGICAL PROFILE OF ARBOVIRUSES IN SOUTHEAST MARANHÃO BETWEEN 2018 AND 2022**

Myrelle Salgueiro Porto de Sá<sup>1</sup>, Luanna Stefanny Campos do Nascimento<sup>1</sup>, Mariana Clara Borges da Silva<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>1</sup>, João Henrique de Oliveira Xavier<sup>1</sup>, Letícia de Almeida Moraes Weber<sup>1</sup>, Bruna Knanda Queiroz Macedo<sup>2</sup>.

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**INTRODUCTION:** The arboviruses transmitted by *Aedes aegypti*, popularly known as dengue mosquito, are a public health problem worldwide, being endemic in the Metropolitan Region of Southwest Maranhense (RMSM), made up for 22 counties. This research aims to analyze the epidemiological profile of this region. **METHODS:** descriptive epidemiological study, based on secondary data from Sistema de Informação e Agravos de Notificação (SINAN), available on Department of Informatics of the Unified Health System, about dengue virus cases (DENV), Chikungunya (CHIKV) and Zika (ZIKV), notified by population from RMSM between 2018 and 2022. The parameters were temporal and spatial analysis, age range, sex and clinical evolution which were tabulated in Excel 2019. Since they are secondary data, the Ethics Committee was dismissed. **RESULTS:** Between 2018 and 2022, 1.366 arboviruses cases were notified in RMSM. Nevertheless, data is missing in some places and periods. The registers of DENV number 633 cases from 2018 to 2020, 68% of these in 2019, being 88% in the first semester, emphasizing april and may. The most affected counties were Imperatriz (24%), Governador Edison Lobão (18%) and Amarante do Maranhão (11%). Women between 20 and 39 years old were the most injured, as well in CHIKV. Children up to 14 years old are 33% of cases. Only one death was reported. Regarding ZIKV, there are 105 registered cases in 2018-22, 59% of them were in 2022. The most affected counties were Imperatriz (54%), Açailândia (17%) and São João do Paraíso (16%). Women represent 56% of cases, while 63% affected people < 15 years old, notably < 5 years olds (27%). The clinical evolution of healing occurred in 88% of sufferers. Between 2019 and 2020 there has been a drop of 76% (143 to 33 cases) and an increase in 2022, with 274 cases, representing a booming. May and June (39%) were featured. The more affected cities were Açailândia (32%), Imperatriz (27%) and Cidelândia (12%). 91% of cases got cured. **CONCLUSION:** There is an important and current contamination by arboviruses in RMSM. Covid-19 pandemic may have worsened the underreporting situation about arboviruses causing a large neglect over their prevention. Furthermore, the limitations in data collection in SINAN stop accurate identification about populations that are in danger. In short, the public politics for arboviruses are ineffective, being necessary to improve epidemiological surveillance, since the prevalence of arboviruses in that region.

**226. EPIDEMIOLOGICAL PROFILE OF HIV/AIDS AMONG ELDERLY PEOPLE IN BRAZIL**

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<sup>2</sup> Universidade Federal do Maranhão

**INTRODUCTION:** Acquired immunodeficiency syndrome (AIDS), caused by HIV infection, is still an important subject of debate, even more than 30 years after its discovery. Among the issues debated are the damage caused to the population, such as social isolation, side effects of medication and, in some cases, death. There is currently an increase in HIV/AIDS infections among people aged 60 and over. The aim of this study is to analyze the evolution of the HIV/AIDS epidemiological profile among elderly people in Brazil. **METHODS:** This is a descriptive and quantitative study, whose secondary data was collected from the Notifiable Diseases Information System (SINAN/SUS), made available by the Department of Informatics of the Unified Health System (DATASUS), and from the HIV/AIDS Epidemiological Bulletin between 2012 and 2022. The ethnicity, gender and schooling of the elderly patients were then analyzed. **RESULTS:** In the period observed, 11,618 new AIDS cases were reported in people aged 60 and over. Together, the triennium 2017-2019 and 2021 represent more than 43% of new cases. Approximately 63% of the cases were among men, who were the most affected in all the years of the study. The white population was the most affected with 3,069 new cases, followed by brown (20.2%), black (5.4%), yellow (0.2%) and indigenous (1.9%). The most common level of schooling was incomplete 1st to 4th grade (22.5%), followed by incomplete 5th to 8th grade, with 817 cases, and complete high school, with 12% of the total. **CONCLUSION:** The increase in life expectancy in the country is linked to the emergence of age-related diseases. However, the results show that there is a growing number of new HIV/AIDS cases reported among the elderly. These results show the need for public policies to prevent STIs in this age group. In addition, it is notable that the lack of sex education is proportional to schooling, especially among people who have not completed elementary school, but even those who have information about the pathology are at risk due to beliefs in the low severity of the disease.

227. **EPIDEMIOLOGICAL PROFILE OF LEPROSY HOSPITALIZATIONS IN THE STATE OF MARANHÃO FROM 2014 TO 2023**

Guilherme Luís Moura Sousa<sup>1</sup>, Bruna Assunção Albuquerque Nascimento<sup>1</sup>, Cecília Maria Camelo da Silveira<sup>1</sup>, Isadora Nogueira Pinheiro Castelo Branco<sup>1</sup>, Marília Beatriz Lima Mineiro<sup>1</sup>, Robert Kennedy Soares de Carvalho<sup>1</sup>, Ana Carla Marques da Costa<sup>2</sup>.

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**INTRODUCTION:** Leprosy is a chronic infectious disease caused by *Mycobacterium leprae*, which is characterized by involvement of the skin and peripheral nerves. Its therapeutic regimen depends on the operational classification: Paucibacillary or Multibacillary; and its clinical presentation varies between: Indeterminate, Tuberculoid, Virchowian, Dimorphic. Brazil ranks second in the world for the number of cases and Maranhão is responsible for the highest prevalence among the Northeastern states. The aim of this study is therefore to outline the epidemiological profile of leprosy hospitalizations in the state of Maranhão from June 2014 to June 2023. **METHODS:** This is a cross-sectional, descriptive and quantitative study using data available on the website of the Department of Informatics of the Unified Health System (DATASUS), recorded in the SUS Hospitalization System (SIH/SUS). The study population includes all people who were hospitalized for leprosy in Maranhão between June 1, 2014 and June 30, 2023. The variables selected for this study were: year of hospitalization, health macro-region, age group, race/color and gender. The data was tabulated in the Microsoft Excel program, with descriptive statistical analysis. **RESULTS:** Maranhão recorded 4,180 hospitalizations in the period from June 2014 to June 2023, which corresponds to 40 of the 10,468 hospitalizations reported in the entire Northeast in this period. The years 2020 and 2022 had the highest numbers, with 643 and 645 hospitalizations respectively. The Northern Health Macroregion accounted for most of the hospitalizations, responsible for 86% (n=3610) of the cases registered, while the East and South accounted for 8% (n=345) and 5% (n=225), respectively. Regarding the profile of the inpatients, 19% (n=810) were aged between 30 and 39 and 72% (n=3019) were male. The data on color/race proved to be insufficient, given that in 76% (n=3163) of the cases, the variable was not determined. **CONCLUSION:** The number of hospitalizations in recent years confirms the need to promote early diagnosis and treatment. The prominence of MRS Norte in the number of hospitalizations indicates the vulnerability of this section of the population. Due to the scarcity of some information, such as education or income profiles, it is important to carry out more studies on this subject.

228. **EPIDEMIOLOGICAL PROFILE OF VISCERAL LEISHMANIASIS IN MARANHÃO OVER A DECADE**

Francisco Marques da Silva Neto<sup>1</sup>, André Cardoso Montenegro<sup>1</sup>, Byanca Taumaturgo Bezerra de Menezes<sup>1</sup>, Cecília Maria Camelo da Silveira<sup>1</sup>, Guilherme Luís Moura Sousa<sup>1</sup>, Raimundo José Ferreira de Macedo<sup>1</sup>, Rommayolle Costa Diniz de Sousa<sup>1</sup>

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**INTRODUCTION:** Visceral Leishmaniasis (VL) is an infectious zoonotic disease characteristic of tropical climate countries. Its etiology is given by protozoa of the genus *Leishmania*, which are transmitted by sandflies. VL is a public health problem, justifying the need for studies on its epidemiology. The purpose of this research is to examine and analyze the epidemiological evolution of visceral leishmaniasis in Maranhão over a decade. **METHODS:** This is a retrospective quantitative ecological study of time series, analyzing data provided by the Disease and Notification Aggravations System (SIVAN) regarding VL cases between 2013 and 2022 in the state of Maranhão. The variables analyzed include gender, Coinfection with Human Immunodeficiency Virus (HIV), area of residence, race, outcome, education level, and age group. **RESULTS:** In the analyzed period, 5,610 cases of VL were reported in the state of Maranhão, with the year 2017 showing the highest number, 793 cases. Furthermore, from 2019 to 2022, there was a downward trend. 74% (n=4176) of notifications did not present coinfection with HIV. Regarding the predominant profile, males accounted for 66% (n=3708), the most affected age group was 1 to 4 years, with 30% (n=1658), and brown ethnicity represented 77% (n=4328) of confirmed cases. Regarding education information, 47% were classified as "not applicable," and among those reported, the most prevalent were incomplete elementary education (1st to 4th grade) and incomplete middle school (5th to 8th grade), both with 11%. Regarding the area of residence, 56% (n=3156) were urban residents. Moreover, the majority of notified patients in the state recovered, accounting for 64% (n=3586) of cases. **CONCLUSION:** The study shows an increase in cases between 2016 and 2018, followed by a reduction between 2019 and 2022. There is a greater predominance in males, brown individuals, and urban residents. Higher levels of education indicate a trend towards reducing VL cases, as incomplete and complete higher education designate 0%. In terms of outcome, cure represents superiority over deaths from VL. Based on these results, there is a need for further implementation of prevention and control measures correlated with socioeconomic and environmental factors.



**229. EPIDEMIOLOGICAL PROFILE OF COLORECTAL CANCER DEATHS IN MARANHÃO: PERIOD FROM 2017 TO 2021**Jaciele Santos da Silva Sousa<sup>1</sup>, Fabricia Cristina da CruzSousa<sup>1</sup>, Alynne Bayma dos Santos<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Colorectal cancer is a malignant neoplasm of the large intestine that originates from benign polyps found in the colon and/or rectum walls. The disease is influenced by genetic, hereditary, and lifestyle factors and can develop silently, taking approximately 10 to 15 years from the onset of the lesion to the establishment of the tumor, with a delay in the appearance of symptoms. In Brazil, colorectal cancer is the third most common, excluding non-melanoma skin tumors. Therefore, this article aims to analyze the death profile of patients from this neoplasm in Maranhão, with the objective of understanding this pathology in the state and the need for prevention. **METHODS:** This is a cross-sectional and descriptive epidemiological study. The collected data were obtained from the Mortality Information System (SIM), available at the Department of Health Informatics (DATASUS) of the Ministry of Health, regarding mortality from colorectal malignant neoplasms. The temporal cutoff considered was from January 2017 to December 2021, including the following variables: gender, age group, race/ethnicity, education, municipality, and staging. **RESULTS:** A total of 1,013 deaths were recorded between the years 2017 and 2021, with 526 female and 487 male. The municipality with the highest number of deaths was São Luís, with 315 during the study period, followed by Imperatriz, with 95. The predominant age group was individuals aged between 60 and 69 years (260 deaths), although there was a considerable incidence in individuals under 50 years, accounting for 7.79% of deaths. Regarding race/ethnicity, there was a prevalence of pardos (60.21%), followed by whites at 29.22%. In terms of education, 22.11% had 8 to 11 years of schooling, and approximately 18.85% had no formal education. Additionally, using the TNM staging system, a predominance of stage III and IV was observed, totaling 42.04%. **CONCLUSION:** The results of this research indicate age as an important risk factor for the onset of colorectal cancer. The main epidemiological death profile in Maranhão for this neoplasm is among women. From the staging data, it was evident that there is a tendency for late discovery of the disease in Maranhão. This emphasizes the need for additional studies on this pathology and health education in the state, focusing on early detection through screening and the reduction of morbidity and mortality.

**230. EPIDEMIOLOGICAL PROFILE OF DEATHS FROM DIABETES MELLITUS IN PINHEIRO, MARANHÃO, 2018 TO 2021**André Aquim Salgado Prazeres Picanço<sup>1</sup>, Fernando Alberto Costa Cardoso da Silva Filho<sup>1</sup>, Caio de Brito Matos<sup>1</sup>, Stephanie Freire Soares de Farias<sup>1</sup>, Brunna Araújo dos Santos<sup>1</sup>, Pedro Henrique Delfim Pessoa<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Diabetes mellitus is one of the most prevalent diseases today, with an estimated 10.5% of the world's adult population (20-79 years old) living with the diagnosis, with half of this percentage unaware of having the disease, with this sample demonstrating be growing. Regardless of classification as type 1 or 2, the final result when poorly controlled is the same: hyperglycemia, which can cause numerous micro and macrovascular complications, acting as a comorbidity for several illnesses and leading to hospital admissions, resulting in increased spending for the public system of health. Given this, we seek to draw an epidemiological profile of direct deaths from the disease in search of elucidation and better planning. **METHODS:** This is a cross-sectional and analytical study. The research was carried out using data collected from the SUS IT System (DATASUS), in which deaths caused by Diabetes Mellitus in the municipality of Pinheiro, Maranhão, between the years 2018 and 2021 were selected, with the variables observed: sex, race/color and age group. **RESULTS:** Within the period analyzed, 197 deaths were registered under ICD-BR-10: 055 — referring to Diabetes — in the municipality in question. Just over half of these deaths were male (54.3%). As for race, self-declared browns represent 71.51% of these deaths, followed by blacks and whites with 15.22% and 13.19% respectively. In reference to the age group, from 10 to 79 years old we have an increasing number of values, with a peak in the range of 70 to 79 years old, with 30.45% of total cases, showing a small drop in the last group, 80 years old or more, which reaches 29.44% of the total. **CONCLUSION:** In short, among the variables: sex, race/color and age group, it was concluded that: men, self-declared mixed race and people between 70 and 79 obtained the highest values of the totality studied. Furthermore, analyzing deaths in a given municipality, such as the case of Pinheiro, is especially important for the ideal performance of the Brazilian health system, as it allows the elaboration of more coherent public policies, which are therefore more efficient in general.



231. **EPIDEMIOLOGY OF REDUNDANT PREPUCE, PHIMOSIS AND PARAPHIMOSIS IN MARANHÃO BETWEEN 2018 AND 2023**

Myrelle Salgueiro Porto de Sá<sup>1</sup>, Mariana Clara Borges da Silva<sup>1</sup>, Luanna Stefanny Campos do Nascimento<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>1</sup>, João Henrique de Oliveira Xavier<sup>1</sup>, Ana Clara Tavares Dantas Nogueira<sup>1</sup>, Samara de Oliveira Sá<sup>2</sup>.

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**INTRODUCTION:** The redundant prepuce, phimosis and paraphimosis (PRFP) are conditions that affect genital hygiene, with relevance over public health, specially in Maranhão, where penis cancer is prevalent. Redundant prepuce involves excessive skin on the glans; phimosis is the difficulty over retract prepuce; and paraphimosis is an emergency which requires immediate attention due to glans blood flow restriction. This study aims to analyze the PRFP epidemiology in Maranhão between 2018 and august 2023. **METHODS:** descriptive epidemiological study, based on secondary data from Departamento de Informática do Sistema Único de Saúde – DATASUS, in the hospital morbidity ward, over cases of hospitalizations by PRFP. The parameters were temporal and spatial analysis, age range, sex and clinical evolution which were tabulated in Excel 2019. For there were not studies in human beings, the Ethics Committee was dismissed. **RESULTS:** in the gap between 2018 and august 2023, there were 7.920 hospitalizations by PRFP in 19 regions of health in Maranhão. in 2020, the Covid-19 pandemic period, had a drop (30%) of hospitalizations. However, in the next years, the number increased, for example, in the first eight months of 2023 represented 14% of the total, with 1.140 hospitalizations, a jump. Among all maranhense health regions more affected by PRFP are São Luís (19%), Codó (9,4%), Imperatriz (9%) e Santa Inês (6%) with the highest number of hospitalizations. it means in the capital São Luís there is a range of male hospitalizations PRFP/inhabitant of 0,2%, followed by Imperatriz (0,5%), Santa Inês (1%) and Codó (1,26%). Regarding age range, 22% of people affected are children between 5 and 9 years old and 47% are men above 15 years old. Regarding race, 50% are brown and 42% did not inform this feature. The character of the service was considered "elective" 45% of times and 55% as "urgent". In the period studied, there were 7 deaths, in São Luís, Santa Inês, Codó and Caxias health regions. **CONCLUSION:** some small cities as Codó and Santa Inês, have high hospitalizations range by PRFP, demanding targeting specific healthy strategies. Furthermore, the Covid-19 pandemic may have promoted the underreporting and nonadherence to treatment. in short, the public politcs to early detection, prevention and treatment to PRFP in Maranhão are ineffective and require improvement.

232. **EPIDEMIOLOGICAL PROFILE OF SYPHILIS IN PREGNANT WOMEN IN THE SOUTHERN REGION OF MARANHÃO FROM 2017 TO 2021**

Karoliny Araújo Santana<sup>1</sup>; Werta Maria de Oliveira Almeida<sup>1</sup>; Iangla Araújo de Melo Damasceno<sup>2</sup>

<sup>1</sup> Centro Universitário Tocantinense Presidente Antônio Carlos, student

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**INTRODUCTION:** Syphilis is an infectious disease caused by the bacterium *Treponema pallidum*, which is transmitted sexually, vertically, or hematogenously. One of the vulnerable populations to this infection is pregnant women, where syphilis can have serious health repercussions for both the mother and the fetus. Given the impact of syphilis on public health and the increasing number of cases, this study aims to analyze the epidemiological profile of syphilis in pregnant women in the southern region of Maranhão from 2017 to 2021. **METHODOLOGY:** This is an epidemiological, cross-sectional, descriptive, and quantitative study based on data obtained from the Information System for Notifiable Diseases (SINAN), available at the Department of Informatics of the Unified Health System (DATASUS). Using the data tabulator (TABNET) to select and analyze the information. The period applied was from January 2017 to December 2021, and at the time of the research, the data were segmented into: race/color, age group, education level, clinical classification, treponemal (treponemal) and non-treponemal test. **RESULTS:** During the analyzed period, 1527 cases of syphilis in pregnant women were reported in the region, with an average of 305.4 cases diagnosed per year. It was noted that the age group with the highest incidence includes pregnant women between 20-39 years old (65.7%) and between 15-19 years old (29.9%). Regarding race/color, there was a predominance of brown women (76.9%), and regarding education, there was a higher prevalence of incomplete 5th to 8th grade education with 389 cases (25.4%). Furthermore, the prevalent clinical classification at the time of diagnosis was the primary stage of the disease with 36.4%, followed by latent syphilis with 35.1%. It was also found that between 2018 and 2019, there was a significant increase in the performance of non-treponemal and treponemal tests, with the highest value in 2019 (390 non-treponemal tests and 352 treponemal tests), with a decrease in subsequent years. **CONCLUSION:** It is inferred, therefore, that in the region, the most affected epidemiological profile of syphilis during pregnancy encompasses a population predominantly made up of brown women, aged between 20 and 29 years old, and with low levels of education. Therefore, it is necessary to direct social policies to this vulnerable group, aiming to reduce the complications of this infection in the mother-child dyad. Furthermore, there is a need for more vigorous interventions aimed at prevention, early diagnosis, and appropriate treatment of syphilis in Maranhão.

**233. EPIDEMIOLOGICAL PROFILE OF PULMONARY TUBERCULOSIS IN SMOKERS IN MARANHÃO FOR A DECADE**

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**INTRODUCTION:** Tuberculosis (TB) is an infectious disease mainly caused by *Mycobacterium tuberculosis*. Its spread occurs primarily through the inhalation of particles containing bacilli, with pulmonary symptoms characterized by cough, weight loss, and night sweats. Smoking increases the risk of TB by decreasing immune response and impairing ciliary function, thus increasing susceptibility to infection and affecting treatment adherence. Therefore, this study aims to outline the epidemiological profile of pulmonary tuberculosis in smokers in the state of Maranhão from 2013 to 2022. **METHODS:** This is a descriptive, cross-sectional, quantitative study using secondary data from the Notifiable Diseases Information System of the Unified Health System (SINAN/DATASUS). The following variables were analyzed: year, sex, age group, race, education, health region, and treatment outcome. **RESULTS:** Maranhão accounted for 10% of pulmonary tuberculosis cases among smokers in the Northeast during the study period. Among smokers in Maranhão, 15% had tuberculosis, with pulmonary TB being the most common form (95%). The number of cases among smokers increased over time, with a slight decrease in 2020 (n=454) but a subsequent rise in 2021 (n=556), reaching a peak in 2022 (n=694). Males were most affected (83%), with the highest prevalence observed in the 20-39 years age group (48%) and 40-59 years age group (36%). The most common race was mixed (72%), followed by black (17%). The most affected education level was incomplete elementary education (24%). São Luís was the health region with the highest number of cases (54%). Regarding treatment outcomes, 50% resulted in cure, 20% in treatment abandonment, and 5% in tuberculosis-related deaths. The highest increase in treatment abandonment and deaths was observed from 2020 to 2021. **CONCLUSION:** Pulmonary tuberculosis is the most common form of the disease affecting the smoking population during this decade. The most affected profile includes male smokers of mixed race, aged 20-59 years, with low levels of education. Therefore, there is a need to establish and strengthen public policies targeting the most affected population to reduce the number of cases and treatment abandonment rates.

**234. EPIDEMIOLOGICAL PROFILE OF AIDS CASES IN THE LUDOVICENSE REGION BETWEEN 2019 AND 2022**

Marla Maria de Sousa<sup>1</sup>, Marianna Sousa Costa<sup>1</sup>, Nielson Amorim Frota<sup>1</sup>, Maria Eduarda Alvim Martins Vieira<sup>1</sup>, João Batista Padilha Filho<sup>1</sup>, Damylla Garreth Alves de Sousa<sup>1</sup>, Alessa Samya Sérvulo Rodrigues<sup>1</sup>

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**INTRODUCTION:** Acquired Immunodeficiency Syndrome (AIDS) is a chronic disease caused by the human immunodeficiency virus (HIV) that primarily affects the immune system. The treatment for this condition is antiretroviral therapy (ART), provided free of charge by the Unified Health System (SUS). However, despite the availability of treatment, AIDS is considered a significant public health problem due to the high number of deaths and other biopsychosocial factors associated with it. Therefore, early detection of cases in the Ludovicense area is urgent through active case finding, as the disease has a slow and progressive course, in order to halt its progression. Thus, the project aimed to analyze the epidemiological profile of AIDS patients in the metropolitan region of São Luís, Maranhão, between 2019 and 2022. **METHODS:** Epidemiological, descriptive retrospective study, conducted by collecting data on reported AIDS cases in the municipality of São Luís from 2019 to 2022, from the database of the Notifiable Diseases Information System (SINAN), provided by the Unified Health System (DATASUS). The following were studied: number of notifications per year, gender, age group, and educational level of reported cases. **RESULTS:** 427 cases of AIDS were reported in the capital of Maranhão between 2019 and 2022, with decreasing numbers over the years, with 45 notifications in 2022. The male population accounted for 68.79% of cases, while females accounted for 31.20%. Furthermore, the most affected age group was 35 to 49 years old, accounting for 43.26%, while those under 35 years old represented 32.86%. Regarding educational level, only 8.2% had completed higher education, and about 60% of cases did not complete high school. **CONCLUSION:** Thus, it is evident that the epidemiological profile of AIDS cases in the metropolitan region of São Luís is predominantly men aged 35 to 49 years old, with the majority having incomplete high school education. Therefore, it is important to emphasize the need for preventive public health policies focused on education for this affected population, aiming to reduce the incidence and improve public health in the capital, ensuring the enhancement of disease diagnosis and control strategies.

**235. EPIDEMIOLOGICAL PROFILE OF LEPROSY CASES BETWEEN 2019 AND 2023 IN THE STATE OF MARANHÃO**Ana Carolina Leal Melo<sup>1</sup>; Mariana Alencar Bisinotto<sup>1</sup>  
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**INTRODUCTION:** Leprosy, also known as Hansen's disease, is a chronic infectious condition caused by *Mycobacterium leprae*. This pathology exhibits various clinical forms and reactive states dependent on the host's specific immunity, characterized by alterations in thermal, painful, and tactile sensitivity, particularly in extremities, and may result in permanent disabilities. Despite being freely treatable in Brazil, leprosy is considered a high burden in the country, posing a significant public health concern. In this perspective, the objective of the present study was to analyze the epidemiological profile of leprosy in Maranhão between the years 2019 and 2023. **METHODS:** This study is an epidemiological analysis of confirmed and reported leprosy cases in the state of Maranhão from 2019 to 2023. It is characterized as retrospective, bibliographical, and comparative, conducted through the DATASUS/SINAN/TABNET platform and the Ministry of Health. **RESULTS:** A total of 13,259 cases of leprosy were reported in the state of Maranhão, with a predominance in the year 2019. Analyzing epidemiological parameters, there was a higher prevalence of the disease in males, accounting for 61.4% of cases. Regarding race, individuals self-declared as mixed race led the number of notifications with 9,073 diagnoses. In terms of education, there was statistical diversity; however, the minority of cases (368) had completed higher education, while the majority had no basic educational background, particularly without completing elementary education. In terms of age, there was a prevalence of cases in adults. Concerning clinical parameters, the multibacillary form of the disease prevailed, with 11,268 cases (85%), as well as the dimorphic pattern with 7,445 cases (56%). In the assessment of the degree of physical disability, the majority were reported with either zero (6,778) or grade I (4,118). Additionally, reactive episodes were low, and the most used therapeutic regimen in 11,132 cases (84%) was PQT/MB/12 doses. **CONCLUSION:** There was a predominance of the multibacillary form of the disease in males and individuals self-declared as mixed race. Furthermore, the influence of sociodemographic factors was evident, with individuals with low educational attainment predominating in the number of reported cases. The high frequency of leprosy cases in Maranhão highlights a public health problem and underscores the need for future interventions to enhance healthcare assistance.

**236. EPIDEMIOLOGICAL PROFILE OF ACUTE KIDNEY INJURY CASES IN MARANHÃO FROM 2017 TO 2021**Maria Eduarda Alvim Martins Vieira Farias<sup>1</sup>, Danylla Garreth Alves de Sousa<sup>1</sup>, Marla Maria de Sousa<sup>1</sup>, Max Danilo Bezerra Policarpo Sousa<sup>1</sup>, Marianna Sousa Costa<sup>1</sup>, Nielson Amorim Frota<sup>1</sup>, João Batista Padilha Filho<sup>1</sup>  
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**INTRODUCTION:** Acute Kidney Injury (AKI) can be defined as the sudden loss of renal function, regardless of etiology or mechanisms, leading to the accumulation of nitrogenous substances (urea and creatinine), accompanied or not by decreased urine output. Thus, this study aims to analyze cases of mortality due to acute kidney injury in the state of Maranhão, Brazil, focusing on parameters such as the number of deaths by age group, sex, and race/ethnicity. **METHODS:** This is an epidemiological, observational, retrospective, and descriptive study, utilizing data collected from the DATASUS website of the Ministry of Health, through the Tabnet tool, covering the period from 2017 to 2021. **RESULTS:** During the study period, 1,035 cases were reported in the state of Maranhão, with the highest occurrence in the year 2021. The majority of cases occurred in individuals over 15 years of age, predominantly in males, and there was a significant highlight for the brown ethnic group regarding race/ethnicity. The highest coefficients were observed in the elderly age group, aged 70 years or older. Additionally, there was a growing trend for both sexes, but with a stronger emphasis on females. **CONCLUSION:** It is concluded that the analysis of the number of deaths and, consequently, the epidemiological profile of cases of acute kidney injury in the state of Maranhão, Brazil, is essential to encourage and improve disease treatment by understanding the resurgence and prevalence of the condition in the region. Thus, there can be an improvement in multidisciplinary work for the recovery of existing cases and the prevention of new cases, allowing for better direction and implementation of public policies in the described state.

**237. PROFILE OF ADMISSIONS FOR TRAUMATIC BRAIN INJURY IN MARANHÃO FROM 2018 TO 2023**

Layanne Silva Oliveira<sup>1</sup>, Thajison Robert Menezes de Holanda<sup>1</sup>, Isabela Carolyne de Melo Costa<sup>1</sup>, Lucas de Paula Nascimento Barros<sup>1</sup>, Brendon Matheus dos Santos Furtado<sup>1</sup>, Valeria de Jesus Menezes de Menezes<sup>2</sup>

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**INTRODUCTION:** Traumatic brain injury (TBI) refers to any trauma in which the brain parenchyma or the structures underlying it are impacted. This occurs due to falls from a height, traffic accidents and external physical violence, and may also be influenced by risk factors that increase the propensity for trauma, for example, drug consumption. Furthermore, it is associated with complications that give the individual temporary or permanent limitations, resulting in a major impact on hospital expenses and the dynamics of the family involved. The objective of the work is to analyze the profile of hospitalizations for TBI in children and adolescents in Maranhão.

**METHODS:** This is an epidemiological, retrospective, quantitative and descriptive study based on data made available by the Department of Informatics of the Unified Health System (DATASUS). The studied population consisted of cases of hospital admissions due to TBI, in Maranhão, between the period from July 2018 to July 2023, with individuals under 1 year old up to 14 years old. The correlated variables were: number of hospitalizations, year of care, sex, age group, deaths, average number of days of hospitalization. **RESULTS:** During the period studied, 2,271 hospitalizations were carried out, the majority in the North macro-region (1,281), with a predominance of the age group from 1 to 4 years old with 743 cases (33%) and around 98 hospitalizations were urgent. The year with the most hospitalizations was 2022 with 475 (20.91%), followed by 2019 with 456 (20.07%). Males were the most affected by trauma with 1,424 hospitalizations (63%). The average stay of hospitalizations was longer in individuals aged 10 to 14 years with an average of 5.5 days, followed by children aged 5 to 9 years with 4.5. Regarding deaths, 66 children died due to TBI, the majority of which were males with 39 cases (59.09%). **CONCLUSION:** Given these data, the relevance of the topic for the prevention of TBI can be observed, especially in early childhood, given the prevalence of cases, resulting in a risk of complications, such as disabilities, decreased neuropsychomotor development and death. Therefore, educational measures are necessary that includes parents and guardians, with the aim of avoiding traumas of any nature in the home environment and beyond.

**238. SYMPTOMATOLOGICAL AND SOCIODEMOGRAPHIC PROFILE OF CHILDHOOD AND YOUTH DEPRESSION IN BRAZIL TODAY**

Antônia Márcia Dutra Rabelo<sup>1</sup>, Myrelle Salgueiro Porto de Sá<sup>1</sup>, Mariana Clara Borges da Silva<sup>1</sup>, Luanna Stefanny Campos do Nascimento<sup>1</sup>, João Henrique Xavier de Oliveira<sup>1</sup>, Lara Bezerra de Matos<sup>1</sup>, Sheila Elke Araújo Nunes<sup>1</sup>

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**INTRODUCTION:** Depression is a disabling mental disorder that can affect any age group, social class and ethnicity. According to the World Health Organization (WHO), the number of cases of depression in children aged 6 to 12 has increased from 4.5 to 8% in 10 years, which demonstrates the need for attention to the diagnosis and treatment of this population. The aim of this study was to identify the main symptoms and sociodemographic profile of Brazilian children and adolescents diagnosed with depression. **METHODS:** This is an integrative review, carried out by searching the LILACS, BVS and MEDLINE databases. The following descriptors were used with Boolean operators: "childhood depression", "depression in adolescence" and "symptoms of depression", among others. The inclusion criteria were: 1) publications from 2018 to 2023; 2) in Portuguese and English; 3) population studies in children and adolescents; and, 4) carried out in Brazil. Systematic or literature reviews, dissertations and those not available in full were excluded. Initially, 25 articles were selected and the exclusion criteria applied, leaving 6 articles. **RESULTS:** In the studies analyzed, the application of assessments and scales, such as the Emotional Self-Regulation Scale (EARE), in the public aged 7 to 18 in 5 large Brazilian cities, pointed out the most common symptoms in most children: lack of concentration, hopelessness, feeling of loneliness, helplessness and poor self-regulation, especially after the COVID-19 pandemic. Regarding the profile of the children, boys aged between 7 and 12 showed greater difficulty in problem-solving, aggression and suicidal ideation, while girls showed anhedonia, a desire to cry and a change in appetite. In adolescence, gender issues stand out, as women face more adversity than men due to socialization, endocrine changes and higher stress levels. In addition, the socio-economic and family context affects the psychological state of these patients, such as the death or illness of a family member, parental unemployment, psychological or physical abuse, making them more prone to self-harm. **CONCLUSION:** Depression in children and adolescents is multifactorial and symptoms require attention from caregivers. Finally, the stigmatization of the condition, the scarcity of public health policies, guidelines and studies on the subject highlight the need for a greater approach to the subject.

239. **SOCIODEMOGRAPHIC PROFILE AND HEALTH CONDITIONS OF THE ELDERLY IN A MUNICIPALITY IN THE STATE OF MARANHÃO**

Christianne Silva Barreto<sup>1</sup>, Juliana Barbosa Costa<sup>1</sup>, Beatriz Maria Mesquita de Mello e Silva<sup>1</sup>, José Ivanildo Frota de Paula Pessoa<sup>1</sup>, Emanuelle Quirino Ribeiro<sup>1</sup>.

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**INTRODUCTION:** In 2016, Brazil had the 5th largest elderly population in the world and, by 2030, this group will be larger than the total number of children aged between 0 and 14. In Maranhão, 13.2% of the population is aged 60 or over. Ageing is heterogeneous and varies according to sex, gender and ethnic-racial relations, socio-cultural and economic aspects, as well as where people live. Therefore, the aim of this study was to assess the sociodemographic profile and health conditions of the elderly in Caxias-MA who attended the Senior Living Centers (SLC). **METHODS:** This was an analytical, cross-sectional study with a quantitative and qualitative approach. The study included elderly people attending 7 SLC in the city of Caxias-MA, aged 60 or over, of both sexes, after signing an informed consent form. A questionnaire was used with socio-demographic information, health conditions and lifestyle habits. Descriptive statistics were analyzed using measures of central tendency and dispersion for continuous variables, relative and absolute frequencies for categorical variables and contingency tables with the Chi-square association test to verify the relationship of independence between qualitative variables. The study was registered on the Brazil Platform and began after approval by the Research Ethics Committee under CAAE number 51152121.0.0000.5554. **RESULTS:** In 2022, 143 elderly people were interviewed, and the majority of the sample were: women (90.9%), mean age of 72.3±7.81 years, brown (57.3%), elementary school (55.9%), retired (95.8%), widowed (43.4%), self-rated health as regular (53.1%), exercise regularly (53.1%), use 1 to 2 medications a day (47.6%) - while 11% do not use any medication, do not smoke (88.1%), do not consume alcohol (89.5%), have difficulty sleeping (50.3%) and attend religious activities (87.4%). Analysis of the contingency tables showed a statistically significant association between alcohol consumption and gender - higher frequency in males (35.7% versus 8.9%). **CONCLUSION:** Thus, the profile of the elderly attending the SLC in the municipality of Caxias - MA is considered to be healthy, with active ageing, no addictions, no polypharmacy, but with significant difficulty in sleeping, as well as greater alcohol consumption among males.

240. **SOCIOECONOMIC PROFILE OF MEN WITH PENILE CANCER IN MARANHÃO BETWEEN 2011 AND 2021**

João Arthur Duarte Cantanhede<sup>1</sup>, Yasmin Andrade Sampaio<sup>1</sup>, Fabrícia Cristina da Cruz Sousa<sup>1</sup>, Leonardo Silva dos Santos<sup>1</sup>, Layla Carolina Barros Leite<sup>1</sup>, Larissa Emilly Fiúsa Do Monte<sup>1</sup>, Ana Gabriela Caldas Oliveira<sup>1</sup>

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**INTRODUCTION:** Penile cancer is a rare neoplasm that is considered a serious public health problem, especially in developing countries. Brazil has one of the highest incidences in the world. In Maranhão, its incidence even exceeds that of prostate cancer. The occurrence of this neoplasm is associated with smoking, phimosis, poor hygiene habits, the individual's lifestyle, sexual life with multiple partners and unprotected, and especially contamination by the human papilloma virus (HPV) and low socioeconomic conditions. **METHODS:** This is a descriptive study using data recorded in the Mortality Information System linked to the Department of Informatics of the Unified Health System (SUS) for the state of Maranhão between 2011 and 2021. **RESULTS:** There were 276 deaths from this neoplasm, with a significant decline starting in 2017, with 31 deaths, which fell to 19 in 2018. However, this percentage increased again in 2019 and remained high until 2021, with a peak of 30 deaths. As for sociodemographic characteristics, there were more deaths in the age group of 80 years or more, corresponding to 22.10% of the total, and in second place, in the 50-59 age group, representing 20.65%, which increased between 2017 and 2021. As for color/race, most men were brown, accounting for 64.13%. In terms of schooling, men with no schooling accounted for 40.21%. Marital status is still predominant, with 117 cases (42.39%), although in 2020 there was a predominance of single men (33.33%). In addition, when using the TNM staging system, it was noted that, from 2013 to 2021, most cases were in stages III to IV, corresponding to 25.30% of the total 245 cases of penile cancer recorded in that period. **CONCLUSION:** The study showed that mortality from penile cancer remained high. There was a predominance of deaths in the elderly age group, with a change and increase in mortality among men aged 50 to 59 between 2017 and 2021. About education, there was a predominance of deaths among men with no or little education. The analysis of staging in the period observed led to the conclusion that diagnosis is still predominantly late. It is therefore essential to reflect on how socioeconomic factors influence mortality from this neoplasm and the need to invest in prevention.



**241. PERFORMANCE OF THE H2FPEF SCORE FOR HFPEF DIAGNOSIS - A LITERATURE REVIEW**

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**INTRODUCTION:** Heart failure with preserved ejection fraction (HFpEF) accounts for more than half of heart failure (HF) cases but remains underdiagnosed due to the lack of precise diagnostic parameters. This condition may manifest as exertional dyspnea unexplained by other cardiac or pulmonary conditions. The gold standard method is right heart catheterization under stress, an invasive, costly, and technically complex examination. Hence, scoring systems have been developed to estimate the probability of HFpEF, allowing for a more practical and secure diagnosis or exclusion of this condition. The aim of this study was to evaluate the performance of the H2FPEF score. **METHODS:** Systematic literature review of the H2FPEF score performance for diagnosing heart failure with preserved ejection fraction, based on the analysis of 10 articles and national and international guidelines found in the "PubMed" database published from 2018 to 2023. **RESULTS:** The H2FPEF score utilizes clinical and echocardiographic data. The method applies the variables: atrial fibrillation, scoring 3; weight (BMI > 30 kg/m<sup>2</sup>), scoring 2; hypertension (use of 2 or more antihypertensive medications), pulmonary hypertension (PSAP > 35 mmHg), age (> 60 years), and filling pressure (E/e' > 9), each scoring 1. Literature indicates that individuals with high scores (6-9) have over 95% probability of HFpEF, while a score of 0 or 1 is associated with a probability of less than 25%. Patients with intermediate scores (2-5) should undergo additional tests such as diastolic stress echocardiography or resting/exercise catheterization. Of the articles analyzed, 80% (n=8) agreed on the accuracy of the score in diagnosing the disease. However, 20% (n=2) of the articles identified the lack of NT-proBNP evaluation as a weakness, highlighting it as an important marker for HFpEF. All analyzed articles demonstrated the score's utility for prognostic evaluation as well, showing good sensitivity. **CONCLUSION:** The H2FPEF score is a viable alternative for diagnosing HFpEF as it employs non-invasive and lower-cost parameters. However, it has weaknesses such as the absence of NT-proBNP evaluation, which is now part of the diagnostic criteria in major guidelines.

**242. MATERNAL PERSPECTIVES ON CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION**

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**INTRODUCTION:** The development of congenital Zika virus syndrome occurs from transplacental transmission from the infected mother by the bite of the Aedes mosquito to the developing embryo or fetus. In this scenario, the Zika virus infects a group of human neural precursor cells, causing cell death and impairing the development of the fetal nervous system. Therefore, considering the countless consequences of this disorder to the affected children and families, this research aims to evaluate the maternal perspectives involved in the congenital Zika virus syndrome (CZS). **METHODS:** This is a narrative review of the literature, carried out in September 2023 in the PUBMED, Scielo and Google Scholar databases, using the indexed descriptors "Zika Virus", "Mothers" and "Congenital Syndrome", covering researches published between 2018 and 2022. Thereby, 6 articles related to the theme of maternal perspectives on CZS were selected, from which the required data was extracted to achieve the defined objective. **RESULTS:** According to the articles, the conception of children diagnosed with CSZ intensifies the typical concerns and feelings of motherhood, so that the psycho-emotional changes take on additional components. At first, faced with the diagnosis, the expectation of a healthy child is shattered, and feelings of frustration, fear and rejection are common. Another aspect which proves challenging is the change in daily routine due to the required care, which especially burdens the maternal figure by reducing the time dedicated to personal care, leisure and work activities. In addition to that, the frequent inability of the mother to maintain her work activity, added to the increased costs with medication, commuting to health services and relocating in order to be closer to treatment centers, lead to a worsening quality of life. **CONCLUSION:** The development of a child affected by SCZ is a challenge in all its spheres. Therefore, the complexity of family relationships is notorious, especially maternity, in the face of the diagnosis. The psychological and social repercussions to which mothers are subjected negatively affect the strengthening of the mother-child bond, idealized during pregnancy, resulting in a complex matter that transcends the family context and becomes an obstacle to public health.

243. **COMPLICATED EMPHYSEMATOUS PYELONEPHRITIS DUE TO RENAL LITHIASIS: CASE REPORT**

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**INTRODUCTION:** Emphysematous pyelonephritis (PE) is a rare infectious necrotizing condition of the renal parenchyma. It is characterized by the presence of gas in the kidney tissue and is generally associated with diabetes mellitus and obstructive uropathy. The objective of this study was to report a case of PE, with an emphasis on clinical management, based on intensive support and antibiotic therapy, without the need for surgical intervention of nephrectomy. This report was submitted for evaluation by the Research Ethics Committee (CEP), in accordance with the guidelines and regulatory standards for research involving human beings, approved according to Certificate of Presentation for ethical assessment no. 54533521.0.0000.5084. **CASE DESCRIPTION:** Female patient, 45 years old, decompensated diabetic, admitted to an emergency care unit, reporting pain in the left flank, radiating to the pelvis, associated with fever, chills, nausea and vomiting. Abdominal computed tomography revealed stones grouped in the left proximal ureter, left renal lithiasis, in addition to gas foci indicating an infectious process. The patient was admitted with a clinical-radiological diagnosis compatible with PE. Initially, the double J catheter was implanted due to obstruction of the proximal ureter. To treat emphysematous pyelonephritis, she underwent only conservative clinical treatment using the antibiotic pipetazo and adequate glycemic control with insulin therapy, without the need for surgery. And, after the cycle of antibiotic therapy and glycemic control, the patient underwent flexible ureterorenolithotripsy to remove the calyceal stones. **CONCLUSION:** PE is a rare and critical condition, traditionally approached with surgical management. However, this case report demonstrated that when the infectious focus is controlled, a conservative and not necessarily surgical approach can be adopted. Therefore, glycemic control in patients with severe kidney infections, early diagnosis and treatment are crucial to avoid potentially fatal complications.

244. **PRENATAL CARE: IMPORTANCE AND SERVICES PROVIDED IN BRAZILIAN HEALTHCARE**

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**INTRODUCTION:** Quality prenatal care includes several measures aimed at reducing complications or negative impacts on the health of women and newborns. Since the Ministry of Health establishes a minimum support of procedures and exams to be offered to all pregnant women during prenatal care, the objective was to analyze the importance of the quality of these in the prenatal care provided to healthcare users in Brazil. **METHODS:** This is a descriptive-exploratory bibliographic research with a qualitative approach using the Scientific Electronic Library Online database in the last 5 years, using the descriptors prenatal care, primary care, and quality of health care. **RESULTS:** Regarding the organization of prenatal care, there is a predominance of utilization of public services. Women receiving prenatal care in private facilities have a predominance in undergoing exams and consultations compared to those assisted by the public system. The number of consultations in the public service was lower due to lower purchasing power and greater difficulty accessing health services, as well as a lack of guidance on the importance of prenatal care attendance. Regarding the coordination of prenatal care with other services in the state's health network, there were reports of problems in referrals to high-risk reference services. Studies show that the quality of care provided during prenatal care is closely related to favorable outcomes during childbirth and the postpartum period, and that women who received guidance during prenatal visits had fewer complications during these phases. **CONCLUSION:** Despite the significant number of prenatal consultations in the private sector compared to the public sector, both services fall short in providing care, with a predominance of private sector assistance. There is a need to improve the quality of prenatal care, provide technical training for healthcare professionals, and adhere to pre-established technical standards in both sectors, but especially in the public network. All of these tools are essential for finding new outcomes, aiming for comprehensive, equitable, and quality care for all pregnant women.

245. **BRAZILIAN PRISONERS: NARRATIVE REVIEW OF THE MOST COMMON DISEASES AND THEIR CHARACTERISTICS**

Kauã Manuel Costa Araújo<sup>1</sup>, Bruna Ory Pinto Bandeira<sup>1</sup>, Graziela Gama da Conceição Gomes<sup>1</sup>, Ana Carolina Celidonio Almeida Campos<sup>1</sup>, Beatriz Santos Pinheiro<sup>1</sup>, Ana Clara de Carvalho Costa<sup>1</sup>, Michelline Joana Tenório Albuquerque Madruga Mesquita<sup>2</sup>.

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**INTRODUCTION:** According to the Brazilian Public Security Yearbook, in the year 2022, there were 832,295 individuals deprived of liberty (PDL) in the country. This situation becomes alarming as the conditions to which individuals are subjected are degrading, such as unsanitary cells and limited space. This condition facilitates the spread of diseases, whether infectious or psychosocial syndromes. Thus, the present study aims to characterize the scenario of diseases affecting Brazilian inmates. **METHODS:** This is a narrative review that used the descriptors "epidemiology," "epidemiological profile," "disease," "illness," "incarcerated," and "prisoners" associated with Boolean operators in two databases: Virtual Health Library and PubMed, in September 2023. Articles written in Portuguese or English published between 2018 and 2023 were included. A total of 27 articles were found, of which only 4 answered the research question and were chosen to constitute this study. **RESULTS:** The articles corroborate the high prevalence of infectious diseases among PDL, with emphasis on tuberculosis and Human Immunodeficiency Syndrome (AIDS), compared to the general population. The causes of the high rates of these pathologies were: inadequate prison conditions, such as overcrowding, which favor the spread of the Koch bacillus, and the sexual violence suffered by inmates, responsible for the development of AIDS. In addition, regarding chronic diseases, the most mentioned illnesses in the articles were arterial hypertension, asthma, and mental disorders. Thus, more than 40% of inmates presented depression or anxiety, about 20% of the studied population had asthma, and more than 20% were hypertensive. This is due, among other issues, to the fact that approximately 90% of individuals deprived of liberty reported not having access to healthy food, associated with inadequate lifestyles and favorable to the highlighted diseases, such as sedentary behavior. **CONCLUSION:** The harmful context of high population density and unsanitary conditions in Brazilian prisons is notably a problem of great relevance and expression in public health. Therefore, the epidemiology of the illnesses presented by PDL is intimately linked to the precarious environments that surround them, resulting in a high prevalence of infectious diseases, as well as chronic physical and mental damages.

246. **PREVALENCE OF ALZHEIMER'S AND PARKINSON'S AND ITS ASSOCIATION WITH ANTHROPOMETRIC VARIABLES**

James Pereira Alves Junior<sup>1</sup>, Amanda Maria Paiva Pereira<sup>1</sup>, Renata de Oliveira Gonçalves<sup>2</sup>, Joelma Ximenes Prado Teixeira Nascimento<sup>2</sup>, Ludmylla Fontenelle Lopes Chaves<sup>3</sup>.

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**INTRODUCTION:** Brazil has been experiencing population aging, a situation in which there is a higher incidence of Alzheimer's and Parkinson's among the elderly population. In addition to senility, this finding may be a product of the interaction between this condition and other environmental factors (sedentarism, poor diet, and smoking). For this reason, nutritional assessment plays a fundamental role in the prevention and control of these diseases. The objective of this study was to analyze the prevalence of Alzheimer's and Parkinson's, and their association with anthropometric variables of Estudo Longitudinal da Saúde dos Idosos Brasileiros (ELSI-Brasil). **METHODS:** This is a cross-sectional study conducted with data from the second wave of ELSI-Brasil (2019-2021) in adults aged 60 years or older. The variables included were: socioeconomic and demographic (age, gender, self-reported skin color, marital status, education, family income), behavioral (alcoholism, smoking and physical activity level), anthropometric (Body Mass Index - BMI, waist circumference - WC, waist-to-hip ratio - WHR, waist-to-height ratio - WHtR), and neurodegenerative diseases. To analyze the data, Stata® version 14.0 was used, and the association between anthropometric variables and neurodegenerative diseases was performed using the Chi-square test ( $p$ -value < 0.05). The study was approved by the Ethics Committee of the Fundação Oswaldo Cruz of Minas Gerais (CAAE: 34649814.3.0000.5091). **RESULTS:** 7072 elderly people were studied, with a female predominance (61.1%), mean age of 70.1±8.8 years, ranging from 60 to 109 years old, self-declared white skin color (47.3%), stable marital status (50.2%); low education level (78.2%); low income (58.5%); reported alcohol consumption (18.2%); smoking (10.8%) and sedentary (72.2%). The medical diagnosis of neurodegenerative disease was reported by 5.2% of participants for Alzheimer's and 1.1% for Parkinson's. Regarding anthropometric variables, significantly elevated means were evidenced in relation to the recommended values. No statistically significant association was observed between the studied variables and neurodegenerative diseases ( $p$  value > 0.05). **CONCLUSION:** The findings reiterate the importance of investigating risk factors associated with neurodegenerative diseases. Furthermore, it is believed that the results support the structuring of protocols for dietitian to act in a systematic way to promote self-care for these individuals, especially among women.

247. **PREVALENCE OF CONGENITAL ANOMALIES BY REGION IN BRAZIL: 2019-2021**

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**INTRODUCTION:** Congenital anomalies (CA) are developmental disorders that occur during intrauterine life and represent the second leading cause of death in children up to five years of age in Brazil. As provided for by Law No. 13.685, CA in newborns has a compulsory notification nature. Despite the crucial role of the Live Birth Information System (SINASC) in registering births, under-registration still persists, as well as few regionalized studies that estimate the prevalence of CA based on these data. In this context, the main objective of this study was to determine the prevalence at birth of priority CAs in Brazilian regions from 2019 to 2021. **METHODS:** This is an epidemiological, cross-sectional, retrospective and descriptive study, quantitative presentation, with data collected from all live births registered at SINASC in the period from 2019 to 2021. A descriptive analysis of the data was carried out using absolute and relative frequencies. **RESULTS:** In Brazil, from 2019 to 2021, 8,256,392 live births were registered, with the prevalence of all CA in this period being 8.64/1,000 live births. The year with the highest case notification was 2019 (24,838) and the year with the lowest was 2021 (22,959). The most prevalent CA in the period under study was Q69.9 - unspecified polydactyly. Regarding the analysis of the prevalence of AC by region, the group of anomalies with the highest number of cases reported in the five regions of Brazil was "Other anomalies of the musculoskeletal system", with 19,065 cases. The group "Absence, atresia and stenosis of the small intestine" was less frequent in all regions, with the exception of the South region, in which it was "Congenital deformities of the hip". The Southeast region presented a rate of approximately 3.85/1,000, with 31,832 cases, equivalent to 44.6% of the total anomalies in the period. In the Northeast, the prevalence was 2.32/1,000, in the North, 0.73/1,000, in the South, 1.21/1,000 and, in the Central-West, 0.61/1,000 live births. **CONCLUSION:** The study describes the prevalence of CA in Brazil from 2019 to 2021, using SINASC to collect data. CAs are a relevant public health concern, with marked regional differences. During this period, Brazil recorded 71,393 cases of anomaly, with unspecified polydactyly being the most prevalent. In this work, the regionalization of ACs and affected groups provides valuable information to guide public policies, in addition to filling gaps in scientific production.

Clemerson Sousa dos Santos<sup>1</sup>, Kauã Manuel Costa Araújo<sup>1</sup>, Erwalber Mendes dos Santos<sup>1</sup>, Paulo Victor de Aguiar Ribeiro<sup>1</sup>, Wanderson Fortes de Sousa<sup>1</sup>, Igor Taylor Azevedo Lemos<sup>1</sup>.

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**INTRODUCTION:** Low birth weight (LBW) occurs, according to the World Health Organization (WHO), when the newborn (NB) weighs less than 2,500 grams. LBW directly interferes with neonatal and infant morbidity and mortality, as the lower the birth weight, the greater the risks to the newborn's life. The literature points to several risk factors for the occurrence of LBW, with prematurity and intrauterine growth restriction being the main ones among them. Therefore, estimating the proportion of LBW and its respective risk factors is extremely important for improving prenatal care. Therefore, this study seeks to determine the proportion of LBW and its respective risk factors, based on data reported by the Information System on Live Births (SINASC), seeking to contribute to understanding the variability of the prevalence of LBW in Brazil. **METHODS:** This is an analytical and cross-sectional study, with a quantitative approach. The study population were newborns in Brazilian macro-regions, notified by SINASC in 2020. The variables under study were: number of prenatal consultations, gestational age, type of delivery, birth weight, maternal education level and APGAR index. Data analysis was performed with R (version 4.3.0), considering a significance level of 0.05. Absolute and relative frequencies were calculated as well as the 95% confidence intervals. To evaluate the association between LBW and the variables under study, the chi-square test was used. **RESULTS:** In 2020, around 2,678,104 live births were reported by SINASC, of which 230,372 were LBW. The highest prevalence of LBW was observed in the southeast region with 9.22%, while the northern region had the lowest prevalence in the nation with 7.73% of cases. When evaluating the factors related to LBW, it was observed that gestational age, APGAR in the 1st minute of life, the number of prenatal consultations and maternal education level presented a statistically significant association ( $p < 0.05$ ) in all Brazilian regions. **CONCLUSION:** LBW is a condition with a multifactorial and highly complex cause, whose occurrence depends on conditions existing in each of the national regions. From this perspective, it is expected that the present work will help with the general understanding of the panorama of BPN in Brazil and that it can serve as a substrate for current literature regarding this condition.

248. **PREVALENCE OF LOW BIRTH WEIGHT IN BRAZIL**

**249. THE PREVALENCE OF CATARACT IN PATIENTS WITH DIABETES MELLITUS IN THE BRAZIL: LITERATURE REVIEW**

Victor de Souza Calixto Neves da Silveira<sup>1</sup>, Mayara Kelly Coelho Bêrredo<sup>1</sup>, Pedro Lopes Aragão Filho<sup>1</sup>, Darlan Ferreira da Silva<sup>1</sup>, Hanna Célia Almeida Serra<sup>2</sup>

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**INTRODUCTION:** Cataract is an ocular disease characterized by opacification of the lens, which leads to visual acuity problems, which is the main cause of blindness in Brazil. Thus, the relationship between cataracts and an increasingly prevalent medical condition – diabetes mellitus – is a relevant aspect, given the significant known risk factor for the development of cataracts. In this sense, it is essential to evaluate the prevalence of this eye disease in diabetic patients, emphasizing the importance of understanding the ophthalmologic complications that can lead to blindness, the social and economic consequences, as well as the prevention and treatment strategies. To analyze the prevalence of cataract in patients with diabetes in Brazil, as well as the risk factors associated with the development of this eye disease in diabetic people. In addition to evaluating the biological mechanisms underlying the relationship between diabetes and cataract and its social implications, based on the analysis of the parameters described in the literature. **METHODS:** This is a descriptive study, of the literature review type, involving statistical analysis and interpretation of data, in order to critically evaluate the current scenario of cataract prevalence in diabetic patients in Brazil. Articles were used as study bases, made possible by sites such as Scielo and Google Scholar from 2018 to 2022. **RESULTS:** It was found that, in Brazil, approximately 18 million people have cataracts, with a prevalence of senile cataracts in patients with diabetes compared to the general population. Among this total number of patients, women are more affected than men, with 26% and 22.6%, respectively, with the white ethnicity being the most affected, with about 18%. In this sense, factors such as the duration of the disease, age, glycemic control, and the use of medications increase the risk of developing cataracts. Concomitantly, in patients with DM, cataracts are mainly related to chronic hyperglycemia, which leads to changes in the structure of lens proteins, resulting in marked opacification and loss of transparency. Thus, the social implications of cataracts in patients with diabetes are significant, causing blindness or impaired vision, which can negatively affect quality of life, independence, and the ability to perform daily tasks. This leads to an increased reliance on caregivers and an increase in healthcare costs. As the incidence of diabetes continues to rise, understanding this relationship becomes critical to public health and patient well-being. **CONCLUSION:** Therefore, the follow-up of chronic diseases in Primary Care is essential so that cataracts in patients with diabetes can be controlled, avoiding the progression of this ocular condition and the need for future surgical procedures in Tertiary Care. In addition, the implementation of actions to raise awareness among the population in the communities is essential for an increase in adherence to treatment, which, consequently, will lead to a reduction in diseases associated with diabetes, such as cataracts.

**250. PREVALENCE OF CESAREAN DELIVERIES IN THE STATE OF MARANHÃO IN THE PERIOD OF 2018 - 2020**

Alcione Miranda dos Santos<sup>2</sup>, Francílio Gomes da Silva Junior<sup>1</sup>, Guilherme Magalhães Carrilho<sup>1</sup>, Isabela Marinho da Cunha<sup>1</sup>, Ludmylla Ellen Ferreira Freire<sup>1</sup>, Rafaela dos Reis Araújo<sup>1</sup>, Vanda Maria Ferreira Simões<sup>2</sup>

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**INTRODUCTION:** Cesarean birth is a surgical procedure in which the baby is removed through a cut in the mother's abdomen and uterus. Despite being considered safe, the excessive rate of this type of birth in Brazil represents a problem. In regard to the state of Maranhão, there is a lack of studies related to cesarean section rates among the health macro-regions. Therefore, the present work aims to describe the prevalence of cesarean sections in Maranhão from 2016 to 2020. **METHODS:** This is an analytical, cross-sectional, quantitative study determining the prevalence of cesarean deliveries in Maranhão from 2016 to 2020. The data were obtained using the Live Birth Information System (SINASC) available in the DATASUS database. Variables such as number and type of delivery were analyzed, associating them with maternal age, maternal education, skin color, and gestational age in each health macroregion of Maranhão. The data was processed using the R Studio program. **RESULTS:** A total of 286,935 vaginal deliveries (52.2%), 261,532 cesarean sections (47.5%), and 1,493 other/NA cases (0.3%) were recorded, with a total of 549,960 deliveries evaluated. Analyzing maternal age, women over 40 years old had 50.9% cesarean deliveries, followed by the 30 to 39 age group (57.5%), 20 to 29 years (46.9%), and under 20 years (38.7%). Regarding education, women with no schooling had 74.52% vaginal deliveries and 24.92% cesareans, while those with 12 or more years of education had a cesarean rate of 76.48%. White women had 63.42% cesarean deliveries, black women 41.18%, yellow-skinned women 50.58%, and mixed-race women 46.74%. Women with gestational age less than 37 weeks had a higher rate of vaginal deliveries (55.16%), while those with gestational age equal to or greater than 37 weeks had a higher number of cesareans (48.54%). The Northern macroregion had 144,805 cesarean deliveries (46.4%), while the Southern had 59,005 (49.4%), and the Eastern had 57,722 (48.8%). **CONCLUSION:** During the period analyzed, an increasing trend of cesarean deliveries was observed in the state of Maranhão, associated with advanced maternal age, higher level of education, white race/skin color and gestational age equal to or greater than 37 weeks. The South macro-region recorded the highest prevalence of cesarean sections, followed by the East and North macro-regions.



251. **PREVALENCE OF PRIMARY SPONTANEOUS PNEUMOTHORAX IN SMOKERS: INTEGRATIVE REVIEW**

Ana Clara Freitas Martins Costa<sup>1</sup>, Joana Tenório Albuquerque Madruga Mesquita Meireles Texeira<sup>1</sup>, Julia Rodrigues Ferreira Gomes<sup>1</sup>, Nathalia Chaves Bezerra<sup>1</sup>, Pedro Henrique Regalado Régis Cordeiro<sup>1</sup>, Maria Elza Lima Sousa<sup>1</sup>  
<sup>1</sup>Universidade Ceuma

**INTRODUCTION:** Pneumothorax is characterized by the presence of free air in the pleural cavity, it is a frequent clinical pathology that presents several peculiarities in its clinical presentation, and can happen spontaneously, being classified as primary, when it happens without a precipitating event, or secondary, when the person has past comorbidities; and in an acquired form, resulting from trauma. Tobacco consumption is the biggest risk factor associated with the appearance of subpleural lesions that progress to primary spontaneous pneumothorax (PSP). **METHOD:** This is an integrative review of the literature that evaluated the prevalence of primary spontaneous pneumothorax in smoking patients. Data collection was carried out on the Scielo, PubMed and Google Scholar platforms, including English and Portuguese. **RESULTS:** In primary spontaneous pneumothorax, bullae or subpleural lesions are found, particularly at the apices of the lungs. The rupture of these bullae is the factor responsible for this type of pneumothorax. Smoking considerably increases the risk of these lesions appearing, which evolve into PSP, with a strong dose-response link between the number of cigarettes smoked and the risk of pneumothorax. As smoking is the most important risk factor for the appearance of PSP, up to 88% of patients with this pathology are smokers in large-scale observational studies. A smoker, compared to non-smokers, has a 9 times higher risk in women and a 22 times higher risk in men of developing PSP. Cannabis smoking also increases the risk of developing spontaneous pneumothorax and is associated with the development of emphysematous changes and the development of lung disease. This pathology occurs predominantly in smokers as a result of the toxic substances present in cigarettes, which affect the action of the body's immune cells, thus causing tissue damage in the lungs, such as subpleural damage. The characteristic symptoms of PSP are chest pain and dyspnea, which can be diagnosed through physical examination, observing the reduction of breath sounds and chest expansibility. **CONCLUSION:** It is concluded that primary spontaneous pneumothorax is prevalent in smokers, as cigarette consumption favors the appearance of subpleural lesions that evolve into PSP, the risk is bigger for men and is increased by cannabis smoking.

252. **PREVALENCE OF EXCLUSIVE BREASTFEEDING IN THE FACE OF DOUBLE WORKING HOURS**

Ilanna Moraes Carvalho<sup>1</sup>; Ana clara Rosa Silva dos Santos<sup>1</sup>; Ana Luíza da Veiga Albino<sup>1</sup>; Maria Eduarda Moura Silva<sup>1</sup>; Carla Gabryella Marques<sup>1</sup>; Isabella Aragão Pachêco<sup>1</sup>; Francisca Bruna Arruda Aragão<sup>2</sup>  
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**INTRODUCTION:** Exclusive breastfeeding (EBF) is essential for the health of newborns and their mothers, as it has many nutritional, emotional and immunological benefits. These advantages are relevant, since continuous breastfeeding in the first year of life is capable of preventing one in every 7.5 infant deaths. Milk is a significant source of nutrition for infants, as it is made up of fats, proteins and carbohydrates, and protects against diabetes mellitus, digestive diseases, allergies, malnutrition and obesity. In Brazil, breastfeeding has received investment since 1981, with the establishment of the National Program to Encourage Breastfeeding (PNIAM), which resulted in an increase in exclusive breastfeeding rates in the country. However, with the current situation in Brazil, many breastfeeding women return to work earlier, interrupting breastfeeding and thus exposing their infants to industrialized products earlier. **METHODS:** This is an integrative literature review. A survey was carried out of articles from the last 20 years, obtained from the Virtual Health Library (VHL), Scielo and PubMed databases, using the English descriptors: "Breastfeeding", "Women" and "Work". The aim of the study was to analyze the prevalence of exclusive breastfeeding in the face of double working hours. The inclusion criteria were articles from the last 20 years in Portuguese and English, and the exclusion criteria were applied, excluding review studies. **RESULTS:** According to the studies analyzed, breastfeeding in the first hours of life and EBF up to 6 months are essential for the neonate's quality of life, avoiding morbidities and mortalities. There was a prevalence of breastfeeding up to 4 months of age, especially among women who work long hours, given that maternity leave lasts 120 days. Another study showed a prevalence in women who work close to home or who have a support network that can help them, such as health professionals and family members, with instructions on how to store milk. **CONCLUSION:** It can be concluded that family and professional support, adequate conditions in the workplace and a positive previous experience seem to be favorable parameters for a mother's decision to breastfeed. However, a major effort is still needed if Brazil is to achieve the rates recommended by the PNIAM among women who face a double working day.

253. **PREVALENCE AND RISK FACTORS FOR PLACENTA PREVIA: AN EPIDEMIOLOGICAL ANALYSIS**

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**INTRODUCTION:** The term placenta previa (PP) refers to a situation in which the placenta covers either fully or partially the internal cervical os. Currently, it has become more prevalent due to high rates of cesarean sections, advanced maternal age, multiparity, the use of artificial reproductive technologies, previous aspiration and curettage, smoking, and cocaine use during pregnancy. Additionally, this condition can be classified as major when it overlaps entirely or partially with the internal cervical orifice, and partial when the overlap is <20 mm. The former increases the risk of prepartum and postpartum hemorrhage, premature birth, and hysterectomy. Resolution typically involves cesarean section between 36-37 weeks. Knowing that, this study aims to describe the epidemiological profile of placenta previa between 2020 and 2023. **METHODS:** This is a descriptive epidemiological study based on data provided by the Departamento de Informática do Sistema Único de Saúde (DATASUS). The study population consisted of cases of hospitalizations in the SUS of women with placenta previa aged between 15 and 79 years in the state of Maranhão, reported between June 2020 and July 2023. **RESULTS:** Between 2020 and 2023, 943 hospitalizations for placenta previa occurred in the state of Maranhão, with the majority of cases in 2021 (31.57%). Of these hospitalizations, 98.5% (n=936) occurred as emergencies. Regarding macro-regions, it is noted that the north was responsible for the majority of cases (48.6%), followed by the south (34.5%) and east (16.8%). About socioeconomic aspects, this comorbidity was more frequent in women aged 20-29 years (51.6%, n=491), 30-39 years (31.2%, n=297), and 15-19 years (13.68%, n=130). Such predominance in the first two groups is also observed in other epidemiological studies. The financial cost associated with this condition is high, with R\$544,638.94 spent in Maranhão during this study period. **CONCLUSION:** The increase in hospitalizations over the years, coupled with the predominantly emergent nature of care, emphasize the importance of preventive measures and awareness strategies. The geographic distribution and associated costs highlight the need for efficient resource allocation. These data provide a solid foundation for future interventions aimed at improving maternal care in the state of Maranhão.

254. **PREVENTION OF CERVICAL CANCER: FREQUENCY OF PREVENTIVE REALIZATION AND EDUCATION**

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**INTRODUCTION:** Cervical cancer (CC) is mostly caused by persistent infection via subtypes of the Human Papillomavirus (HPV). It is the 4th most common among women in the world, although it is preventable and curable when detection and treatment are adequate. The scientific relevance of this research is based on the high prevalence of CC in the country and state and the need for increased bibliography to study this tumor. The objective is to outline the epidemiological profile of women diagnosed with this pathology in Maranhão from 2013 to 2022 and analyze the data collected. **METHODS:** A descriptive and observational study was carried out using data collected in the Cancer Information System (SISCAN) and the Cervical Cancer Control Information System (SISCOLO), from 2013 to 2022, seeking to trace the epidemiological profile of these women. **RESULTS:** 1.666,302 cytopathological tests were performed to screen for CC in the aforementioned interval. Of these, 98.72% were due to the indication for screening, while 0.40% were due to altered results – abnormality of squamous epithelial cells – and 0.86% were due to follow-up. Regarding the collection period for a new exam, 141,784 took it in the same year, 508,719 in one year, 253,626 in two years and 121,525 in three years; the rest of the sample had the period ignored or inconsistent. Furthermore, when stratifying age according to the screening indication by the Ministry of Health in the gap between 25 and 64 years for sexually active women, in this range, 1,333,360 tests were collected, while 252,321 were carried out at younger ages and 80,613 at older ages. recommended. Regarding education, 1,658,779 did not have the information recorded. However, incomplete primary education (N=3,454) predominates among the records, followed by, in descending order, complete secondary education (N=1,647), complete primary education (N=1,330), illiterates (N=776) and completed higher education (N=316). **CONCLUSION:** Cervical cancer is a significant public health concern, affecting a large number of women, a fact that is closely related to education. It is noteworthy that in the case of women with higher education, there is less notification due to the use of private health services. The screening exam is crucial for early detection and effective treatment regardless of the level of education, as well as education and awareness on the subject.

255. **PREVENTION AND CONTROL OF CHRONIC PAIN AFTER DIABETIC FOOT AMPUTATION: SYSTEMATIC REVIEW**

Ana Clara Arouche Lemos da Silva<sup>1</sup>, Marcelle Teixeira e Silva<sup>1</sup>, Anna Karoliny Freitas de Souza<sup>1</sup>, Francisco Santos de Almeida<sup>1</sup>, Renato de Freitas Farias<sup>1</sup>, Dâmaris Gonçalves Vieira<sup>1</sup>, Walquiria Lemos Ribeiro da Silva Soares<sup>1</sup>.

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**INTRODUCTION:** Amputation is a therapeutic procedure that involves the removal of a limb or part thereof. In Brazil, between 2008 and 2015, 361,585 amputations were recorded in the Hospital Information System of the Unified Health System. In patients with Diabetes Mellitus (DM), one of the most common complications is diabetic foot. It is estimated that 50 to 85% of amputated individuals develop post-amputation chronic pain (PACP). **METHODS:** This is a systematic review conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) method. The guiding question was: "What are the main measures for prevention and control of post-amputation chronic pain in diabetic extremities?" The studies were searched in electronic databases - National Institute of Medicine (NIH-PubMed), Scopus, and Web of Science, from September to October 2023. The following descriptors extracted from the Medical Subject Headings (MeSH) were used for the searches: "limb amputation," "secondary amputation," "repeat amputation," "diabetic foot," "pain," and "chronic pain." Boolean operators "AND" and "OR" were used for descriptor cross-referencing. **RESULTS:** Out of the total of 12 analyzed articles, the highest publication frequency was found in 2021 (n: 04), with the highest production of works in Australia (n: 02). Regarding the Qualis of the journals in the sample, 10 studies are classified between A1 and A4 by the Coordination for the Improvement of Higher Education Personnel (CAPES). **CONCLUSION:** Based on the analysis of the studies included in this review, it is possible to propose that various factors are involved in the prevention and control of post-amputation chronic pain, such as lifestyle, smoking, and factors related to DM clinic, such as cardiovascular diseases, peripheral neuropathy, ulcer severity, and previous presence of the lesion or other amputations. It can also be suggested that there is a strong protective effect of pain caused by preventive pharmacological therapies for post-amputation chronic pain (PACP), administered via epidural route, in combination with drugs applied in a perioperative regimen. Although the individual bias risk of the studies was low, further studies are recommended to strengthen the evidence.

256. **POTENTIAL OF PROBIOTICS AS ADJUVANT THERAPY IN THE ERADICATION OF HELICOBACTER PYLORI**

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**INTRODUCTION:** Peptic ulcers are lesions that occur in the lining of the stomach and duodenum, which can cause severe pain and discomfort to patients. Infection with the bacteria *Helicobacter pylori* is an important factor in the development of these ulcers. The appropriate approach to the treatment of *H. pylori* infection in peptic ulcers is essential for the healing of these lesions and prevention of their complications. Thus, the purpose of this work was to gather scientific evidence on the association of the use of probiotics in therapy to treat the eradication of *H. pylori*, in a systematic, orderly and comprehensive manner, in order to contribute to deepening knowledge on the topic. **METHODS:** This study consists of an integrative review. For the development of the work, a thorough search for original scientific articles published in the PubMed database was conducted using the descriptors "probiotic," "*Helicobacter pylori*" combined through the boolean operator AND. Inclusion criteria considered studies that presented the descriptors in the title or abstract and were written in English, being clinical trials. Articles written in languages other than English, as well as those whose title or abstract did not fit the proposed theme, were excluded. The bibliographic data search between 2022 and 2023 resulted in a total of 93 scientific articles. After extensive analysis, only 7 studies met all the selection criteria and were included in this study. **RESULTS:** Regarding the therapy adopted in cases of *Helicobacter pylori* infection, adjuvant therapy has demonstrated significant effectiveness. The groups that underwent additional treatment with probiotics and triple therapy had an average eradication rate of 83.39%. Furthermore, some studies have demonstrated an improvement in the inflammatory response and a reduction in adverse effects, such as a reduction in abdominal pain and bloating in 42% and 25% of cases, respectively. **CONCLUSION:** The addition of probiotics as adjuvant therapy has provided a series of benefits in the treatment of *Helicobacter pylori* infection. This therapeutic approach has shown promise by increasing the clearance rate of *H. pylori*, improving the composition of the intestinal microbiota, reducing the levels of inflammatory cytokines and minimizing the occurrence of adverse gastrointestinal effects.

257. **PHYSIOLOGICAL PRODUCTION OF NITRIC OXIDE: A NARRATIVE REVIEW**

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**INTRODUCTION:** Nitric oxide (NO) is a gaseous molecule that mediates important physiological pathways in the human body, produced by neurons, endothelial tissue, gastric protonation and macrophages. It can act as a second messenger in target molecules involved in vasodilation, pregnancy, bronchodilation, antithrombotic, neuronal action and combating some diseases. Given this, it is necessary to have a broad understanding of how NO production pathways occur and how they fit into the context of maintaining homeostasis. **METHODS:** This is a narrative review based on 8 articles selected from the Scielo and PubMed databases, which allowed a better understanding of the physiological pathways of NO production. **RESULTS:** In our body, NO is generated endogenously by the action of the enzyme nitric oxide synthase (NOS), which oxidizes the amino acid L-arginine into L-citrulline, the free radical .NO or simply NO, another route is the gastric acid action of ingested nitrites. NO acts on vasodilation, neurotransmission, bronchodilation, inhibition of platelet aggregation, production of gastric mucus, pregnancy and antimicrobial action. In this case, NO is produced in large quantities by macrophages and other cells of the immune system. In the central and peripheral nervous system, evidence suggests that NO acts as a neurotransmitter, mediating the adaptation capacity of synapses to conduct nerve impulses and promoting the release of hormones and other neurotransmitters, produced via glutamate in the synaptic cleft, which enables the activation of the neuronal NOS enzyme, participating in memory and learning. Non-adrenergic non-cholinergic (NANC) nerves release NO and promote bronchodilation. In the cardiovascular system, NO is produced by the endothelial cells of blood vessels and promotes smooth muscle relaxation and inhibition of platelet aggregation by activating the soluble guanylate cyclase enzyme. Stomach NO formed from the protonation of nitrites concentrated in saliva, mediates blood flow and mucus production in the mucosa. During pregnancy, it is involved in ovulation, implantation, maintenance of pregnancy, labor and birth. **CONCLUSION:** The relevance of NO for maintaining the functionality of important physiological events in the human body becomes evident. NO is currently the main topic of numerous scientific studies, as there is still a lot to understand about the role of this molecule in our organism.

258. **WHEN BURN BECOME CANCER: A REVIEW OF MARJOLIN'S ULCERS**

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**INTRODUCTION:** Marjolin's ulcer (MU) is a health condition in which injured chronic healing wounds become malignant processes. Despite its rarity, its incidence is increasing due to population aging, which indicates the need to investigate this neoplastic phenomenon. Against this backdrop, this study aims to investigate the relationship between burns and the genesis of MU. **METHODS:** A bibliographic survey, carried out on the VHL, Scielo and Pubmed platforms, of studies addressing the theme of MU, published in Portuguese and English between 2017 and 2023. As exclusion criteria, articles outside the survey period or in another language were not analyzed. **RESULTS:** The etiology of Marjolin's ulcer is made up of a number of factors, which are influenced by local trauma, although this event in itself is not carcinogenic. The average latency period between the initial wound and the discovery of malignant degeneration is 30 to 35 years, and the average age of presentation is 59 years. This trauma aids in the malignization of the lesion, as it intensifies some carcinogenic factors, such as ultraviolet rays, due to the greater sensitivity of traumatized skin. Low and middle-income countries are the main countries to report MU and need opportunities for prevention and early detection. Injuries were still most frequently located on the lower extremities of the body. The most common type of tumor in this ulcer is squamous cell carcinoma (71%), but Pavlovic et al. report that other malignancies such as basal cell carcinoma (12%), malignant melanoma (6%), osteogenic sarcoma, fibrosarcoma and liposarcoma (4%) have also been found. There is a notable risk of lymph node metastasis and distant metastasis, which suggests the need for cross-sectional radiological staging. Chemotherapy has not shown satisfactory results, while radiotherapy is used in selected cases and requires further investigation. Diagnosis and excision should be carried out early for the best clinical outcome, given the rapid progression, tissue damage and worse prognosis. **CONCLUSION:** Although it is a rare condition, understanding the risk factors, clinical characteristics and type of malignancy presented by Marjolin's ulcer is essential to guide medical practice in order to improve the prevention, treatment and prognosis of patients affected by this condition.

**259. RECOMMENDATION FOR THE USE OF ACETYLSALICYLIC ACID IN THE PREVENTION OF CARDIOVASCULAR EVENTS**

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**INTRODUCTION:** Cardiovascular diseases (CVD) are the main cause of death and premature disability in the global panorama, also presenting great importance in the Brazilian scenario and an exponential growth rate in frequency, mortality and hospital costs. In an attempt to prevent cardiovascular events, primarily and secondarily, several strategies are adopted, including the use of acetylsalicylic acid (ASA) as an alternative to prevent ischemic events. However, recent evidence opposes the use of this medication in primary prevention due to its risks and effectiveness. The present study aims to evaluate recommendations for the use of ASA in the prevention of cardiovascular events. **METHODS:** The present study is a systematic literature review prepared through articles found in the PUBMED and SCIELO databases. The research was carried out using the Health Sciences Descriptors (DeCS): "Acetylsalicylic Acid", "Prevention" and "Cardiovascular", together with the Boolean operators "AND" and "OR". 162 studies were found in accordance with the inclusion criteria: articles with full text, available for free access, published between 2020 and 2023. After reading, 6 articles were selected that suited the objective of the study. **RESULTS:** Recent studies that aimed to evaluate the efficacy and safety of ASA in the primary prevention of ischemic cardiovascular events indicate that the use of this medication does not result in significant differences in the incidence of these events when compared to the control group. Furthermore, these studies identify an increased risk of bleeding events even at the low doses usually used (75-100mg/day), particularly in groups with a greater predisposition to such occurrences, such as the elderly. However, the same studies provide positive recommendations regarding the use of acetylsalicylic acid in the secondary prevention of cardiovascular events, since the benefits for patients outweigh the risks associated with the use of the drug. **CONCLUSION:** It is concluded, therefore, that the use of ASA in the primary prevention of ischemic cardiovascular events is not widely recommended due to its potential hemorrhagic effect, even at low doses, and the potential efficacy of its use should be evaluated to the detriment of these effects secondary. However, the use of the drug in the secondary prevention of these events proved to be satisfactory.

**260. PSYCHIATRIC REFORM IN BRAZIL: A LITERATURE REVIEW**

Dara Farias Freitas<sup>1</sup>, Pedro Antônio da Costa Carvalho<sup>1</sup>, Cícero Newton<sup>1</sup>

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**INTRODUCTION:** Psychiatric reform in Brazil had its origins in the post-dictatorial movement, with the implementation of the Unified Health Program (SUS), in which, after the fall of the country's regime, it gained visibility in the Federal Constitution (CF) of 1998, in which the State is responsible for the obligation to manage its citizens, among other points seen as basic, health. This qualitative work sought to analyze the trajectory of Brazilian psychiatric reform, post-dictatorship, aiming to observe the main changes that occurred, highlighting the laws that underlie them. **METHOD:** For this, a theoretical survey was carried out using scientific articles using the method known as case study. This method, considered demanding (when compared to other research methods), has great value in the investigative field of human and health sciences, as it allows the researcher a broad view of contemporary social manifestations, helping him to understand the object of study, seeking to understand all its aspects in a unique way. With regard to the instruments used in the study, bibliographical research on the topic was used, such as: scientific articles from periodicals collected from the Virtual Health Library (VHL), Latin American Caribbean Health Sciences Information System (LILACS), Scientific Electronic Library Online (SCIELO) and monographs, as well as exploration of current legislation. **RESULTS:** Psychiatric reform in Brazil achieved significant changes, mainly after the country's support and greater political involvement. However, the biggest change occurred with the transformation of society's paradigms, in the understanding of what mental illnesses are and what requires asylum hospitalization, what should be done for these patients and the multidisciplinary actions that should take place for their progress. **CONCLUSION:** This article ends by highlighting that psychiatry and its branches continue to undergo constant reform, always adapting to current socioeconomic standards.



**261. RELATIONSHIP BETWEEN NEONATAL JAUNDICE AND BREASTFEEDING IN INFANT HEALTH: SYSTEMATIC REVIEW**

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**INTRODUCTION:** Exclusive breastfeeding is widely recommended in the first 6 months of life due to the health benefits it provides for the baby. However, it presents itself as one of the risk factors for neonatal jaundice, a common physiological condition marked by high levels of bilirubin in the blood in many newborns. In this regard, this study aims to investigate the possibility of continuing or discontinuing breastfeeding during the neonatal jaundice period considering the risks and benefits. **METHODS:** A systematic review was conducted to analyze the results of studies that relate neonatal jaundice to breastfeeding. PubMed, Scielo, and Lilacs were consulted to select eligible articles, considering articles written in English published between 2019 and 2023. The following descriptors were used for the search: Jaundice, Neonatal, Breast Feeding. Inclusion and exclusion criteria were applied to the articles found in the literature. **RESULTS:** The presence of epidermal growth factor (EGF) was observed in breast milk, with higher quantities in colostrum, which was associated with a decrease in transcutaneous bilirubin levels, consequently reducing the incidence of late-onset jaundice. As a result, the administration of colostrum in the first 72 hours is related to physiological jaundice in neonates, as newborns who do not receive colostrum are more likely to develop jaundice. Finally, it was observed that mothers of jaundiced neonates admitted to the hospital have a higher rate of breastfeeding continuation, as there is encouragement from healthcare professionals. **CONCLUSION:** Therefore, it is evident that it is not recommended to stop breastfeeding during the neonatal jaundice period, as breastfeeding provides immunological protection, neuropsychomotor development for the infant, and a psychological connection between mother and baby. In light of this, there should be encouragement for exclusive breastfeeding from healthcare professionals, clarifying to mothers that the benefits of breastfeeding outweigh the risks during physiological jaundice, emphasizing that this alteration is a temporary condition.

**262. INTRACARDIAC TUMOR RESECTION IN NORTHEAST BRAZIL OVER THE LAST DECADE**

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**INTRODUCTION:** Cardiac neoplasms can be malignant or benign and mostly originate in the tissues of the inner lining of the heart, in the myocardium or in the pericardium. In addition, the stage of the tumor when diagnosed determines its classification into primary or secondary. Tumors in early stages are called primary. Tumors in advanced stages are called secondary or metastatic. In general, the absence of symptoms in patients with intracardiac neoplasms hinders early clinical diagnosis. Late-stage tumors can cause severe embolization or obstruction. Still, with the advancement of diagnostic technology, surgical treatment has become more feasible. Thus, the present study aims to analyze the rates of resection of intracardiac tumors in the Northeast region (NE) in a decade. **METHODS:** This is a descriptive quantitative study, with retrospective analysis over a ten-year period — July 2013 to July 2023. The SUS Hospital Information System (SIH-SUS) was used to collect information in the TABNET database. The variables used were: number of hospitalizations, type of care, total value, year of hospitalizations, and mortality rate. As these were secondary data, approval by the Research Ethics Committee was not required. **RESULTS:** From 2013 to 2023, there were 1,429 hospitalizations for resection of intracardiac tumors, of which 274 (19.17%) were performed in the Northeast. In this region, Ceará was the state responsible for the largest number of these procedures, as well as for the highest amount spent in the period (BRL 931,459.36, totaling about 22% of regional costs). There were 16 deaths in the NE, and the mortality rate of the procedure was 5.84%. Regarding the nature of care, about 169 (61.6%) of the procedures performed in the region were elective, with a mortality rate of 2.47%, and 105 were urgent, with a mortality rate of 11.43%. **CONCLUSION:** In view of this study, it was noted that hospitalizations for surgical resection of intracardiac tumors in the Northeast were mostly performed in Ceará, resulting in higher costs in this state as well. In addition, most of the procedures were elective.

263. **INTEGRATIVE REVIEW OF TTP AND ITP: EXPLORING HEMORRHAGIC AND THROMBOTIC DISTURBANCES**  
Brunna Stefanne Araujo Cardoso<sup>1</sup>; Crystiana Carvalho Silva Lauande<sup>1</sup>; Keyza Maria Gomes Cunha<sup>1</sup>; Natália Fernandes Reis Cabral<sup>1</sup>; Sara Ellen Cabral Silva<sup>1</sup>; Madeline Porto Candeira Rodrigues<sup>1</sup>.  
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**INTRODUCTION:** Thrombotic Thrombocytopenic Purpura (TTP) is a disorder involving the formation of small blood clots that block the blood flow to vital organs such as the brain, heart, and kidneys. It occurs in hereditary and acquired forms, with a deficiency of metalloprotease ADASMTS13 – responsible for cleaving von Willebrand Factor multimers; and development of an IgG autoantibody – that inhibits ADASMTS13, respectively. Already the, Immune Thrombocytopenic Purpura (ITP) is a hemorrhagic disorder in which the immune system produces antibodies against platelets and destroys them. Like this the aim is to explore hemorrhagic and thrombotic disorders in TTP and ITP. **METHODS:** This is an integrative literature review, having as inclusion criteria the Google Scholar, BVS, and SciELO, databases in the last 10 years, experience reports were excluded, five articles selected which will be discussed below. **RESULTS:** TTP is clinically characterized by a quintet consisting of thrombocytopenia (gastrointestinal, urinary, and cutaneous bleeding), microangiopathic hemolytic anemia, neurological abnormalities (headaches, stroke), fever, and renal failure (proteinuria and hematuria). Laboratory tests reveal reduced platelets, the presence of schistocytes, and elevated LDH. Coagulation tests are normal, and ADAMTS13 is reduced or absent. Regarding ITP, an autoimmune pathology, it is classified based on the age group affected and the duration of evolution. In adults, it often presents as a chronic condition with a high recurrence rate, while in children, it is acute and triggered by viral infection. Most cases are asymptomatic; however, symptomatic individuals experience bleeding (petechiae, bruising, epistaxis, gingival bleeding, and menorrhagia), fatigue, and/or a decrease in quality of life. Diagnosis is exclusionary, ruling out other pathologies and observing platelet levels in the complete blood count. **CONCLUSION:** Understanding these disorders is crucial for early diagnosis and appropriate treatment to prevent severe complications and improve the quality of life for affected patients. Therapeutic approaches should be personalized, considering the origin of the condition and the individual needs of the patient. Further research and studies are needed to enhance knowledge and therapeutic approaches for these conditions, which, although rare, are clinically significant.

264. **CARDIOVASCULAR RISK ASSOCIATED WITH THE USE OF ANABOLIC STEROIDS: LITERATURE REVIEW**  
Hyandra Gomes De Almeida Silva<sup>1</sup>, Vanessa Silva Sousa<sup>1</sup>, Maria Luiza Nunes Pereira<sup>1</sup>, Amanda Karen de Oliveira Freitas<sup>1</sup>, Maria Luiza Santos Viana<sup>1</sup>  
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**INTRODUCTION:** Anabolic androgenic steroids (AAS) are a group of synthetic molecules derived from testosterone and its related precursors. They are widely used indiscriminately by adolescents and athletes, especially bodybuilders, both for aesthetic use and as physical performance enhancers. When used improperly, they can cause damage to health and disorders that affect various organic functions. With this in mind, this study aims to review the cardiovascular risk associated with the use of anabolic steroids. **METHODS:** This research is a literature review carried out between July and October 2023, following the Health Sciences Descriptors. The standardized descriptors were "anabolic androgenic steroids" and "cardiovascular risk", using articles from the BVS, Scielo, Lilacs and Medline search engines. The inclusion criteria were original articles published in full online in Portuguese and English, within the last 5 years, using the aforementioned descriptors. The exclusion criteria were duplicate articles and those that did not meet the theme of the data search using the defined descriptors. **RESULTS:** The use of anabolic steroids affects not only professional athletes, but also the general population. In the first case, their use is prohibited and sanctioned by the World Anti-Doping Agency, however, for most users who are looking to improve performance and physical appearance, it is possible to obtain the products indiscriminately on the internet and mostly without a professional prescription. Among the most common medical causes of death in athletes, sudden cardiac death stands out and has been associated with the use of performance-enhancing drugs, with the most commonly cited AAS being nandrolone, testosterone and stanozolol, and the most frequently reported macroscopic alterations being cardiomegaly and left ventricular hypertrophy. It has been shown that the use of ASA alters the physiological cardiac remodeling of athletes to pathophysiological cardiac hypertrophy with an increased risk of potentially fatal arrhythmias. **CONCLUSION:** We can consider that the use of anabolic steroids has deleterious effects on numerous physiological variables. In addition, the abuse of these substances in particular can lead to impaired cardiac function.

**265. EWING SARCOMA: EPIDEMIOLOGY, DIAGNOSIS AND TREATMENT**

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**INTRODUCTION:** Ewing's Sarcoma (ES) is a rare and aggressive type of bone cancer, which most commonly affects the long bones of the legs, pelvis, and thoracic wall. It is the second most common sarcoma in childhood and results from a random mutation. ES does not have familial inheritance characteristics; thus, there are no preventive mechanisms. The most affected populations include children, adolescents, young adults, males, and individuals of white ethnicity. Therefore, this study aims to elucidate the epidemiology, diagnosis, and treatment of ES. **METHODS:** This is a literature review conducted with articles in Portuguese, English, or Spanish, found in the databases Scielo, Lilacs, BVS, and PubMed, using the following keywords: Ewing's Sarcoma, Epidemiology, Diagnosis, and Treatment, excluding articles addressing other neoplasms, and collecting only relevant articles published in the last 10 years. **RESULTS:** As a malignant tumor, there are no screening tests capable of early diagnosis. The main signs and symptoms include persistent bone pain, possibly accompanied by non-disappearing edema. Systemic signs such as fever and weight loss are also noteworthy. Thus, ES diagnosis is based on clinical findings and the performance of laboratory, imaging, and biopsy tests. Regarding treatment, chemotherapy and/or radiotherapy are necessary, along with surgery for tumor removal. The continuity and guidance of multidisciplinary treatment vary according to patient outcomes and needs. Physical therapy is recommended for patients requiring strength and mobility. Some cases may necessitate reevaluation and additional chemotherapy sessions. In more severe situations, limb amputation to contain proliferation is the most appropriate procedure. **CONCLUSION:** Given the complexity and rarity of Ewing's sarcoma, treatment planning should be conducted at a specialized center with a multidisciplinary team, as this type of cancer does not end with surgery. Therefore, patients should undergo annual follow-up even after achieving remission to prevent and treat possible recurrences at an earlier stage.

**266. NEONATAL BACTERIAL SEPTICEMIA, THE MAIN CAUSE OF CHILD DEATHS IN MARANHÃO, IN 2022**

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**INTRODUCTION:** Septicemia is one of the main causes of infant mortality, it presents systemic clinical manifestations resulting from the presence of a pathogen in the newborn's body, and can be classified as early or late: early (the pathogen originates in the maternal genitourinary tract), in the late period (the infection usually comes from the hospital environment), given the relevance of this topic, the objective of this research was to investigate data on neonatal bacterial septicemia, which was the main cause of infant deaths in Maranhão, in 2022. **METHODS:** Study carried out descriptive, quantitative, with secondary data, coming from the SUS Information System (DATASUS), on infant deaths in 2022. The variables studied were: "ICD-10 category", "sex", "color/race", "pregnancy duration", "birth weight", "type of birth", "detailed age range", "Maranhão", "mother's age" and "mother's education". **RESULTS:** In 2022, there were 1,499 infant deaths in this State, the main cause of which was bacterial septicemia in newborns (n=131). The majority of deaths from this cause (ICD 10=P36) were male babies (n=81), brown (n=99), premature babies (n=97), with low birth weight (500g and 999g)- (n=37), with vaginal birth (n=76), and with late-onset sepsis, after the first three days of life (n=94). Regarding the profile of mothers of newborns suffering from bacterial septicemia, the majority are between 15 and 19 years old (n=31), and have 8 to 11 years of schooling (n=59). **CONCLUSION:** Cases of infant death due to bacterial septicemia in newborns registered in Maranhão in 2022 may have as main factors the hospital environment and poor hygiene in the handling of newborns, given that the majority of records occurred in relation to premature babies, with low birth weight, and started late, after the babies' first three days of life. Therefore, it is essential to invest in better hygienic and sanitary conditions in maternity wards and pediatric intensive care units in Maranhão.

267. **SYPHILIS IN PREGNANCY: A DESCRIPTIVE STUDY OF THE BRAZILIAN SITUATION BETWEEN 2005 AND 2022**

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**INTRODUCTION:** Syphilis is a sexually transmitted infection caused by the spirochete *Treponema pallidum*. Its manifestations are notably multifaceted, with different stages occurring over time in untreated infections. The infection is particularly concerning during pregnancy due to the risk of transplacental transmission to the fetus. Congenital infection may be associated with various consequences, including perinatal death. The objective of this study is to analyze the epidemiological profile of syphilis cases in Brazil between 2005 and 2022. **METHODS:** This is a retrospective descriptive study based on available data from the Department of Health Information System (DATASUS). Data on syphilis cases during pregnancy in Brazil between 2005 and 2022 were collected and processed using Microsoft Excel® for statistical analysis. **RESULTS:** From 2005 to 2022, a total of 535,034 cases of gestational syphilis were recorded in Brazil. Of these, 45.3% resided in the Southeast region, 21.4% in the Northeast, 14.6% in the South, 10.3% in the North, and 8.4% in the Midwest. Between 2005 and 2010, 37,360 cases were diagnosed. In 2011, there were 13,758, and in 2012, 16,438 cases. In 2013, this number rose to 20,916. In 2014, 2015, 2016, 2017, 2018, 2019, and 2020, there were, respectively, 26,624, 32,783, 38,305, 49,845, 63,407, 64,578, and 65,835 reported cases. In 2021, there were 74,095 cases, and by June 2022, 31,090 cases had already been registered. The majority of these cases, specifically 193,667, were diagnosed in the first trimester of pregnancy. Regarding age group, 6,292 were between 10 and 14 years, 126,583 between 15 and 19 years, 291,027 between 20 and 29 years, 99,795 between 30 and 39, and 11,157 were over 40 years. Regarding education, 3,482 were illiterate, 141,080 had incomplete primary education, and 75,494 had incomplete secondary education. A total of 50,595 completed primary education, and 99,739 completed secondary education. Only 5,690 had a higher education degree. **CONCLUSION:** Comparative analysis revealed that the most affected region in the country is the Southeast. It was also observed that a significant number of cases were diagnosed in the first trimester of pregnancy and in women aged 20-29. Syphilis in pregnant women remains a public health issue in Brazil. Health education actions and proper prenatal care are essential for early diagnosis and treatment. Lack of appropriate treatment can lead to congenital syphilis and its complications.

268. **CRIGLER-NAJJAR SYNDROME: A REVIEW OF THERAPEUTIC APPROACHES**

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**INTRODUCTION:** Crigler-Najjar Syndrome is an autosomal recessive hereditary liver disease that prevents the conjugation of bilirubin. It can be classified into type 1, with absence of glucuronyl-transferase, and type 2, with partial deficiency of this enzyme. This leads to hyperbilirubinemia, which causes severe jaundice and bilirubin encephalopathy if left untreated. This study aims to analyze the importance and impact of different therapeutic approaches on the prognosis of the disease. **METHOD:** This is a descriptive study of the literature review type, in which the Scielo and Pubmed databases were consulted, using the descriptors "Crigler-Najjar", "hyperbilirubinemia" and "therapeutics". The inclusion criteria were articles written in Portuguese and English and published between 2019 and 2023. Thus, 4 articles were selected and read in full for the preparation of the paper. **RESULTS:** In the therapeutic approach to Crigler-Najjar syndrome type 1, plasmapheresis is the treatment of choice for these patients. Phototherapy can temporarily decrease indirect bilirubin levels, creating an "excretable" form that can be eliminated in bile or urine. In addition, inhibiting bilirubin production by administering heme oxygenase inhibitors has proved useful during crises. It is worth noting that phenobarbital, a transferase inducer, does not produce positive effects, since there is no availability of enzymes to be induced. Liver transplantation is the only definitive option for curing the condition. In Crigler-Najjar Syndrome type 2, phenobarbital is effective in reducing blood levels of indirect bilirubin, as it stimulates transferase activity. In addition, it can be used to differentiate between types I and II of the syndrome. **CONCLUSION:** Crigler-Najjar Syndrome is a chronic pathology that has a high impact on patients lives, and the more its treatment is neglected, the greater its complications, which can have neurological consequences and lead to death. Therefore, understanding its treatment is essential, as is encouraging new research to improve the quality of life and prognosis of its patients.

269. **MUNCHAUSEN SYNDROME POWER OF ATTORNEY: WHEN THE SEARCH FOR HEALTH TURNS INTO VIOLENCE**

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**INTRODUCTION:** Munchausen Syndrome by Proxy (SMP) is a form of child abuse, in which one of the parents, mostly the mother, appears to have signs and symptoms in the child, with the aim of attracting attention to himself, exposing the infant to unnecessary and potentially harmful treatments. This work aims to analyze the picture, giving an overview of this condition. **METHODS:** This is a narrative review that used the descriptors 'Munchausen syndrome by power of attorney', 'Munchausen syndrome', and 'child abuse'. Thus, a bibliographic survey was made in the BVS, PubMed and Google Scholar databases and articles in Portuguese and English published from 2013 to 2023 were included. Thus, 35 articles were found, of which only 6 met the inclusion criteria and were analyzed in this review. **RESULTS:** The harmful behavior on the part of the parents in placing the child in the condition of a patient would be motivated by the need to attract medical attention. In addition, it is observed that the mother, through a precarious marital relationship, seeks in the hospital environment the ideal father, the provider of care, since the chronic disease generates a continuous dependence on the hospital service. In addition, repetitive behavioral indications coming from parents may be suggestive to help in the recognition of the syndrome, such as inconsistent stories reported by different people, the insistence of parents on invasive procedures and hospitalizations, the incongruous behavior of the caregiver regarding the pain of the offspring, and the presence of signs only when accompanied. In addition, a great challenge is established, given that the SMP can cause consequences for the victim, from psychological problems to death. Likewise, the various admissions to the medical service place health professionals in a reckless situation, that is, as potential causes of damage to the child, since the promotion of unnecessary treatments and procedures makes medical practice prudent in a continuous iatrogenic. **CONCLUSION:** Therefore, there is a repetitive behavioral pattern among those responsible for this type of abuse, as well as distinctive characteristics in the identified cases that should be noted in the suspicion of this disorder. Identifying the patterns allows an early diagnosis, avoids the suffering of the victims, and enables adequate treatment for the person who is actually sick. Therefore, it is crucial that there be expanded information about the SMP.

270. **SYMPTOMS, DIAGNOSIS AND TREATMENT OF CUSHING'S SYNDROME: LITERATURE REVIEW**

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**INTRODUCTION:** Cushing's Syndrome (CS), or hypercortisolism, is an endocrine disorder that may have endogenous or exogenous origin and is characterized by chronic exposure to high levels of cortisol, resulting in various symptoms, which may be accompanied by psychological disorders. Despite advances in its diagnosis, hypercortisolism persists as a challenge to endocrinological practice. The objective of the work is to present an understanding of relevant aspects regarding Cushing's Syndrome. **METHODS:** This is a literature review carried out through a qualitative study based on the search for articles, published nationally and internationally, between the years 2019 and 2023. The digital platforms PubMed, MEDLINE, Elsevier, Google Scholar and Scielo. The terms used for the search were "Cushing's Syndrome"; "Cushing's disease"; and "Hydrocortisone". The inclusion criteria were the approach and coherence with the theme in the chronological interval of the last 5 years; of exclusion, unrelated or insignificant outcomes for understanding the topic and case reports. 12 articles were selected. **RESULTS:** Cushing's Syndrome, as it has very heterogeneous causes, ranging from prolonged use of glucocorticoids to the presence of neoplasms, is difficult to diagnose, as it requires the performance of diverse and complex tests and, therefore, there is no more accurate knowledge about the incidence and prevalence of CS. In addition to the challenge of making a diagnosis, the multiplicity of causes directly interferes with the high diversity of treatments that include pharmacological and/or surgical approaches. Symptoms are also not of great contribution to making a differential diagnosis as there are few exclusive symptoms. Thus, the wide manifestation of the disease's frequent symptoms and the complexity of the tests required for diagnosis, combined with the low number of studies on the subject, make it a complicated pathology. **CONCLUSION:** It is concluded that Cushing's Syndrome is a rare condition, with some diagnostic difficulty and high morbidity and mortality. Your treatment may include pharmacotherapy, radiotherapy or even surgery. The increase in mortality is due to delays in treatment and diagnostic difficulties, causing future complications. It is essential that there is a greater spread of this disease, in order to inform and assist in early identification.



271. **VACCINE COVERAGE RATE AND MENINGITIS CASES IN CHILDREN IN MARANHÃO (2013-2022)**Miriam Santos Nunes<sup>1</sup>, Gildean Pereira Costa<sup>1</sup>, João Pedro Oliveira da Silva<sup>1</sup>, Débora Cardoso de Oliveira<sup>1</sup>.<sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Vaccination is one of the greatest achievements of modern medicine, which plays a significant role in preventing infectious diseases, with effectiveness linked to vaccination coverage. The relationship between vaccination, vaccination coverage and meningitis is crucial, as this disease is potentially serious and preventable with vaccines. Meningitis, inflammation of the membranes covering the brain, can be caused by viruses or bacteria, with bacterial forms presenting severe complications. Vaccination is vital in preventing bacterial meningitis, but its success depends on the population's vaccination coverage. Low coverage rates can enable infectious disease outbreaks, emphasizing the importance of immunization programs and equitable access to vaccines in promoting public health. **METHODOLOGY:** This is a cross-sectional, quantitative and descriptive study, with data obtained from the Information Technology Department of the Unified Health System (DATASUS) regarding vaccination coverage of Meningococcal C, Pentavalent, BCG and 10-valent conjugated Pneumococcal vaccines, from the years from 2013 to 2022; and cases of meningitis in children under 4 years of age, excluding those ignored/blank, from the same period in Maranhão. **RESULTS:** In the period studied, the vaccine with the highest coverage rate was BCG, with 93.5%, and the lowest, the 1st booster of 10-valent pneumococcal, with 70.38%. There is a continuous decrease in the vaccination coverage rate, from 92.5% in 2015 to 75.3% in 2022, reaching its lowest percentage in 2020 (61.9%), the year before a significant increase in meningitis occurrences. In the state of Maranhão, with 49 cases. In 2022 there was an increase in the number of cases (57), along with the maintenance of the low immunization rate, 63.7%. It is also noteworthy that there does not seem to be an obvious connection between an increase in deaths from meningitis and a specific immunizer. **CONCLUSION:** There is a significant decrease in the vaccination coverage of immunizers that protect against infections by different types of bacteria that cause meningitis, including meningococcus, and an increase in the incidence of the disease, highlighting the importance of immunization in preventing disease outbreaks. It is worth noting that this decline was accentuated mainly in 2020, the year the COVID-19 pandemic began in Brazil. Therefore, the relevance of maintaining and strengthening immunization programs and equitable access to vaccines is evident as a fundamental part of promoting public health.

272. **CIRCULATORY SYSTEM SURGERY MORTALITY RATE SURGERY IN MARANHÃO FROM 2013 TO 2022**Gabrielle Barbosa Ferreira<sup>1</sup>, Raul Felipe Santos Ribeiro<sup>1</sup>, Jairo de Araújo Oliveira<sup>1</sup>, Bruna Oliveira Montes do Rosário<sup>1</sup>, Laura Rosa Carvalho Dias<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Circulatory system surgery encompasses two specialties: vascular surgery and cardiology. This type of surgery is classified as of moderate complexity, demanding specialized professionals and technological resources for diagnosis and treatment. Consequently, this study aims to analyze the mortality rate related to circulatory system surgery in Maranhão from 2013 to 2022. **METHODOLOGY:** It constituted an ecological, cross-sectional, and descriptive study, conducted in the state of Maranhão, Brazil, covering the period from 2013 to 2022. The data, obtained from the Department of Information Technology of the Unified Health System (DATASUS), were analyzed based on variables such as units of the federation, procedure groups, mortality rate, deaths, and time period. The data were assessed for the specified periods to facilitate a comparative analysis. Since secondary and publicly available data were used, approval from the ethics committee was not required. **RESULTS:** There were 23,498 hospitalizations for circulatory system surgery, comprising 2,056 in 2013 and 3,026 in 2022, indicating an approximately 47% increase between the two periods. Regarding deaths and mortality, a total mortality rate of 3% was observed, with rates of 1.51% in 2013 and 3.96% in 2022. Out of 706 total deaths, 31 occurred in the initial year of analysis, rising to 127 in the final year. **CONCLUSION:** The analysis of operation and mortality rates during the same period reveals a disproportionate relationship between the two, underscoring the need for further studies in this field. This exploration aims to ascertain whether other factors contribute to the rising mortality rates, ultimately seeking improvements in operational conditions in Maranhão.

**273. GENETICS ANALYSIS TECHNIQUES FOR ACUTE LYMPHOBLASTIC LEUKEMIA: A LITERATURE REVIEW**

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**INTRODUCTION:** Acute Lymphoblastic Leukemia (ALL) is a malignant, uncontrolled proliferation of hematopoietic cells with a high metastatic potential. It is the most common pediatric neoplasm, representing the second leading cause of death in children under 15. The aim of this study was to identify new genetic analysis technologies and their contributions to the diagnosis and treatment of ALL. **METHODS:** This work consists of a bibliographic review, carried out in October 2023, using the scientific literature available on the PubMed, Nature and SciELO platforms, based on 5 articles published in the last 5 years in English and Portuguese. The descriptors used were: Acute Lymphoblastic Leukemia, Diagnostic Techniques and Procedures and Genetics. **RESULTS:** Techniques such as Multiplex Linkage Probe Amplification (MLPA), by analyzing abnormalities in particular areas of DNA, have been shown to accurately identify aneuploid-type ALL, which, because it is commonly associated with poor prognosis, requires early diagnosis. Another efficient technique is the DNA Index (DI), whose specificity lies in identifying hyperploid and masked hypoploid ALL, which together account for almost 30% of childhood ALL cases and which have more favorable results than conventional treatments. In addition, fluorescent in situ hybridization (FISH) is another molecular technique considered standard for identifying ALL as intrachromosomal amplification of chromosome 21 (iAMP21), the most common type in older children and with the most unfavorable results, requiring more intense treatments. Finally, more recent genetic sequencing technologies, such as whole genome sequencing (WGS), transcriptome sequencing (RNA-seq), whole exome sequencing (WES) and targeted genetic sequencing, have shown efficiency in recognizing the most varied subtypes of ALL and their clinical repercussions. **CONCLUSION:** It is therefore understood that genetic sequencing technologies are promising for the diagnosis, treatment, prognosis and understanding of the biology of childhood ALL, as they recognize the different subtypes of ALL, which is vital for health promotion for pediatric oncology patients.

**274. SCREEN TIME DURING CHILDHOOD: POSSIBLE CORRELATION WITH SUBSEQUENT DEMENTIA**

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**INTRODUCTION:** The vast popularization of technological media in contemporary times has been affecting children even below two years old, producing direct adverse effects in development that are amply registered but under-studied due to little observation time. The question then raised is what is the correlation between the harmful effects of prolonged screen time and possible dementia syndromes in subsequent ages. **METHODS:** This study was an integrative literature review. It was constructed based upon the PICO (Population, Intervention, Control, and Outcome) acronym method, which allowed the following selection of key descriptors and Boolean operators: Dementia OR Alzheimer AND Child AND Screen time. The platforms used for research were Scielo, PubMed, and Cochrane, and the selected works had pertinent themes and were published in the last ten years. **RESULTS:** Neuroplasticity is an innate characteristic of humans and is vastly influenced by environmental factors, being of great importance for the satisfactory evolution of childhood neurodevelopment. Regarding prolonged screen use, structural changes were evident, localized in the occipital cortex, prefrontal cortex, temporal cortex, limbic structures, reduction of functional connectivity in cortical-subcortical circuits, and abnormalities in grey and white matter microstructures. Such changes in areas of sensitive, cognitive, motor, and reward centers are at risk for cognitive pathologies that can cause subsequent dementia. Functionally, there is also a correlation between the presenting of symptoms of dysfunctions relating to attention and humor due to screen use. Such symptoms are also mentioned as risk factors for dementia syndromes. Furthermore, the use of technologies at an early age is related to the development of obesity, reduction of physical activities, and higher food consumption, which are causes of metabolic syndromes equally associated with dementia. **CONCLUSION:** Due to the substantial increase in screen use being only within recent generations, there is a need for more study of the long-term effects of said use. However, it is possible to infer many correlations between the risk factors for dementia and the use of technologies, making it possible for future diagnoses to take place. More significant follow-up time with exposed individuals is necessary to conclude more about the topic.

**275. TEMPORAL TRENDS IN STROKE MORTALITY RATE IN THE STATE OF MARANHÃO**

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**INTRODUCTION:** Stroke stands as the second-leading cause of mortality globally and the primary cause within Brazil. Characterized by a typically focal neurological deficit of sudden onset or rapid progression lasting longer than 24 hours, stroke presents as either ischemic (IS), accounting for approximately 80% of cases, or hemorrhagic (HS), constituting 20% of cases. In this context, this study aims to assess the temporal trends in stroke mortality rates in the state of Maranhão. **METHODS:** This study adopts an ecological, cross-sectional analysis with a quantitative approach, utilizing data sourced from the Department of Health Informatics of the Unified Health System (DATASUS). Information encompassing hospital admissions, gender, race, age groups, deaths, and mortality rates was collected. Prais-Winsten regressions, considering autocorrelation in time series, were employed to analyze incidence rate trends. For annual percentage changes (APC) and their respective confidence intervals, the calculation method proposed by Antunes (2005) was utilized. Statistical analysis was performed using SPSS 25.0 for Windows, with a significance level set at 5%. **RESULTS:** Between 2013 and 2022, there were 7,419 recorded stroke-related deaths in the state of Maranhão, comprising 3,801 male deaths and 3,618 female deaths. The mortality rate stood at 14.6%, exhibiting an ascending trend over the years, increasing from 11.95% (2013) to 14.86% (2022) among males and from 10.92% (2013) to 14.68% (2022) among females. Concerning race, the highest number of cases occurred in individuals of mixed race (21,311), followed by those of yellow (3,184), white (1,464), and black (851). The Prais-Winsten method revealed a rising trend in stroke mortality cases in Maranhão for both males, with an APC of 8.5 (2.3; 13.2;  $p = 0.02$ ), and females, 12.5 (6.5; 16.4;  $p = 0.01$ ). **CONCLUSION:** The observed increase in stroke mortality over the past decade in Maranhão underscores the imperative need to expand access to preventive measures and control modifiable risk factors to curtail the occurrence of new cases. Furthermore, enhancing intervention measures applied to stroke patients is essential for optimizing outcomes.

**276. PHARMACOLOGICAL THERAPY IN THE TREATMENT OF DIABETIC FOOT IN PINHEIRO: A CASE REPORT**

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**INTRODUCTION:** Diabetic Foot (DF) is a complication of Diabetes Mellitus (DM) that involves ulcers, infections, tissue necrosis and, in severe cases, amputation. There are around 7.12 million Brazilians with DM II, with around 484,500 ulcers and 169,000 hospitalizations. The study aims to compare the pharmacological treatment of DF ulcers carried out in the clinical cases followed and that indicated in the literature. The entire study was carried out under National Health Council Resolution 466/12, with approval from the Human Research Ethics Committee of the Federal University of Maranhão and approved under opinion 70382923.4.0000.5087. All volunteers validated participation through the Free and Informed Consent Form. **CASE DESCRIPTION:** These are two cases, both female, diagnosed with DM associated with DF, seen and monitored between April and June 2023, in a private clinic in Pinheiro-MA. Patient A, 62 years old and with DM since 2018, and Patient B, 71 years old, hypertensive for 26 years and with DM for 16 years. In both cases there was standard pharmacological therapy: biguanide and sulfonylureas (SUs) for glycemic control (A: Metformin 1g orally.; Gliclazide 30mg orally; B: Metformin 850mg orally, 2x/day; Glibenclamide 5mg orally, on an empty stomach). The Brazilian Diabetes Society (SBD) highlights the safe use of SUs in terms of cardiovascular risk and lists Gliclazide as the one with the lowest risk for hypoglycemia. Patient A, after fever, hyperemia, asthenia, headache and areas of necrosis on the right ankle, received Benzetacil (1200 IU) + 5 doses of Ceftriaxone 1g + 1 dose of Cefuroxime 10 mg. Patient B, after hyperemia and foci of necrosis in the distal third of the right lower limb, took Levofloxacin 500 mg orally, for 10 days. The use of 2nd and 3rd generation cephalosporins + Clindamycin is indicated by SBD for the treatment of moderate or severe DF infections with foci of necrosis, in addition to indicating the use of beta-lactamase inhibitors, carbapenems or metronidazole. Furthermore, as a complement to healing, injectable Arnica Montana D2 was used, 10 ampoules of 2.2ml IM, 10% papain (topical use), ozone therapy (2x/week, 60µg/ml), and ozonized sunflower oil. **CONCLUSION:** The pharmacological therapies used are in accordance with the literature, which reflects the importance of ensuring patients' full adherence to treatments, along with the necessary dietary adjustments and, under the evaluation of health professionals, the use of complementary therapies.

**277. GESTATIONAL TOXOPLASMOSIS AND RELATIONSHIP WITH RACE AND AGE GROUP IN MARANHÃO BETWEEN 2019 AND 2022**Ruan Lucas Costa Bastos<sup>1</sup><sup>1</sup> Universidade CEUMA (UniCEUMA)

**INTRODUCTION:** Despite the low incidence of gestational toxoplasmosis in the state of Maranhão, the disease is still important in the context of Maranhão, causing serious challenges for infected women. In this sense, the objective of this study is to describe the cases of gestational toxoplasmosis infection in Maranhão and to correlate the data with the variables age group and race. **METHODS:** This is an observational, descriptive and ecological study with a quantitative approach, carried out through data collection from DATASUS, following the frequency of notifications and using the variables color/race and age group. The period analyzed was from 2019 to 2022. Based on the data collection carried out on October 2, 2023, descriptive statistics were applied using Excel in order to organize the research results. **RESULTS:** The data showed a total of 1204 cases and showed an increase in the incidence of the disease in the period analyzed, with an increase of 60.49% from 2019 to 2023. In addition, there was a correlation between young adults aged between 20 and 39 years (70.34%) and brown women (75%). **CONCLUSION:** The results showed a clear relationship with young adults, which can be explained by the higher probability of women becoming pregnant in this age group, and brown skin color, by the large percentage of brown people in the state. Thus, congenital toxoplasmosis was related to women who were more likely to become pregnant and was also shown to be a relatively important disease in Maranhão. Therefore, it is still important to warn the population about the prevention of toxoplasmosis, especially in pregnant women, due to the serious risks to the fetus and the mother that the protozoan can cause.

**278. CONDUCTION DISORDERS AND CARDIAC ARRHYTHMIAS: AN EPIDEMIOLOGICAL ANALYSIS OF THE NORTH AND NORTHEAST OF BRAZIL**Sharon dos Santos Albuquerque<sup>1</sup>, Rommayolle Costa Diniz de Sousa<sup>1</sup>, Silas Freire Pereira e Silva Junior<sup>1</sup>, Bruna Assunção Albuquerque Nascimento<sup>1</sup>, Gustavo de Oliveira Silva<sup>1</sup>, Rafael Castro Viegas<sup>1</sup>, Jerusa Rodrigues Bezerra<sup>1</sup><sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Conduction disorders and cardiac arrhythmias (CDCAs) are electrical alterations in the heart that change the normal rhythm of this organ, causing tachycardias, bradycardias and irregular heart rates in the propagation of impulses, causing electrical instability. The aim of this study is to analyze the epidemiological survey of hospitalizations due to TCACs in the North and Northeast regions between 2015 and 2022. **METHODS:** This is an epidemiological, quantitative, cross-sectional and retrospective study. Data was collected from the SUS Hospital Information System (SIH/SUS), made available by DATASUS from 2015 to 2022. The variables analyzed were: geographical and annual distribution of hospitalizations, type of care, age group, gender, deaths and mortality rate. **RESULTS:** In the period analyzed, 94,817 hospitalizations for CDCAs were reported in the North and Northeast regions, with the Northeast accounting for 82.59% (n=78,312) of the total and the North for 17.4% (n=16,505). The states of Bahia (n=24,349), Pernambuco (n=16,697), Ceará (n=12,565) and Pará (n=6,161) stand out, with the latter receiving the most admissions in the North, followed by Amazonas (n=3,680). The years 2019 to 2022 saw more hospitalizations in both regions, totaling 50,221 cases in this period alone. Emergency care was the most prevalent type of care, with 75.3% (n=71,399) of cases. The most affected age group was 70 to 79 years old, which accounted for 25.9% (n=24,561) of the total. Another parameter analyzed was the prevalence between the sexes, which showed a difference between the two of 2,081 hospitalizations in the North and 986 in the Northeast, with males being more affected. With regard to deaths, the regions had 9,340 cases and the Northeast accounted for 80.27% (n=7,498) of these fatal outcomes. However, when the mortality rate (MR) of the two regions is analyzed, the North is ahead with a MR of 11.16% while the Northeast has one of 9.57%. **CONCLUSION:** CDCAs account for a significant proportion of hospitalizations for cardiovascular diseases in the North and Northeast of Brazil and are a major challenge for public health, since they can lead to sudden death. Primary care should seek to recognize and intervene early in cases of clinical instability, and it is therefore necessary to expand knowledge and management of the clinical profile of patients with CDCA and their complementary test findings.

279. **MENTAL DISORDERS RELATED TO WORK IN THE STATE OF MARANHÃO FROM 2018 TO 2022**Bruna Luise De Almeida Carvalho<sup>1</sup>, Eduarda Silva Fernandes Araújo<sup>1</sup>, Gabriel Neves Ezon Ferraz<sup>1</sup><sup>1</sup> Universidade Ceuma

**INTRODUCTION:** Mental Disorders Related to Work (MDRW) result from situations arising from how work is organized and managed, and in some cases, exposure to chemical agents. In Brazil, the notification of these disorders is compulsory. According to the National Social Security Institute (INSS), more than 200,000 people were removed from work due to mental disorders in 2022. Thus, the present study aims to analyze the epidemiological profile of Mental Disorders Related to Work in the State of Maranhão from 2018 to 2022.

**METHODS:** This is a descriptive, surveillance study, using data obtained from the public domain platform of the Notifiable Diseases Information System (SINAN), covering the period from 2018 to 2022 in the state of Maranhão. The descriptive variables used for the study were: sex, age group, specific diagnosis, and case outcome. **RESULTS:** In the analyzed timeframe, 55 notifications were recorded. The female sex accounted for 61.81% (n=34) of the notifications, while males accounted for 38.18% (n=21). The predominant age group was 25-34 years, representing 40% (n=22) of the notifications, followed by 35-44 years with 30.9% (n=17). Among the analyzed cases, neurotic, stress-related, and somatoform disorders (F40-F48) and mood disorders (F30-F39) showed the highest frequency of notifications, with 49% (n=27) and 30.9% (n=17), respectively. Regarding the case outcome, temporary incapacity was the most common outcome, accounting for 58.18% (n=32) of the notifications, while 5.4% (n=3) resulted in confirmed recovery. **CONCLUSION:** Therefore, it was found that females were the most affected, with the predominant age group being between 25 and 44 years. Furthermore, the data indicate underreporting and the need for most professionals to take time off from work activities. In light of this, it is necessary to optimize the process of recognizing and reporting these diseases, due to their importance in guiding public health promotion and prevention policies.

280. **TREATMENT CHOICE FOR RETINOBLASTOMA: A LITERATURE REVIEW**Lucian da Silva Araujo<sup>1</sup>, Bianca de Jesus Coelho Reis Sousa<sup>1</sup>, Márcia Sousa Barroso Santiago<sup>1</sup>, Layana Cristina Diniz Araújo<sup>1</sup>, Emanuela Vitória de Barros Tavares Cavalcante<sup>1</sup>, Lucas Hideki Matsumoto<sup>1</sup>, Adriana Leite Chavier<sup>1</sup>.<sup>1</sup>Medical Student at CEUMA University – UniCEUMA, São Luís (MA)

**INTRODUCTION:** Retinoblastoma is a rare type of eye cancer, more common in children under the age of three, and it can be lethal if not treated. There are three types of retinoblastomas: unilateral, bilateral and the primitive neuroectodermic tumor. The diagnostic can be concluded through the red reflex test. Ophthalmic appointments are also necessary to do the ophthalmoscopy and to request an eye globe's ultrasound and a magnetic resonance of the eye orbits. The symptoms include leukocoria, strabismus, impaired vision, eye pain, a bigger eye globe and amblyopia. The early diagnostic can lead cure chances up to 90%. Because of the many types of treatment and the singularity of each case, this literature review objectifies to clarify how the choice for the retinoblastoma treatment is made. **METHOD:** It was carried out an analysis of bibliographic data in articles found in two databases: Scielo and Pubmed, between 2018 and 2023. The keywords explored were: retinoblastoma, choice of treatment and early diagnostic. 10 articles were selected after research. **RESULTS:** It was noticed that the conduction of the retinoblastoma is very complex and the treatment is singular for each case, having the main goal preservation of life. The current treatments used have been showing a great level of survival when the tumor is identified in a located state. It is necessary an initial deep evaluation of the disease so it can be defined as an extension to the treatment and avoid unnecessary collateral effects. The treatment of choice also depends on the staging of the International Retinoblastoma Classification to analyze the disease's presentation. The patient's family historic needs to be evaluated for a definition of treatment, like extraocular clinic factors. In many times is necessary to combine different treatment techniques. It is also important to maintain a follow-up protocol after therapy and long-term. **CONCLUSION:** There are many treatment options available, since chemotherapy and radiotherapy to more precise techniques. The choice of treatment must be individualized and carefully evaluated. Constant advances in researches and in practices are vital to improve options of treatment and assure a better quality of life to the patients.



**281. TREATMENT OF ADHD IN ASSOCIATION WITH OTHER PSYCHIATRIC DISORDERS: INTEGRATIVE REVIEW**

Isabela Silva Nakata<sup>1</sup>, Hannara Andrade Gabina de Oliveira<sup>1</sup>, Rafael Casanovas Tavares Pimentel<sup>1</sup>, Maria Fernanda Almeida do Vale<sup>1</sup>, Rhana Luiza Trabulsi<sup>1</sup>, Isabela Feitosa Andrade<sup>1</sup>

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**INTRODUCTION:** Attention Deficit Hyperactivity Disorder (ADHD) consists of inattention and/or hyperactive-impulsive behaviors, manifesting itself in more than two contexts. Comorbidities in ADHD can result in an accentuation of symptoms and the overlap of these indicators tends to result in diagnostic confusion. Commonly, Anxiety Disorder (AD) and Substance Use Disorder (SUD) co-occur with ADHD as comorbidities, and, due to the convergence of symptoms, create an intensification and the aforementioned diagnostic confusion. These comorbidities make it difficult to manage the individual's treatment, as their symptoms are subject to variable responses to ADHD intervention. Therefore, the objective of this study was to investigate the necessary adjustments to this treatment. **METHODS:** This consists in an Integrative Literature Review, with the research question being: "How is ADHD associated with comorbidities treated?". Furthermore, the databases used were the Virtual Health Library (VHL) and the U.S. National Library of Medicine (PubMed). Only articles related to the guiding question from the last 5 years were included, available free of charge and in full, regardless of language, disregarding articles that did not meet the referential criteria. **RESULTS:** 30 studies were found of which 4 constituted a final sample, summarized in a descriptive way. In general, the texts point out that both AD and SUD worsen the symptoms of ADHD. Furthermore, symptoms shared with anxiety, such as inattention and irritability, tend to make it difficult to differentiate between disorders, leading to mistaken diagnoses. This also occurs when there is a comorbidity with SUD, as impulsivity and emotional dysregulation are common to both. Therefore, conventional treatment for ADHD using stimulants tends to be less effective in these cases, as increased anxiety and impulsivity are often a side effect of these medications. **CONCLUSION:** It is understood that the association between ADHD and AD or SUD requires greater clinical attention, given that the symptoms overlap, making diagnosis difficult and requiring new treatment approaches that seek to relieve the condition intensified by comorbidities.

**282. TREATMENT AND SURVIVAL AFTER GIST TUMOR SURGERY**

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**INTRODUCTION:** The gastrointestinal stromal tumors (GISTs) comprise the most common mesenchymal neoplasm of the gastrointestinal tract. They originate from Cajal cells, which act as pacemakers for the nerve impulses controlling peristalsis. GISTs can occur throughout the GI tract, with the stomach being the most affected organ and having the best prognosis. Primary treatment is surgical, involving complete tumor resection with clear margins (R0). Neoadjuvant therapy with Imatinib may be considered in cases with a high risk of recurrence. This study aims to analyze the impact of surgical and adjuvant treatment on the survival and prognosis of patients with GIST. **METHODOLOGY:** This review covered articles published between 2019 and 2022, obtained through Google Scholar and PubMed. They were selected based on keywords related to GIST and treatments. The analysis of the articles highlights trends and relevant results in the clinical approach to GIST. **RESULTS:** GIST tumors primarily affect men aged between 50 and 60 years; a study conducted by PUC-RS, analyzing 109 medical records of individuals diagnosed with GIST between 1985 and 2010, showed a predominance in white patients. Among the most common symptoms in the study were weight loss, digestive bleeding, and abdominal pain. In another study conducted by a reference institution in southern Brazil, with 38 patients analyzed (2011 - 2020), the stomach was the most affected site (63%), followed by the small intestine (17%). Additionally, metastases were observed in 24% of cases. About 76% of patients underwent surgery alone, while 13% received neoadjuvant treatment. Those who underwent surgery showed better five-year survival rates, while neoadjuvant or imatinib therapy did not demonstrate significant differences. **CONCLUSION:** GIST tumor, although relatively rare, still poses a significant challenge to medical practice. The nonspecific symptoms, associated with various differential diagnoses, make disease identification a diagnosis of exclusion. Surgery, among all treatment options, emerged in studies as the most effective measure and showed the best prognosis for patients. Nonetheless, expanding research on the pathology and long-term post-surgery follow-up may be the cornerstone to identify the most appropriate and effective disease management.

283. **KELOIDAL SCAR TREATMENT: A LITERATURE REVIEW**  
Kaíque Marques França Vieira<sup>1</sup>, Ana Maria Ramos Goulart<sup>1</sup>,  
Jorge Fernando Lopes da Cunha<sup>1</sup>, Guilherme Dutra Oliveira<sup>1</sup>,  
Adélia Jane Saraiva Garrido Carneiro<sup>1</sup>, Rayssa Yasmin Pereira  
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**INTRODUCTION:** Keloidal scars result from a process of tissue repair with fibroblasts hyperproliferation and increased extracellular matrix deposition. Generally, it shows multilateral growth, greater than 4 millimeters, and elevation, not containing itself within the limits of the lesion. Currently, the treatment approaches for keloids present low success rates and high recurrence rates, however, new protocols have been proposed to minimize the scar condition and prevent recurrence. This work aimed to showcase the different procedures for keloidal scar treatment available in the current literature. **METHODOLOGY:** The work consists of a narrative review about the different procedures for keloidal scar treatment. For this purpose, a bibliographic survey was carried out on the VHL, Scielo and Pubmed platforms, searching for studies involving clinical-surgical protocols used in the treatment of keloidal scars, published in Portuguese and English between the years of 2019 and 2023. Exclusion criteria include works published outside the delimited period and/or languages. **RESULTS:** There are several surgical and therapeutic protocols for keloidal scars treatment and prevention, including: intralesional Triamcinolone injections before and during the surgical approach, and in the postoperative period as well; prolonged application of phototherapy using UVB and tUVB for reducing the size and improving clinical appearance of the lesions. Furthermore, the use of topic silicone gel and corticosteroids for keloid prevention in Pfannenstiel Incisions can be mentioned, as well as the injection of steroids preceded by cryotherapy for scar texture improvement. Additionally, there's the exposure to an 100% oxygen environment, a procedure used for difficult healing lesions and some central nervous system conditions, as well as in conditions that require the reduction of inflammatory processes, as the case of keloidal scars. The therapy induces the reduction of HIF-1-Alpha, Interleukin-1-Beta and Tumor Necrosis Factor expression. The purpose of treatments is to improve appearance of the scar, as well as representing a barrier to post-excision relapse. **CONCLUSION:** Keloid Scars are a public health condition, as it consists of a pathological scar of great importance, as well as significant epidemiology, with multifactorial treatment, involving different areas of clinical, therapeutic, and pharmacological conduct combined before, during and after the surgical approach, aiming the improvement on the scar appearance and post-excision recurrence prevention.

284. **NON-CONSERVATIVE TREATMENTS FOR DIABETIC FOOT ULCERS: OZONE THERAPY AND LASER THERAPY**  
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Conceição Ribeiro<sup>1</sup>  
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**INTRODUCTION:** Diabetic neuropathy is the most prevalent chronic complication of diabetes mellitus. Its management may involve restorative and basic treatment (glycemic control), in addition to adjuvant measures. The latter includes ozone therapy and low-intensity laser therapy (LLLT), which promote tissue repair and antiseptis. The objective of this summary is to report the effects obtained with the use of ozone (O<sub>3</sub>) and LLLT in two patients with diabetic foot ulcers (DUP). **METHODS:** The research took place in the municipality of Pinheiro-MA, between April and June 2023, governed in accordance with Resolution of the National Health Council 466/12, with approval from the Ethics Committee for Research with Human Beings of the Federal University of Maranhão and approved under opinion number 70382923.4.0000.5087. Volunteers validated their participation by signing the Informed Consent Form. **RESULTS:** Two patients (62 and 71 years old) who underwent pharmacological therapy in association with LLLT (point application, 2J/cm<sup>2</sup>, 2x/week) and ozone therapy (60-20µg/ml, 2x/week, topical with creams and ozonized oils). It was observed that such measures have been successful in patients, with tissue repair and reduction of inflammation, indicating that they are satisfactory in the healing process for UDP. According to Chamanga (2018), LLLT helps oxygenate and granulate the damaged epithelium, reduces inflammatory foci and algesia, confirming its effectiveness. While ozone therapy is still the subject of discussion. On the one hand, its use in dental care and aesthetic purposes has been proven to be effective, and on the other hand, it is a constant topic of debate about its use in the healing of ulcers. According to Pinheiro and Barbosa (2021), O<sub>3</sub> improves metabolism in general by repairing oxidative stress, providing antimicrobial and healing effects. Law No. 14,648, dated 04/08/2023, was recently approved, which authorizes health professionals registered on inspection councils and with O<sub>3</sub> equipment regulated by the National Health Surveillance Agency to use it in the national territory for the treatment of wounds. **CONCLUSION:** The use of non-conservative therapeutic measures in addition to pharmacological measures has shown effectiveness in the healing process of UDP, by accelerating tissue repair and minimizing inflammatory effects. However, more studies are needed regarding the clinical management of ozone therapy in this repair, as well as its dose, risks and benefits.

285. **PULMONARY THROMBOEMBOLISM AND ITS THERAPEUTIC APPROACHES: A LITERATURE REVIEW**  
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**INTRODUCTION:** Pulmonary Thromboembolism (PTE) is the main cause of preventable deaths in hospital beds, its pathophysiology is linked to Virchow's Triad (endothelial injury, venous stasis and hypercoagulability). The clinical diagnosis is made using criteria based on the Wells Score, which takes into account the main risk factors for the development of the disease, classifying the patient as having a high, medium or low clinical probability of having PTE. The initial therapeutic approach aims to achieve clinical and hemodynamic stability of the patient with the use of anticoagulants, thrombolytics, embolectomy or vena cava filter. **METHODS:** This is a literature review on PTE and its therapeutic approaches, searched in the Scielo and Google Scholar databases with the descriptors "Thromboembolism" and "Pulmonary thromboembolism AND Major bleeding" with filter from 2019. **RESULTS:** Anticoagulants Injectables act by preventing clotting by binding to antithrombin III, they are considered safe with few predictable adverse effects. Oral anticoagulants act by inhibiting the synthesis of coagulation factors dependent on vitamin K and proteins C and S. Thrombolytics or fibrinolytics are drugs that dissolve thrombi by activating plasminogen, increasing the production of plasmin, which, despite being more effective than anticoagulants in the dissolution of thrombi, their use can induce intense bleeding, being more indicated for patients with hemodynamic instability and ventricular dysfunction. Embolectomy, emergency surgical removal of emboli, is indicated in massive PTE and/or contraindications to the use of drugs, and is linked to high patient mortality. The vena cava filter is a device implanted in the inferior vena cava by catheterization of the jugular or femoral vein, with the aim of preventing the passage of thrombi to the lungs, which despite the risks, is recommended for patients with a recurrent history of thrombosis. **CONCLUSION:** Because PTE presents different clinical forms, manifesting non-specific signs and symptoms, quick and efficient decision-making about the diagnosis and clinical approach to this condition is extremely important. Therefore, knowledge about epidemiology, pathophysiology, diagnosis, prophylaxis and treatment must be known by every medical professional, capable of evaluating the risks and benefits of each therapeutic approach and appropriately managing PTE.

286. **BEDSIDE ULTRASOUND FOR DIAGNOSING HEART DISEASE IN CRITICALLY ILL PATIENTS**  
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**INTRODUCTION:** Bedside ultrasound is an examination performed by a doctor to assess the condition of a disease, management, or guide treatment. It has an advantage in its practicality and speed, not requiring the exam room. Its use is widespread in the areas of emergency and intensive care medicine, in which it can explore various systems, including the cardiac. In this way, trained people are able to obtain images of the heart in order to identify changes that may favor the diagnosis. This review aims to analyze the use of bedside ultrasound for the diagnosis of heart disease in critically ill patients. **METHODS:** Narrative literature review of the PubMed and Scielo databases using the descriptors "Bedside ultrasound"/"Point-of-care ultrasound", "Cardiac disease"/"Cardiac disease" using the boolean operator "AND", selecting articles in Portuguese and English that addressed the topic in question between the years 2017 and 2022. **RESULTS:** Ultrasound is able to provide important clinical information about the presence of pericardial effusion/cardiac tamponade, left and right ventricular size and function, intravascular volume status, as well as aid in decision-making during cardiopulmonary resuscitation. It is not a diagnostic method, it only helps in identifying problems and can increase the accuracy of a cardiac examination. Thus, the subsequent diagnosis can be made by a specialist with the use of an echocardiography or even another complementary test. Some U.S. protocols assume that detailed evaluation of heart disease is not possible. In addition, there is a divergence as to whether or not specialist physicians perform such an examination. **CONCLUSION:** Bedside ultrasound is an instrument that assists in the examination of the patient, as well as all the processes of cardiac semiology already recommended by medicine. In this way, it is able to detect a limited number of critical cardiac conditions, which, associated with the clinical presentation by the patient, will culminate in the effective diagnosis made later by a specialist using echocardiography.

287. **USE OF AI AND THE EVOLUTION OF CARDIOVASCULAR INTERVENTIONS**Samia Raysa Sales Rodrigues<sup>1</sup>, Paulo Vitor Soeiro Pereira<sup>1</sup>  
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**INTRODUCTION:** Cardiovascular diseases lead global morbidity and mortality statistics. In this scenario, technological advancement emerges as a vital ally, enhancing scientific progress in medical practice. Cardiology incorporates artificial intelligence (AI) in different ways, revolutionizing precision medicine, prognosis, cardiac image analysis and robotic medicine. **METHODS:** This is a descriptive review study. Scientific articles published between 2019 and 2023, found in Medline, PubMed, Scielo, and Google Scholar databases, were used for data collection. To search for articles, the descriptors were considered: AI and cardiology, artificial intelligence in medicine and AI in cardiovascular interventions. The selected material addressed the study's guiding question and aimed to recognize the relevance of AI in the context of cardiology. **RESULTS:** AI, especially in the context of machine learning, presents promising applications in cardiology, especially in coronary artery disease (CAD) and atrial fibrillation. AI improves the diagnosis of CAD, the identification and determination of the degree of plaque in the arteries, and the detection of stent restenosis, through the analysis of image exams. Optical Coherence Tomography (OCT) integrated with evaluation software, recently used in the management of heart diseases, allows the optimization of the reading of OCT images, with assessment of plaque morphology, dimensions of the stent and balloon, and the post-stent deployment result, enabling corrections when necessary. The implementation of AI in the medical scenario demonstrates the potential for assertive diagnoses and better treatment of patients with cardiovascular diseases, in addition to automating computer tasks, allowing more time for direct patient care. **CONCLUSION:** Therefore, advances in AI and technologies integrated into its use will have a positive impact on the management of coronary artery disease and structural heart disease, from better patient identification to a better prognosis and faster treatment planning. It is important to emphasize that advances in AI emerge as mechanisms to assist healthcare professionals, not replacing them in decisions made in the doctor-patient relationship.

288. **IRREGULAR USE OF PSYCHOTROPIC SUBSTANCES AMONG MEDICAL STUDENTS IN CONTEMPORARY TIMES**Ana Beatriz Paixão Rodrigues<sup>1</sup>, Wellyson da Cunha Araújo Firmo<sup>1</sup><sup>1</sup>Universidade Estadual da Região Tocantina do Maranhão

**INTRODUCTION:** The psychopathologization of contemporary society is evident, notably among university students, particularly those in the field of Medicine, as they represent a vulnerable group susceptible to psychological afflictions such as depression and anxiety. Consequently, there is a noticeable rise in the inappropriate use of psychotropic medications as a means to alleviate emotional distress that impairs the overall well-being of individuals. In this context, the present study aims to elucidate the reasons and effects of the increased improper consumption of psychotropics among medical students in the present day. **METHODS:** This is a structured integrative review based on publications from the SCIELO and PUBMED databases, verified in October 2023, using descriptors such as "Psychotropic drugs," "University students," "Medicine," and the Boolean operator "AND." Eight documents published between 2018 and 2023 were selected, following the inclusion criterion of youth psychosocial attention. **RESULTS:** It is pertinent to highlight that contemporary youth suffers psychologically due to social pressures demanding immediate success. Within this context, medical students resort to self-medication as an alternative to alleviate their psychological distress. The most prevalent psychiatric disorders among this group are depression and anxiety, and the commonly used medications include antidepressants (escitalopram and sertraline) and anxiolytics (clonazepam and alprazolam). Furthermore, psycho-stimulant drugs (methylphenidate) are also widely consumed by students aiming to enhance academic performance. However, the improper use of psychotropics can lead to negative side effects such as sedation, systemic disturbances, exacerbation of depression or anxiety, and chemical dependence. **CONCLUSION:** The psychological distress prevalent in contemporary society affects modern youth, especially medical students, who resort to self-medication (psychotropic drugs) as a means of escapism from reality. However, the consequences of irrational drug use are severe, both in the short and long term. Therefore, meticulous and enhanced psychosocial attention is crucial for this particular demographic.

289. **HPV VACCINATION IN MARANHÃO FROM 2019 TO 2023**

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**INTRODUCTION:** The human papillomavirus (HPV) is directly linked to the occurrence of cervical cancer, among others, with vaccination being its primary prevention strategy, provided free of charge by the Unified Health System (SUS). However, Brazil records low adherence to the complete vaccination schedule, posing a risk for the development of neoplasms. **METHODS:** This is a descriptive epidemiological study based on data about the Quadrivalent HPV vaccine and its coverage that are made available in the Information System of the National Immunization Program (SI-PNI), by the Information Technology Department of the Unified Health System (DATASUS), from 2019 to 2023. **RESULTS:** A total of 361,953 doses of the HPV vaccine were administered in the state of Maranhão, among females, during the sampling period, with particular emphasis on the year 2020 (92,247 doses administered). Regarding age groups, there is a pronounced decline in vaccine coverage inversely proportional to age increase, with the age group of girls aged 9 to 11 years showing the highest vaccine application (302,174 doses). Concerning the quantity of vaccines administered per dose, there was an 18% decrease from the first to the second dose. In males, 275,724 doses were administered, with the year 2019 standing out (73,393 doses), exhibiting a similar pattern to the female population in terms of declining coverage with increasing age. The highest number of doses was administered among boys aged 11 years (957,731 doses) when compared to other age groups. **CONCLUSION:** It is observed that the coverage of HPV vaccination still shows low adherence, especially in subsequent doses of the vaccine, which is concerning, as this is the most effective prevention strategy against the disease. The gender discrepancy in administered doses also deserves attention, given that the vaccine particularly protects women against neoplasms with high prevalence and mortality. Therefore, it is mandatory to develop actions that ensure the expansion of HPV vaccination coverage.

290. **CARDIAC FREQUENCY VARIATION IN ELDERLY INDIVIDUALS WITH ALTERED BMI DURING THE SIX-MINUTE WALK TEST**

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**INTRODUCTION:** The aging process of the cardiovascular system encompasses various structural and functional alterations with systemic impacts. In this context, heart rate (HR) serves as a pivotal predictor of cardiac function, as resting HR typically declines with advancing age. However, even during physical exertion, the heart's capacity to elevate HR may decrease, rendering it less adaptable to stressors. Simultaneously, altered body mass index (BMI) can exacerbate these changes due to increased oxygen demand by adipose tissue. Consequently, cardiovascular aging can significantly influence cardiac function, with obesity exacerbating the issue. Thus, this study aimed to identify HR variation during the six-minute walk test (6MWT) in elderly individuals with altered BMI. **METHOD:** Prior to data collection, all participants underwent informed consent procedures. The research protocol obtained approval from the Research Ethics Committee of the State University of Tocantins (CAAE: 63297222.3.0000.8023). An interview was conducted to ascertain inclusion and exclusion criteria. Subsequently, participants' resting HR was measured. They then completed a 6-minute walk between two cones placed 15 meters apart, with HR recorded every minute, totaling 6 measurements. **RESULTS:** Twelve elderly individuals aged 60 years or older were evaluated, including 2 males, with a mean age of 68.0±6.4 years. The mean HR of the volunteers was as follows: at rest (77.5±15.9 bpm); at the first minute (89.4±13.1 bpm); at the second minute (92.3±14.1 bpm); at the third minute (84.6±27.2 bpm); at the fourth minute (93.4±15.5 bpm); at the fifth minute (93.4±12.9 bpm); at the sixth minute (92.3±14.0 bpm). Notably, the study did not observe a significant HR variation. In certain instances, slight variations in HR amplitude at rest and during physical exercise may indicate autonomic nervous system alterations. **CONCLUSION:** Although substantial HR variation was not observed among elderly individuals, the variation appeared progressive. Additionally, the slight variation may have been influenced by individual selection of walking speed, with exertion considered submaximal. While this study contributes to understanding the topic, it underscores the need for further research.



291. **EPIDEMIOLOGICAL OVERVIEW OF ASTHMA HOSPITALIZATIONS IN A BRAZILIAN CITY, 2018 TO 2022**

Rafael Porto de Sá Vaz<sup>1</sup>, Ana Clara Tavares Dantas Nogueira<sup>1</sup>, Leticia de Almeida Moraes Weber<sup>1</sup>, Luan de Sousa Oliveira<sup>1</sup>, Rafaela Dias de Medeiros<sup>1</sup>, Pedro Lucas Baía da Paixão<sup>1</sup>

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**INTRODUCTION:** Asthma belongs to the group of respiratory diseases, causing chronic inflammation in the bronchi, leading to exacerbation periods, which can be triggered by secondary infections and their consequences, resulting in hospitalization of the affected patient. This study aims to analyze the epidemiological profile of hospitalizations and mortality rates among asthma hospitalizations in São Luís from 2018 to 2022. **METHODS:** A descriptive epidemiological study based on secondary data from the Hospital Morbidity System, available at the Department of Health Informatics of the Unified Health System, was conducted to assess the number of hospitalizations and hospital mortality rates due to asthma in São Luís from 2018 to 2022. Data were collected, tabulated, and analyzed using Microsoft Excel 2019. Parameters for analysis included year of processing, hospitalizations, deaths, and mortality rate. The study did not involve human subject research, thus ethical committee approval was waived. **RESULTS:** Between 2018 and 2022, there were 521 hospitalizations due to exacerbation of symptoms in asthmatic patients. Hospitalizations remained stable in 2018 and 2019, with 50 cases each year. However, in 2020, the year of the coronavirus pandemic, hospital morbidity decreased by 26%. In subsequent years, more than half of the hospitalizations during the analyzed period were recorded, with an increase of approximately 116% in 2021 and 237% in 2022. Regarding mortality, 20 deaths were recorded among the 521 hospitalizations, with more than half occurring in 2021 and 2022, totaling 12 deaths. Additionally, the highest mortality rate was 8.11% in 2020, the year when the pandemic began in Brazil. **CONCLUSION:** The significant decrease in hospitalizations in 2020 was likely due to the COVID-19 pandemic, which may have influenced underreporting rates. Furthermore, the significant increase in hospital morbidity and mortality rates between hospitalizations in 2021 and 2022 may also be related to the pandemic period, due to the increased number of respiratory tract infections caused by the virus, as well as post-infection sequelae. Additionally, there is evidence of decreased adherence among asthmatic patients due to social isolation and its consequences. Therefore, this social group requires greater healthcare assistance to reduce asthma morbidity and mortality in São Luís.

292. **EPIDEMIOLOGICAL OVERVIEW OF DEATHS FROM RHEUMATIC VALVE DISEASES IN THE NORTHWEST OVER 10 YEARS**

Lara Milena Santos Silva<sup>1</sup>, Rafaela Dias de Medeiros<sup>1</sup>, Luan de Sousa Oliveira<sup>1</sup>, Ana Clara Tavares Dantas Nogueira<sup>1</sup>, Benjamim Alves Pessoa Neto<sup>2</sup>, Lucas de Sousa Macedo<sup>2</sup>, Alice Marques Moreira Lima<sup>2</sup>.

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**INTRODUCTION:** Chronic rheumatic heart disease (RHD) is a late complication of rheumatic fever (RF), characterized by the immune response to streptococcal pharyngotonsillitis by Group A beta-hemolytic *Streptococcus* if not properly treated. This condition may lead to fibrosis and calcification of cardiac valves and represents the primary cause of morbidity and mortality in RF. Despite the declining mortality trend from RHD due to advances in antibiotic therapy and prophylaxis, the Northeast region still exhibits a significant number of deaths. Therefore, this study aims to delineate the epidemiological profile of mortality due to rheumatic valvular disease in the Northeast region over a period of 10 years. **METHODS:** This is a retrospective, descriptive-quantitative ecological study based on data collected from the Unified Health System's Hospital Information System (SIH/SUS), provided by the Department of Informatics of the Unified Health System (DATASUS). The variables analyzed include gender, age group, race/ethnicity, education level, region of the federation, and number of deaths, according to Chapter IX, codes I05-I08 of ICD-10, from 2011 to 2021 in the Northeast region. **RESULTS:** During the observed period, 19,385 deaths due to RHD were reported in Brazil, with 4,273 deaths in the Northeast region, ranking second (22.4%). There was a higher prevalence among females (61.1%), individuals of mixed race (59.2%), those aged over 50 years (45%), and those with no education or less than 3 years of schooling (31.6%). Regarding the chronological distribution, the highest mortality was observed in 2021 (11.4%) and 2020 (10.2%). Among the states, Bahia and Pernambuco (44.1%) exhibited the highest rates, while Piauí and Paraíba had the lowest death rates (0.06%). Regarding involvement of cardiac valves, the mitral valve was the most affected (54.5%), followed by lesions in multiple valves (33.3%), aortic valve (0.06%), and tricuspid valve (0.05%). **CONCLUSION:** Understanding the epidemiological variations and their relationship with socioeconomic and demographic factors is crucial for the development of public policies aimed at preventing, diagnosing, and providing appropriate treatment, thereby minimizing avoidable deaths from chronic rheumatic heart disease.

293. **EPIDEMIOLOGICAL VIEW OF CONDUCTION DISORDER AND CARDIAC ARRHYTHMIA IN MARANHÃO FROM 2012 TO 2022**

Mariana Clara Borges da Silva<sup>1</sup>, Luanna Stefanny Campos do Nascimento<sup>1</sup>, Myrelle Salgueiro Porto de Sá<sup>1</sup>, Antônia Márcia Dutra Rabelo<sup>1</sup>, João Henrique Xavier de Oliveira<sup>1</sup>, Alice Marques Moreira Lima<sup>2</sup>

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**INTRODUCTION:** The process of efficient cardiac contraction depends on the conduction of an action potential through the heart's electrical system. In this sense, in cases of Conduction Disorders and Cardiac Arrhythmias (TCACs) the heart rhythm is compromised, due to the lack of stimulation or its slowness, causing consequences such as angina, reduced cardiac output, and even sudden death. Therefore, this study seeks to analyze deaths from TCACs in the state of Maranhão between the years 2012 and 2022, due to the observation of the great deleterious impact of these pathologies. **METHODS:** This is a descriptive, quantitative and retrospective analysis, in which secondary data were collected from the SUS Hospital Information System (SIH/SUS), offered by the Department of Informatics of the Unified Health System (DATASUS). The mortality rate was calculated using the Tabwin@v.4.14 software. **RESULTS:** During the years 2012 to 2022, the mortality rate from TCACs in Maranhão was 8.49 per 100,000 inhabitants. 413 deaths were reported, with 2022 accounting for 23.24% of deaths, the highest incidence of the period, followed by 2021, with 22.28%, representing a trend of increasing deaths over time. Turning to the patient profile, males were the most impacted, with 219 deaths (53.03%). Regarding the age group, the most affected age group was 70 to 79 years old, with 110 records (26.63%), followed by 80 years old or more, with 100 records (24.21%). In the color/race characteristic, a failure in notification was observed, given that the factor "no information" had a higher count, compared to the indicators, being followed by the Brown color/race, with 124 cases (30.02%). Finally, the most impacted health macro-region was the North, with 60.77% of cases, with São Luís being the most impacted municipality (196 deaths), due to the greater concentration and admission of patients, as it has more resources. **CONCLUSION:** In short, the COVID-19 pandemic possibly influenced the cases of TCACs, given the large number of cases in 2021, due to the virus's power to increase inflammatory cytokines and hypoxia, which culminates in injury to myocytes, altering the depolarization process and repolarization of cardiac cells. Like this, the study of deaths from TCACs contributes to identifying the largest risk groups and the socioeconomic and demographic aspects that influence the illness process.

294. **EPIDEMIOLOGICAL OVERVIEW OF DEATHS FROM RHEUMATIC VALVE DISEASES IN THE NORTHWEST OVER 10 YEARS**

Lara Milena Santos Silva<sup>1</sup>, Rafaela Dias de Medeiros<sup>1</sup>, Luan de Sousa Oliveira<sup>1</sup>, Ana Clara Tavares Dantas Nogueira<sup>2</sup>, Benjamim Alves Pessoa Neto<sup>2</sup>, Lucas de Sousa Macedo<sup>2</sup>, Alice Marques Moreira Lima<sup>2</sup>.

<sup>1</sup>Universidade Estadual da Região Tocantina do Maranhão

<sup>2</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Chronic rheumatic heart disease (RHD) is a late complication of rheumatic fever (RF), characterized by the immune response to streptococcal pharyngotonsillitis by Group A beta-hemolytic Streptococcus if not properly treated. This condition may lead to fibrosis and calcification of cardiac valves and represents the primary cause of morbidity and mortality in RF. Despite the declining mortality trend from RHD due to advances in antibiotic therapy and prophylaxis, the Northeast region still exhibits a significant number of deaths. Therefore, this study aims to delineate the epidemiological profile of mortality due to rheumatic valvular disease in the Northeast region over a period of 10 years. **METHODS:** This is a retrospective, descriptive-quantitative ecological study based on data collected from the Unified Health System's Hospital Information System (SIH/SUS), provided by the Department of Informatics of the Unified Health System (DATASUS). The variables analyzed include gender, age group, race/ethnicity, education level, region of the federation, and number of deaths, according to Chapter IX, codes I05-I08 of ICD-10, from 2011 to 2021 in the Northeast region. **RESULTS:** During the observed period, 19,385 deaths due to RHD were reported in Brazil, with 4,273 deaths in the Northeast region, ranking second (22.4%). There was a higher prevalence among females (61.1%), individuals of mixed race (59.2%), those aged over 50 years (45%), and those with no education or less than 3 years of schooling (31.6%). Regarding the chronological distribution, the highest mortality was observed in 2021 (11.4%) and 2020 (10.2%). Among the states, Bahia and Pernambuco (44.1%) exhibited the highest rates, while Piauí and Paraíba had the lowest death rates (0.06%). Regarding involvement of cardiac valves, the mitral valve was the most affected (54.5%), followed by lesions in multiple valves (33.3%), aortic valve (0.06%), and tricuspid valve (0.05%). **CONCLUSION:** Understanding the epidemiological variations and their relationship with socioeconomic and demographic factors is crucial for the development of public policies aimed at preventing, diagnosing, and providing appropriate treatment, thereby minimizing avoidable deaths from chronic rheumatic heart disease.

295. **ANALYSIS OF HOSPITAL ADMISSIONS FOR SEPSIS IN THE STATE OF MARANHÃO**

Marcos Vinicius da Costa Vilela<sup>1</sup>, Fernando Viana de Azevedo Naves<sup>1</sup>, José Rodrigues de Moraes Neto<sup>1</sup>, Arthur Abreu Pinheiro<sup>1</sup>, Nicolás Louzada Borchardt Gomes<sup>1</sup>  
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**INTRODUCTION:** Abortion is the termination of a pregnancy, which can be spontaneous or induced. Spontaneous abortion occurs when the loss of the fetus is due to natural causes, without any external intervention or intervention by the pregnant woman herself and, in order to fit into this classification, it must occur between the 20th and 22nd week at the latest. It is common for this type of abortion to result in hospitalizations, which is why this study analyzed hospital data in order to understand the prevalence, demographic characteristics and trends surrounding these hospitalizations in the Northeast region. **METHOD:** This was a descriptive epidemiological study, quantitative in nature and cross-sectional in approach. The data used was collected through the Hospital Information System (SIH/DATASUS) regarding hospitalizations in the ICD-10 category "spontaneous abortion" in the Northeast region, between 2013 and 2022. The variables analyzed included the number of hospitalizations, age group, color/race, total value and average value per hospitalization. **RESULTS:** In the period analyzed, there were 36,844 hospitalizations due to miscarriage in the Northeast, the second largest region in terms of population. This figure represents 40% of the total number of cases of the same cause in Brazil. The most affected age group was between 20 and 29 years old (n=159168). With regard to the color/race variable, there was a great disparity, with the brown population being the most affected (n=194181) and the indigenous population the least affected (n=557). The state of Bahia had the highest number of hospitalizations (n=90793), while Piauí had the lowest number (n=14724). The highest number of hospitalizations was recorded in 2014 (n=41089) and the lowest in 2022 (n=28332), showing a downward trend over the years. **CONCLUSION:** There is a significant burden of hospitalizations due to miscarriage in the Northeast region of Brazil, representing a significant public health challenge. The majority of hospitalizations occur in the state of Bahia, in the 20-29 age group and among the brown population. Although there is a downward trend in the number of hospitalizations over the period analyzed, it is essential to continue monitoring and developing health policies aimed at preventing miscarriage and supporting women who go through this situation, and this study is crucial for guiding these practices.

296. **EPIDEMIOLOGY OF RHEUMATIC FEVER IN MARANHÃO: ANALYSIS OF THE LAST 5 YEARS**

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**INTRODUCTION:** Rheumatic fever (RF) is an autoimmune complication of a pharyngotonsillitis caused by group A beta-hemolytic streptococcus (*Streptococcus pyogenes*). It is more prevalent in the pediatric population, and its incidence can reach approximately 471 thousand new cases per year. Although most symptoms can be resolved with proper medical care, valve damage, known as rheumatic heart disease (RHD), may remain. This is an important factor in morbidity and mortality from RF. The Brazilian Institute of Geography and Statistics (IBGE) reports that Brazil has approximately 30,000 new cases of RF per year. Given the limited availability of epidemiological data on RF in Brazil, this study aims to enhance the existing Brazilian dataset, while also analysing the current situation in the state of Maranhão on these diseases. **METHODS:** an epidemiological, cross-sectional, time series study was carried out, with data from DATASUS, Ministry of Health, from June 2018 to May 2023. The following data were collected: number of hospitalizations for rheumatic fever; mortality from rheumatic fever; hospitalizations and deaths by sex; hospitalizations and deaths based on skin color, in the state of Maranhão. In addition, the absolute numbers of national hospitalizations and deaths were analyzed for the purpose of comparing results. **RESULTS:** In the period analyzed, 494 hospitalizations for rheumatic fever were carried out in the state of Maranhão. The year with the highest number of hospitalizations for RF was 2019 (n=134). The most affected sex was female (n=359). Regarding skin color, the number of hospitalizations was higher among mixed-race people (n=279). Analyzing the number of deaths, a total of 14 were documented in the established period. The highest mortality rate occurred in 2022 (n=4 deaths). Regarding mortality in relation to skin color, the number of deaths was higher among white people (n=6). Nationally, the number of hospitalizations and deaths were 7911 and 271, respectively. **CONCLUSION:** The number of hospitalizations in Maranhão due to RF represents 6% of the Brazilian total, and the number of deaths represents 5% of the national number. Furthermore, the number of female deaths represents 78% of the total in Maranhão in the period. The present study presents data only from hospitalized individuals, which may underestimate the real situation in Maranhão in terms of RF. These data raise concerns regarding public spending and inequality in the country.

297. **EPIDEMIOLOGY OF BENIGN BREAST NEOPLASM BETWEEN 2019 AND 2023 IN THE STATE OF MARANHÃO**

Melo, Ana Carolina Leal<sup>1</sup>; Luz, Kellen De Jesus Farias Da<sup>1</sup>; Câmera, Bruna Leão Lemos<sup>1</sup>; Santos, Alynn Bayma Dos<sup>1</sup>; Castro, Isabelly Soares<sup>1</sup>; Krogh, Erika<sup>1</sup>

<sup>1</sup>Universidade Federal do Maranhão (UFMA)

**INTRODUCTION:** Benign breast pathology encompasses a spectrum of alterations in the mammary gland, involving a diverse group of lesions. These lesions are common and can manifest clinically as palpable lumps or solely as changes in imaging tests. It is crucial to rule out malignant breast lesions since breast cancer is the most prevalent malignancy in women in Western countries. With the advent of mammography, ultrasound, magnetic resonance imaging, and needle biopsies, monitoring benign lesions without the need for surgery becomes possible in the vast majority of cases. In this perspective, the objective of the present study was to analyze the epidemiological profile of benign breast neoplasms in Maranhão between the years 2019 and 2023. **METHODS:** This is an epidemiological, descriptive, time-series study (July 2019 to June 2023), utilizing secondary data extracted from DATASUS. The variables investigated included health macro-region, race, age group, gender, year of diagnosis, and nature of care. **RESULTS:** In the state of Maranhão, a total of 453 hospitalizations due to benign breast neoplasms were observed, with 83.6% occurring in the northern macro-region. The year 2022 represented the peak of hospitalizations, with 115 cases, accounting for 25.4% of the total. Notably, 419 of these hospitalizations were elective. The most affected age group was 40 to 49 years, with 112 hospitalizations. The majority of patients who declared their race were of mixed race. Of the hospitalizations, 95.3% of patients were women. The total cost of hospitalizations was approximately 381,000 Brazilian Reals, with 2021 registering the highest expenditure. On average, patients spent about 1.4 days hospitalized, totaling 638 days of hospitalization due to this neoplasm. It is important to emphasize that there were no recorded deaths during the analyzed period, highlighting the benign nature of this condition. **CONCLUSION:** Based on the presented data, the incidence of benign breast neoplasms is noteworthy in the health panorama of Maranhão, resulting in 453 hospitalizations during the period from July 2019 to June 2023. Thus, the high frequency of cases, particularly in women aged 40 to 49, underscores the importance of a comprehensive and efficient healthcare service to achieve early diagnosis, minimize the negative impacts of the disease on patients' quality of life, and establish appropriate monitoring and treatment.

298. **EPIDEMIOLOGY OF BREAST MALIGNANT NEOPLASM IN THE STATE OF MARANHÃO IN THE PERIOD OF 2020-2023**

Yasmin Andrade Sampaio<sup>1</sup>, Jousen Henrieth Reis Andrade Nascimento<sup>1</sup>, Kellen De Jesus Farias Da Luz<sup>1</sup>, Lyanne Silva Oliveira<sup>1</sup>, Isabelly Soares Castro<sup>1</sup>, João Pedro Chaves Saboia<sup>1</sup>, Erika Krogh<sup>1</sup>

<sup>1</sup> Universidade Federal do Maranhão

**INTRODUCTION:** Malignant breast neoplasm is a heterogeneous group of diseases with distinct behaviors, characterized by the rapid proliferation of abnormal breast cells, forming tumors and invading or not adjacent and/or distant tissues. In Brazil, it is the most common neoplasm in women, second only to non-melanoma skin cancer. Furthermore, it deserves attention due to its major negative impact on patients' quality of life and functionality. The aim is therefore to describe the epidemiological panorama of malignant breast neoplasms in Maranhão (MA). **METHODS:** This is a descriptive epidemiological study based on data provided by the Department of Informatics of the Unified Health System (DATASUS). The study population consisted of cases of hospital admissions in the SUS of women with malignant breast neoplasm in the state of Maranhão, reported between June 2020 and June 2023. **RESULTS:** In the period from June 2020 to June 2023, MA had a total of 3,336 hospitalizations for malignant neoplasms of the breast. The most affected age group was 50-59 years old, with 965 cases, while the year with the highest number was 2021 (175). There were also 2,730 elective hospitalizations and 605 emergency hospitalizations. Furthermore, among the macro-regions, the North had the highest number of hospitalizations, 2,139, with 275 deaths, followed by the South, 669, with 82 deaths, while the East had the lowest number, 527, with 50 deaths. This amounted to 407 deaths, 0.3% in the 50-59 age group; 0.23% in the 40-49 age group; 0.21% in the 60-69 age group; and the lowest rate, 0.01% in the 20-29 age group. In this context, 2022 stands out with 0.36% of deaths, followed by 2021 with 0.29%. Brown women accounted for 0.7 percent of this total, those with no information 0.17 percent and black women 0.05 percent. They required 11,724 days of hospitalization, an average of 3.5 days of stay, generating a total cost of R\$7,683,766.13 to the public coffers. **CONCLUSION:** The analysis showed the impact of breast neoplasms in MA, especially in the North macro-region, where the mortality rate was higher. In addition, the 50-59 age group had a higher incidence, with 2022 having the highest number of deaths and hospitalizations. In this way, the study served to elucidate the epidemiological panorama of this disease, which shows the complexity of the issue, and reiterates the importance of seeking to expand and improve public health policies in MA to reduce the incidence of this neoplasm in the state.

299. **EPIDEMIOLOGY OF IMMUNODEFICIENCY SYNDROME ACQUIRED IN BRAZIL IN THE LAST TEN YEARS**

Pedro Henrique Delfim Pessoa<sup>1</sup>, Brunna Araújo dos Santos<sup>1</sup>, Stephanie Freire Soares de Farias<sup>1</sup>, Caio de Brito Matos<sup>1</sup>, Adeany Yasmim Morgado Reis<sup>1</sup>, Lucas Guilherme Macedo Guterres<sup>1</sup>

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**INTRODUCTION:** Acquired Immune Deficiency Syndrome (AIDS) is a chronic disease, whose symptoms can lead to severe weakness, significantly compromising the quality of life of the sufferer. In untreated contexts, it can lead to reduced immunity and even death. Despite the notable advance in the national epidemiological scenario regarding the disease, this condition still represents an important challenge for the country's public health. Therefore, the main objective of this study is to verify and compare the incidence of AIDS among Brazilian macro-regions between the years 2013 and 2022. **METHODS:** This is an epidemiological, descriptive and retrospective study. Furthermore, a systematic search was carried out on the DATASUS portal, in a specific segment for the epidemiological coverage of AIDS - with the results subdivided by columns in relation to the regions of the country -, in addition to the IBGE, for demographic consultation. **RESULTS:** The region with the highest incidence of AIDS in the selected period was the Southeast, with an absolute number of new cases of 83,171, which represents a rate of 0.12%, the lowest observed. From 2021 to 2022 there was a 64.16% reduction in the diagnosis of new cases in the country as a whole, from 16,889 to 6,052, this being the lowest incidence observed. The North region presented 22,500 new cases in the period mentioned, which denotes a rate of 0.18%. The South region produced 47,737 new cases, representing a rate of 0.19%, the highest recorded. The Central West region reported 16,316 new cases, the lowest incidence observed, with a rate of 0.14%. The year in which the most new cases of AIDS were reported in Brazil, among the period in question, was 2013, with 32,445 occurrences. The only increase in the number of new cases investigated in Brazil, when analyzed in subsequent years, was from 2020 to 2021, 15,854 in the first and 16,889 in the second, which represents an increase of 6.5%. The total number of cases for the ten-year period, considering the national unit, was 220,393. **CONCLUSION:** AIDS is a condition with important pathological potential, whose therapeutic neglect means a poor prognosis for the patient with it. However, the advancement of medical science and public health policies has provided a scenario in which the containment of new cases is a reality, something that can be verified in the statistics expressed in the databases used for the different regions of the country.

300. **EPIDEMIOLOGY OF TUBERCULOSIS IN ALCOHOLIC PATIENTS IN MARANHÃO FROM 2018 TO 2022**

Caio de Brito Matos<sup>1</sup>, Stephanie Freire Soares de Farias<sup>1</sup>, Pedro Henrique Delfim Pessoa<sup>1</sup>, Brunna Araújo dos Santos<sup>1</sup>, André Aquim Salgado Prazeres Picanço<sup>1</sup>, Adeany Yasmim Morgado Reis<sup>1</sup>, Sueli de Souza Costa<sup>2</sup>

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**INTRODUCTION:** Tuberculosis (TB) is a disease of bacterial origin, caused by *Mycobacterium tuberculosis*, which has permeated society for decades with high rates of complications, mainly pulmonary. Alcohol abuse, concomitant with TB, increases the risks related to the disease, either by increasing the aggression of the bacillus in the patient's body or by socioeconomic factors that interfere with the improvement of the disease. For this reason, the study aims to evaluate the epidemiological profile of tuberculosis in alcoholic patients, over a period of 5 years, in Maranhão. **METHODS:** This is a cross-sectional and descriptive study of patients diagnosed with tuberculosis associated with alcoholism in the state of Maranhão, in which data obtained through the Sistema de Informação de Agravos de Notificação (SINAN), made available by the platform of the Departamento de Informática do Sistema Único de Saúde (DATASUS), in the period from 2018 to 2022. The variables included in the study involve the age range from 15 years of age, race, sex and education. **RESULTS:** In the period from 2018 to 2022, in Maranhão, 2752 cases of patients with alcohol dependence who developed TB were reported, with 2022, with 664 cases, being the year with the highest incidence (24%). Regarding the age group, 790 new cases were confirmed in adults between 30 and 39 years old (29%). When it comes to race, self-declared brown people were those most affected by the disease, since the population is mostly mixed race, with 1953 new cases in this period (71%). Male patients are the most affected, with an incidence of 2323 cases (84%), with the influence of education also being noted, in which 2065 patients (75%) did not complete basic education. **CONCLUSION:** Alcoholic patients, aged 30-39, self-declared mixed race, male and who have not completed basic education are more susceptible to acquiring TB. Thus, the study shows the social group vulnerable to this association of illnesses, making it possible to target public policies capable of changing this scenario in Maranhão.



**301. EPIDEMIOLOGY OF PATIENTS WITH CHRONIC HEART FAILURE IN A UNIVERSITY HOSPITAL**

Thamires Nayane Gomes De Santana<sup>1</sup>, João Felipe Serra Melo<sup>1</sup>, Francisco De Souza Faria<sup>1</sup>, Rayanne Dutra Gonçalves<sup>1</sup>, Anna Karoliny Freitas De Souza<sup>1</sup>, Surama Do Carmo Souza Da Silva<sup>1</sup>, José Albuquerque De Figueiredo Neto<sup>1</sup>

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**INTRODUCTION:** Endemic diseases are a central concern for public health. In the state of Maranhão, epidemiological data shows some infectious and parasitic diseases such as tuberculosis, leishmaniasis, leprosy, Chagas disease, and some arboviruses and helminthiasis as the main endemic diseases of the state. The occurrence of these diseases is associated with socioeconomic characteristics and may influence the cause or exacerbation of chronic diseases, such as chronic heart failure (CHF). In this context, the present study aims to analyze the epidemiological profile of patients diagnosed with CHF in a university hospital in Maranhão. **METHOD:** This is a cross-sectional observational study with descriptive and qualitative analysis. Patient inclusion occurred from July 2021 to July 2023. Patients diagnosed with chronic HF, with left ventricular ejection fraction (LVEF)  $\leq$  49%, and aged 18 years or older were included in the study (CAAE:25756919.9.2004.5086). Statistical analyses were obtained from calculations of mean and relative to absolute values. **RESULTS:** With a sample of 165 patients, it was found that in relation to socioeconomic characteristics, 113 (68.7%) were male, with a mean age of 57.8 years. In epidemiology, 10.3% had Chikungunya (n=17), 7.8% Trachoma (n=13), 3.6% Chagas disease (n=6), 3.7% Dengue (n=5), 2.2% Helminthiasis (n=3), Scabies (n=3), Leprosy (n=3), and Zika (n=3). Regarding the environment, the majority reside in urban areas (79.4%, n=131), have basic sanitation (68.9%, n=98), and have access to drinking water (94.5%, n=156). **CONCLUSION:** The results revealed a significant incidence of various diseases, with rates of Chikungunya, Trachoma, Chagas disease, dengue, Helminthiasis, Scabies, Leprosy, and Zika among participants. These diseases have the potential to predispose individuals to chronic diseases and trigger complications, particularly CHF. Regarding environmental factors, most patients have access to basic sanitation services and live in urban areas, but this may be more related to access to healthcare services than to the development of the disease. Therefore, delineating this profile becomes crucial in implementing policies aimed at the action of epidemiological surveillance and public health practices to prevent and control CHF in Maranhão.

**302. EPIDEMIOLOGY OF DEATHS FROM MENINGITIS IN CHILDREN UNDER 1 YEAR OF AGE IN MARANHÃO FROM 2013 TO 2022**

Maria Vitória de Carvalho Lemos<sup>1</sup>, Melissa Clementino Sousa<sup>1</sup>, Leticia Moucherek do Nascimento Cutrim<sup>1</sup>, Pedro Henrique Regalado Régis Cordeiro<sup>1</sup>, Rakell Almeida Soares<sup>1</sup>, Rebecca Abdala de Melo e Alvim Franca<sup>1</sup>, Rhamid Kalil Trabulsi<sup>1</sup>

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**INTRODUCTION:** Meningitis is an inflammation involving the meninges -brain membranes- and the cerebrospinal fluid (CSF) in response to an aggressive agent. Such inflammation is considered a public health problem due to the significant morbidity and mortality it causes, which can result in neurological sequelae and death, especially in the pediatric age group. Therefore, the present study aims to analyze the number of deaths from meningitis in children under 1 year of age in the State of Maranhão. **METHODS:** This is an epidemiological study of cases of death due to meningitis in patients under 1 year of age in Maranhão from 2013 to 2022, through secondary data collected in the Notifiable Diseases Information System (SINAN/DATASUS), which were tabulated in EXCEL and statistically analyzed. **RESULTS:** In the period from 2013 to 2022, 73 cases of death from meningitis in children under 1 year old were recorded. In the 2013 - 2014 biennium, the highest number of notifications related to deaths in the age group due to inflammation of the meninges occurred, corresponding to 29.4% of total notifications in the last 10 years (F= 20). In the period from 2015 to 2018, a drop in cases was recorded, resulting in the 2017 - 2018 biennium, the lowest number of deaths in the last 10 years, corresponding to 9.2% of total notifications (F= 6). However, in the 2019 - 2020 biennium there was a new increase in occurrence, recording an increase of 266.66% of cases (F= 16) when compared to data from 2017 - 2018 (biennium with the lowest occurrence); with a slight reduction in notifications in 2021 - 2022 with registration corresponding to 23.1% of cases (F= 12). **CONCLUSION:** The study revealed that in contrast to the downward trend in deaths registered in the period from 2015 to 2018, there was a significant increase in notifications between 2019 and 2020. During the period of increased notifications, 16 new cases were recorded, corresponding to 25.4% of the total of notifications from the period under study, therefore, it is possible to infer a return to the rates analyzed in the 2017 - 2018 biennium (lower number of registered deaths). The recognition of the return of a high incidence of deaths due to meningitis in children under 1 year of age highlights the impact of vaccination coverage on the number of notifications of deaths due to meningitis, as well as the need to plan actions aimed at prevention and combat, especially in the age group analyzed.

**303. EPIGLOTTITE EM PACIENTES PEDIÁTRICOS: IMPACTOS DO DIAGNÓSTICO PRECOZE NA MORTALIDADE.**

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**INTRODUCTION:** Epiglottitis, inflammation of the epiglottis, is considered a pediatric emergency, considering the high risk of death. In this sense, early diagnosis becomes a necessity, given its repercussions on the prognosis of patients. Thus, the objective of this study is to analyze the impacts of early diagnosis of epiglottitis on the reduction of mortality in children. **METHODS:** This is a narrative review, which used the descriptors "epiglottitis", "pediatrics", "early diagnosis" and "mortality", in three databases (Virtual Health Library, PubMed, and Scielo) in October 2023. Articles written or not in Portuguese, published between 2018 and 2023, were included. In all, 21 articles were found, of which 6 were in accordance with the objectives of this study. **RESULTS:** The articles pointed out the importance of early diagnosis. Thus, knowledge about the signs and symptoms - dyspnea, dysphagia, high fever, inspiratory stridor, sialorrhea, signs of toxemia and cyanosis - of epiglottitis in pediatric patients was considered of paramount relevance to the agility of medical management and reduction in mortality. Thus, with regard to complementary exams, conventional radiography proved to be an auxiliary tool in the diagnosis, but the materials list that the primacy of the physical examination, and the correlation with the history, to the early diagnosis. In this sense, the greater the efficiency of diagnosis, the lower the probability of death. Attention is also paid to the etiological origin - non-infectious and infectious causes - in order to understand the cause. In addition, airway management is highlighted as crucial to the maintenance of the patient's vital signs, in addition to the medical skill in conducting such activity, through orotracheal intubation or another access route. Finally, since epiglottitis is a rare disease, early diagnosis, technical skill, and effective management are essential to reduce mortality. **CONCLUSION:** Therefore, knowledge of signs and symptoms, detailed physical examination, and correct airway management are essential for early diagnosis and mortality reduction in pediatric patients with epiglottitis. In addition, radiography also has value in the safety of professionals in decision-making, as it represents an assertive complementary exam.

**304. ASYMPTOMATIC CAROTID STENOSIS: COGNITIVE IMPACT RELATED TO REVASCULARIZATION**

Letícia Vitória de Souza Rodrigues<sup>1</sup>, Raquel de Sousa Lima<sup>1</sup>, Myrella Evelyn Nunes Turbano<sup>1</sup>, Pedro Henrique Fréres Holanda<sup>1</sup>, Vitória Pereira da Costa Silva<sup>1</sup>, Monalyza Pontes Carneiro<sup>1</sup>, Robertha Hallana Rodrigues Farias<sup>1</sup>

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**INTRODUCTION:** Carotid artery stenosis (CAS) is a condition in which this artery is blocked by atherosclerotic plaques, increasing the risk of stroke and other cardiovascular events. CAS is considered symptomatic when symptoms occur in the previous 6 months, or asymptomatic when no previous symptoms are identified. When asymptomatic, it can be linked to cognitive dysfunction related to cerebral hypoperfusion. Management includes medical treatment and invasive revascularization, such as carotid endarterectomy or carotid angioplasty. Indications for revascularization in asymptomatic CAS are poorly understood, associated with a smaller number of available evidence. Therefore, the study aims to evaluate the cognitive implications of carotid revascularization in asymptomatic patients. **METHODS:** The research is an integrative literature review, based on bibliographic sources, with a qualitative and retrospective approach, based on studies between the years 2011 and 2023 extracted from the databases: PUBMED, EMBASE and Cochrane, using the health descriptors "executive function", "carotid stenosis" and "management" and Boolean operators "AND" and "OR". **RESULTS:** The studies have shown that improvement in cerebral perfusion parameters through revascularization led to cognitive improvement in patients with asymptomatic carotid artery stenosis. Among the surgical modalities, some studies highlighted carotid endarterectomy with better outcomes, while carotid angioplasty was associated with a higher risk of cognitive dysfunction. Simultaneously, improvement in executive function was reported with revascularization compared to medical treatment. These findings were supported by comparing cognitive tests before and after carotid revascularization, by analyzing biomarkers, and by imaging examinations evaluating cerebral perfusion. Some studies also reported a decrease in the incidence of stroke. **CONCLUSION:** Despite surgical revascularization methods for asymptomatic carotid artery stenosis indicating an improvement in cognitive capacity, there are still controversies in the literature regarding the use of surgical techniques over medical treatment. However, other studies support that both are associated with improvement in cognitive and executive abilities.

**305. STUDY OF THE TOXICITY AND CARDIOVASCULAR ACTION OF FRIDERICIA PLATYPHYLLA IN RATS**

Mateus Balbino Barbosa de Carvalho<sup>1</sup>, Rachel Melo Ribeiro<sup>1</sup>, Kellen de Jesus Farias da Luz<sup>1</sup>, Ludmila Tavares dos Santos Silva<sup>2</sup>, Nicolas Melo de Cerqueira Salgado<sup>2</sup>, Isabela Vitória de Araújo Costa Melo<sup>1</sup>, Arthur Juan Oliveira Moreira<sup>1</sup>  
<sup>1</sup>Universidade Federal do Maranhão

**INTRODUCTION:** Pharmacological therapy for cardiovascular diseases, such as hypertension, is linked to significant side effects. Thus, there is interest in finding more therapeutic options, with greater tolerance of these effects by the patient. Relevant alternatives are bioprospecting studies with plant species. This study aims to obtain the hydroethanolic extract of *Fridericia platyphylla* (HEFP) and evaluate its toxicity and cardiovascular effects in rats. **METHODS:** Adult, normotensive *Rattus norvegicus* rats of the Wistar strain were used. The toxicity study was carried out with females weighing 150 to 200g, divided into Control groups, using saline solution, and Treated groups, administered HEFP 2000 mg/kg, observing piloerection, ocular reflex, behavioral patterns and parameters of body weight, excreta, water and food intake for 14 days. The pharmacological activity was carried out using males weighing 200 to 250g, divided into Control and Treated groups, the latter being given HEFP 1000mg/kg in a single dose for acute treatment, in which the rats were anaesthetized after 1 hour and Systolic Blood Pressure (SBP), Diastolic Blood Pressure (DBP) and Mean Blood Pressure (MBP) were obtained, as well as Heart Rate (HR). The study was approved by the Animal Research Ethics Committee under No. 23115.013098/2020-73. **RESULTS:** The toxicity study of the animals treated with HEFP 2000 mg/kg remained normal when compared to the Control group and did not cause mortality in any of the animals, suggesting a Lethal Dose 50 higher than this dose, in addition to being non-toxic orally. As for the hemodynamic parameters of the animals treated with HEFP 1000 mg/kg, it can be seen that at this dose the extract can promote significant hemodynamic changes in DBP, when compared to the Control Group, but still at normal levels for what is considered in rats. There were no significant differences in the animals' HR or in SBP and MBP, which were within normal limits. This suggests that, in this acute treatment, HEFP showed cardiovascular safety. **CONCLUSION:** This study has produced a pharmaceutical formulation of HEFP for oral use which is safe in terms of toxicity and hemodynamic parameters. In this way, this study contributes to the bioprospecting of this plant species, which has a high potential that could be validated and used in the treatment of conditions that affect human health.

**306. STUDY ON THE USE OF CANNABIDIOL IN THE TREATMENT OF AUTISM: CASE REPORT**

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<sup>1</sup>Universidade Ceuma

**INTRODUCTION:** Cannabis Sativa is one of the variations of Cannabis, an angiosperm with female and male flowers with great therapeutic potential, given the extraction of one of its compounds, cannabidiol (CBD) for the treatment of various disorders and diseases that affect the quality of life of affected individuals. In the case of Autism Spectrum Disorder, the treatment is individualized with the aim of acting on the manifestation of symptoms, accompanied by the daily use of the usual medication, leading to progression in hyperactivity, self-injurious behaviour and anxiety. **CASE DESCRIPTION:** Patient, 11 years old, male, with grade 2 Autistic Spectrum Disorder. The diagnosis came at the age of 5, after which he began treatment with controlled medication and neurological monitoring. He used medication based on CBD/THC (Tetrahydrocannabinol), components of Cannabis, with medical support for 2 years. He currently uses 4 drops every 12 hours of the medication manufactured by the company Abrace, together with 15mg aristab. The patient's mother reports that he uses the blue bottle (it has a higher concentration of CBD than THC), based on the suitability and progression of symptoms observed by the neurologist. In the last year, he has seen an extremely significant improvement in the degree of interaction with his schoolmates, as well as in the hyperactivity, cognitive aspects of speech, concentration and anxiety attacks. That year she began the literacy process and saw progress in her reading and ability to concentrate during lessons and questions with teachers. She claims that during the drug therapy with Cannabidiol, she noticed a significant improvement in her quality of life. **CONCLUSION:** The use of CBD has achieved positive results as a drug therapy in addition to specific medications. The patients did not experience any side effects, but rather an improvement in the symptoms that hindered their routine. Acceptance of the treatment is good, however, because it is marketed exclusively by ANVISA, as well as being authorized, the price of the product is high and not everyone is able to use it long-term because of the financial demands.

307. **EPIDEMIOLOGICAL STUDY OF ARBOVIROSES IN BAIXADA MARANHENSE FROM 2018 TO 2022**

Paulo Victor Nascimento Silva<sup>1</sup>, Douglas da Costa Siqueira<sup>1</sup>, Lissandro Marlon Castro Santos<sup>1</sup>, Suzana Patricia Santos Rodrigues<sup>1</sup>, Carolinne Sousa Dourado<sup>1</sup>, Raphael de Matos Lima<sup>1</sup>, Robson Emmanuel Silva Sampaio<sup>1</sup>

<sup>1</sup>Universidade Federal do Maranhão - UFMA

**INTRODUCTION:** Arboviruses are diseases caused by so-called arboviruses. Its main means of transmission is *Aedes aegypti*, which can transmit the Zika virus, chikungunya fever and dengue fever. In 2023, until the end of April, there was a 30% increase in the number of probable dengue cases compared to the same period in 2022 throughout Brazil. Occurrences rose from 690.8 thousand cases last year to 899.5 thousand this year, with 333 confirmed deaths (Ministry of Health, 2023). In this sense, the study aims to analyze the increase in cases of arbovirus in Baixada Maranhense (BM). **METHODS:** Epidemiological study of arbovirus in BM from 2018 to 2022. The online platforms of the Ministry of Health of the Department of Informatics of the Unified Health System (DATASUS) were used through the Notifiable Diseases Information System (SINAN). Data related to the arboviruses dengue, chikungunya and Zika were stratified into: race/color, age group, education and sex. **RESULTS:** The incidence rate of arbovirus cases in BM was (592 cases) of arbovirus from 2018 to 2022, with emphasis on 2022, with 226 cases. The most prominent disease is dengue with 494 cases and chikungunya with 201 cases. In the age group, there was a higher prevalence between 20-39 (205 cases) and between 40-59 (161 cases). Regarding race/color, there was greater emphasis on self-declared mixed race (464 cases), followed by white (64 cases) and black (55 cases). Regarding education, there was a predominance of complete secondary education (105 cases) and incomplete 4th and 8th grades of elementary school, with 66 cases and 63 cases, respectively; however, there are 171 white/ignored cases. Furthermore, with regard to sex, there is a preponderance of females, with 340 cases. **CONCLUSION:** The study demonstrated that arbovirus is more affected by brown race/color, between 20-39 years old, female and with complete MS, in the period between 2018 and 2022. Furthermore, what refers to race/color only intensifies data already collected by national sources, such as the Brazilian Institute of Geography and Statistics. This analysis highlights the importance of increasing actions in public health, through dissemination in communication vehicles, as well as actions by health agents with other professionals. In addition, there are actions aimed at the environment, through urban cleaning, with the aim of reducing the incidence of transmitting mosquitoes and reducing the harm.

308. **BARRETT'S ESOPHAGUS: A COMPLICATION OF GASTROESOPHAGEAL REFLUX**

Priscilla Malena Albuquerque de Souza<sup>1</sup>, Gu'eren Hadassa Alves Silva<sup>1</sup>, Pedro Henrique de Oliveira Cavalcante<sup>1</sup>, Juliana de Oliveira Lima<sup>1</sup>, Daniel Alves Alvarenga<sup>1</sup>, Kerolayne de Melo Nogueira<sup>1</sup>

<sup>1</sup>Faculdade Pitágoras de Bacabal

**INTRODUCTION:** Gastroesophageal reflux disease (GERD) is caused by malfunction of the lower esophageal sphincter. This pathology is a consequence of the return of gastric contents into the esophagus or into the oral cavities and lungs. Furthermore, the chronicity of GERD is the main risk factor for triggering complications such as Barrett's esophagus (BE) and is associated with cases of esophageal adenocarcinoma (EA). The purpose of this research is to understand GERD, Barrett's pathology and the consequences in the population. **METHODS:** This is an integrative literature review, in which articles published on the SciELO, PubMed, Google Scholar and LILACS platforms were used. The research was carried out in September 2023 with works published in the last five years. The literature found was analyzed, interpreted and summarized for a general understanding of the subject covered. **RESULTS:** Long-term GERD may favor the replacement of the stratified squamous epithelium of the esophagus by specialized columnar epithelium of the intestinal type, due to the high aggression of the esophageal mucosa by gastrointestinal reflux. This has gained relevance in Western medicine due to its association with cases of AE, becoming the fifth leading cause of cancer-related death worldwide. Furthermore, obesity is recognized as a major risk factor for the development of EB, since the high body mass index favors high degrees of obesity and increases the chance of developing this pathology, which has intensified in the population due to poor health conditions. lifestyle habits, enhancing the emergence of GERD as well as EB. Studies using *in silico* models, using biomarkers, proved to be successful, as using this tool and therapeutic strategies reduced the number of deaths linked to EB. This advance was due to techniques using genes such as genomic sequencing, which, using DNA, makes it possible to identify the risks of GERD and EB in a sick individual. **CONCLUSION:** Therefore, it is important to highlight that gastroesophageal reflux disease culminates in Barrett's esophagus, which is a major risk factor for the development of esophageal adenocarcinoma. Therefore, this pathology requires a rapid diagnosis, since Barrett's esophagus has the potential to progress to esophageal adenocarcinoma and is therefore one of the main reasons for death from cancer in the world.

309. **OPHTHALMOLOGICAL EXAMS AND THE EARLY DIAGNOSTIC OF RETINOBLASTOMA: A LITERATURE REVIEW**

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**INTRODUCTION:** The retinoblastoma is a rare type of eye cancer, usually more common in children under the age of three and can be lethal if not treated. There are three types of retinoblastomas: unilateral, bilateral and the neuroectodermic primitive tumor or trilateral retinoblastoma. The symptoms consist in the "cat eye", that is characteristic of leukocoria, which can be seen in pictures taken with flash, also problems with the eye's movements, like strabismus, vision impairment, eye pain, bigger eye globe and amblyopia. With an early diagnostic, the chances of cure are up to 90%. Therefore, the literature review is necessary to show the importance of the ophthalmological exams for the early diagnostic of the retinoblastoma, since the current treatments show better results when the disease is identified in a localized stage **METHODS:** The researches were based on 10 bibliographic data articles found in two databases: Scielo and Pubmed, between 2018 and 2023. The keywords used were: retinoblastoma, chosen treatment and early diagnostic. **RESULTS:** It was noticed that the diagnostic can be done by several exams, including the red reflex test, which will track changes in the eye transparencies. This exam needs to be done in every new born in the maternity and needs to be repeated during the first three years of the child, at least twice or three times a year. Medical appointments with ophthalmologists are also necessary for the ophthalmoscopy, and it can be required an eye globe's ultrasonography and a magnetic resonance of the ocular orbits for investigation of the current state of the disease. Those actions decrease the lethality levels due to early diagnostic and bring higher chances of vision preservation and cure. **CONCLUSION:** The ophthalmological exams detect retinoblastoma, allowing a diagnostic of the disease during the initial stages. The knowledge about the importance and the access to those exams and to ophthalmologic care perform an essential role on the mortality related to the retinoblastoma.

310. **ASSOCIATED FACTORS WITH INFANT GROWTH IN THE FIRST TRIMESTER OF LIFE**

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**INTRODUCTION:** Child growth is characterized by intense and complex changes in anthropometric values in the first months after birth. This process results from the interaction between intrinsic (genetic) and extrinsic (environmental) factors. The benefits of breastfeeding for the mother-child binomial during this process are undeniable. However, factors prior to birth, such as intrauterine growth restriction, smoking during pregnancy, and environmental factors can interact in different ways on infant growth. The objective of this study was to investigate the factors associated with the growth of children in the first trimester of life. **METHODS:** This was a cross-sectional, population-based study associated with a multicenter study entitled: Nutritional status of iodine, sodium, and potassium in the mother-child group in five Brazilian macroregions. In this analysis, data from São Luís - MA were used, with a probabilistic sample consisting of 178 breastfeeding women and their infants. Data collection (socioeconomic, demographic, nutritional, gestational, biological, and food consumption) took place in 12 Basic Health Units and in the homes of the breastfeeding women, using computerized semi-structured questionnaires. To investigate the factors associated with child growth in the first trimester of life, multiple linear regression analyses were performed using the STATA 14.0® program. In the univariate analysis, the variables that presented a p-value  $\leq$  0.25 in the regression models were included in the next block until the final model. The significance established in the final model was a p-value  $<$  0.05. The study was approved by the Research Ethics Committees of the Federal University of Viçosa (n° 2.496.986) and the Federal University of Maranhão (n° 2.982.185). **RESULTS:** Higher daily weight gain velocity (DWGV) is associated with lower birth weight (p-value = 0,028). **CONCLUSION:** The findings indicate the importance of investigations from the early stages of a child's life, suggesting the need for intensified prenatal care with measures to prevent maternal smoking, especially in the first 1,100 days of life, a period when eating habits and established growth will persist throughout the life cycle.



311. **FACTORS ASSOCIATED WITH THE NUTRITIONAL STATUS OF PREGNANT WOMEN**

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**INTRODUCTION:** Pregnancy is characterized by the period of development of the embryo in the uterus, in which nutritional needs are higher than normal, due to the pregnant woman's physiological adjustments and nutrient demands for fetal growth. In this way, the nutritional status of the pregnant woman not only affects maternal health, but also that of the fetus, due to the mother's dependence on her growth and development, which can influence her birth weight, prematurity, morbidity and infant mortality. It is also known that nutritional status during pregnancy is responsible for the health of the fetus, with its effects in the short, medium and long term. The present study aimed to evaluate the factors associated with the nutritional status of pregnant women. **METHODS:** Population-based cross-sectional study, linked to a multicenter study developed in five Brazilian macro-regions approved by the Research Ethics Committees of the Federal Universities of Viçosa (n° 2,496,986) and Maranhão (n° 2,982,185). The study sample was probabilistic, consisting of 299 pregnant women. A descriptive analysis of the investigated variables was carried out, presented through absolute and relative frequencies; and statistical analysis in association with nutritional status per gestational week, using the Chi-Square Test ( $p < 0.05$ ) for variables relating to pregnancy planning and the number of prenatal consultations and the Fisher's Exact Test ( $p < 0.05$ ) for the other variables. **RESULTS:** Among the pregnant women evaluated, a significant portion (72.9%) mentioned not planning the pregnancy. Pregnant women predominated in the third trimester of pregnancy (42.1%), and only 24.4% attended 6 or more prenatal consultations. Data regarding pre-pregnancy BMI (Body Mass Index) reveal that 8.7% of pregnant women were underweight and 24.6% were overweight. A large portion (44.4%) presented obesity in relation to nutritional status by gestational week according to BMI. Association between nutritional status according to BMI and each of these variables, was no statistically significant difference, with the exception of age ( $p$  value = 0.003). **CONCLUSION:** The mother's age was an important factor in association with the pregnant woman's nutritional status: younger mothers have a greater tendency to be underweight, while older mothers tend to be overweight and obese.

312. **FACTORS ASSOCIATED WITH DEATH IN PATIENTS WITH TRAUMATIC BRAIN INJURY CAUSED BY FIREARMS**

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**INTRODUCTION:** Traumatic brain injury (TBI) is an injury caused by an external force that affects the brain parenchyma or its underlying structures. These affected regions are evident because they are the targets of most traumatic actions and because they protect the intracranial structures, thus representing one of the main causes of death in trauma victims. Due to the increase in urban violence, firearm projectiles (FAP) are one of the main causes of this injury. As a result, injuries caused by FAP constitute a high mortality rate, making this case a complex and emergency approach. Therefore, the aim of this study is to analyse the factors that lead to death in patients with firearm-related TBI. **METHODS:** This is a bibliographic survey carried out through the search and analysis of scientific articles published on the Scielo, Google Scholar and Virtual Health Library online platforms. The descriptors "Firearms", "Craniocerebral trauma" and "Death" were used, and 47 articles were found. After excluding those that fell outside the proposed objective, 8 documents were obtained in English, Spanish and Portuguese. **RESULTS:** The following factors were found to be related to progression to death: fractures, brain injuries, type of orifice, trajectory of the projectile, distance and speed of the shot. With regard to fractures, it was observed that skeletal trauma is more prevalent in the occipital bone. Skull base fractures also stand out, as they affect structures such as the brain stem. As for brain injuries, intracranial haemorrhages are the most common, worsening when they are deeper; in addition, the penetrating damage mechanism is more associated with fatalities, as it damages the brain tissue more. In relation to the orifices and trajectory of the PAF, wounds with an exit orifice and which reach the coronal and sagittal plane are more likely to die. Finally, greater distance and velocity of the shot are also related to an increased risk of mortality. **CONCLUSION:** Considering the increase in the number of patients with TBI in emergency departments, greater analysis and knowledge of the aforementioned factors could lead professionals to develop better strategies to treat these patients and prevent them from dying and developing neurological complications.

**313. FACTORS ASSOCIATED WITH THE OCCURRENCE OF METABOLIC SYNDROME IN WOMEN DURING MENOPAUSE**

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**INTRODUCTION:** The incidence of cardiovascular disease increases after menopause. This increasing risk appears to be determined by the metabolic syndrome, of which all components (visceral obesity, dyslipidemia, arterial hypertension and glucose metabolism disorder) are associated with a higher incidence of coronary artery disease. Several studies show a higher prevalence of metabolic syndrome in postmenopausal women. This may be a consequence of ovarian failure or result from metabolic changes promoted by an increase in visceral fat secondary to a decrease in estrogen, and it is not clear whether menopause increases cardiovascular risk in all women or only in those who have metabolic syndrome. The objective of this review is to analyze the interrelationship between menopause and the components of metabolic syndrome. **METHODS:** A bibliographical search was carried out in the Scielo, LILACS and MEDLINE databases, using the key words: metabolic syndrome, menopause and obesity, in Portuguese and English, from 2018 to 2023. **RESULTS:** Based on the studies analyzed, the prevalence of metabolic syndrome increases when we compare the period from pre- to post-menopause, regardless of the population and study design. The identification of significant associations related to metabolic syndrome, such as age at menarche, eating habits and physical activity, as well as sleep changes and regular consumption of alcohol and tobacco, also contributed significantly to the susceptibility of women after the reproductive period. present such clinical manifestations. Among the biological components, the occurrence of polymorphism of estrogen receptors 1 and 2, senescence, characterized by the drop in follicular reserve and consequent estrogen deficiency, added to the enhanced action of pro-inflammatory cytokines and hormonal changes, promote weight gain, redistribution of body fat with abdominal obesity and increased insulin resistance, crucial conditions for the diagnosis of metabolic syndrome. **CONCLUSION:** The treatment of metabolic syndrome is based on changing lifestyle habits and, when necessary, using medication aimed at its components. In the presence of symptoms of climacteric syndrome, hormonal therapy, when indicated, will also help to improve metabolic syndrome.

**314. FACTORS ASSOCIATED WITH PREMATURETY IN INFANTS FROM A HUMAN MILK BANK**

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**INTRODUCTION:** Prematurity is a complex syndrome with multiple etiological factors, which is associated with a wide spectrum of clinical conditions that define survival and the pattern of growth and development in different risk subgroups. Those born preterm have an increased risk of becoming ill and dying as a result of incomplete fetal development and their greater susceptibility to infections. Furthermore, prematurity is responsible for a large part of childhood morbidities and an important factor in the causes of neonatal deaths. As lower the gestational age was, higher the cognitive impairment and associated disabilities. The present study aimed to investigate the factors associated with prematurity in infants assisted by the childcare program of a Human Milk Bank (HMB). **METHODS:** Cross-sectional study within a prospective cohort in which 257 nursing-infant pairs monitored at the HMB were evaluated, in a non-probabilistic sample - Research Ethics Committee (CEP-HUUFMA), under Consubstantiated Opinions no.: 2,341,252 and no.: 2,673,595. Socioeconomic and demographic data of the nursing mother and infant, biological data of the infant and data related to breast complications were collected through semi-structured questionnaires. To investigate the factors associated with prematurity, multivariate Poisson regression analysis was performed, with robust variance using the STATA 14.0® program. In the bivariate Poisson analysis with robust variance, variables that presented  $p \leq 0.20$  were selected to enter the adjusted analysis. The selection of variables was carried out using the stepwise by elimination method. Only variables with  $p < 0.05$  remained in the final model, with statistical significance. **RESULTS:** Having six or more prenatal consultations (PR = 0.50; 95% CI 0.26 – 0.97;  $p = 0.040$ ) and low birth weight (PR = 6.16; 95% CI 3.24 - 11.70;  $p < 0.010$ ) are associated with prematurity. **CONCLUSION:** The findings highlight the importance of prenatal care in the outcome of premature birth and the most immediate consequence of prematurity for newborns as it is associated with low birth weight. Thus, indicating necessary improvements in public policies, in the planning of preventive actions and in pre- and post-natal health care, consequently reducing child morbidity and mortality.

315. **CLINICAL, BIOCHEMICAL, AND ULTRASONOGRAPHIC FACTORS IN THE PREDICTION OF PREMATURITY**

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**INTRODUCTION:** Premature birth is defined by the World Health Organization as delivery occurring before 37 completed weeks of gestation. Prematurity has multifactorial causes, making the creation of accurate prediction models challenging. Even patients diagnosed with preterm labor based on subjective clinical criteria have an uncertain progression, especially in the early stages. **METHODS:** This is a narrative literature review on clinical, laboratory, and ultrasonographic factors in the prediction of prematurity, constructed from publications found in the "PubMed" database. Scientific productions were selected using the descriptor "Prediction of prematurity." Four articles, in Portuguese and English, published between 2018 and 2023, were selected and thoroughly read for data collection. **RESULTS:** In the articles found, it is observed that concerning clinical aspects, a history of spontaneous preterm birth is a strong predictor for the occurrence of a new event, as approximately 25 patients experienced recurrence. Additionally, factors such as maternal age over 40, uterine malformations, low socioeconomic status, black race, low or high BMI, and gestational weight gain also played a role in characteristics related to preterm births. Among biomarkers related to prematurity, interleukins (IL) 6 and 8, corticotropin-releasing hormone, serum and salivary estriol, fetal fibronectin (fFN), and, more recently, insulin-like growth factor-binding protein-1 phosphorylated (phIGFBO-1) are mentioned. Of these, the two most used in clinical practice are the fetal fibronectin test and IGFBO-1. Changes in cervical length assessed by transvaginal ultrasound measurements seem to be a good marker for the increased risk of preterm birth. Finally, elastography (E-Cervix™), a tool that measures cervical stiffness, has recently been used to predict the risk of preterm birth in women with a short cervix. **CONCLUSION:** The prediction of prematurity is a complex process involving the analysis of multiple clinical, laboratory, and ultrasonographic factors. Integrating this information allows for a more accurate assessment of the risk of preterm birth, which, in turn, can lead to timely interventions, reducing perinatal morbidity and mortality.

316. **GENETIC FACTORS ASSOCIATED WITH CHIARI MALFORMATION TYPE 1: A NARRATIVE REVIEW**

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**INTRODUCTION:** Chiari malformation type 1 (CM1) is an anomaly of the craniocervical transition, characterized by herniation of the cerebellar tonsils through the foramen magnum. Its etiology remains poorly understood, involving genetic and environmental factors. Evidence of genetic contributions includes twin studies, familial aggregation, and co-occurrence with genetic syndromes. This narrative review aims to discuss the current evidence regarding the contribution of genetic factors to the etiology of CM1. **METHODS:** A narrative review of the current literature was conducted. The articles analyzed correspond to the period from 2013 to 2023 and were chosen from the Pubmed database. Initially, the search using the descriptors "Arnold-Chiari Malformation" and "Genetics", in addition to the Boolean operator "AND", yielded 67 results. Only fully available articles in English were chosen, which resulted in the exclusion of 3 articles. Subsequently, after a careful reading of the titles and abstracts, 4 articles were chosen to compose this review. **RESULTS:** The studies discuss the possible genetic origin of CM1, pointing to evidence in studies of monozygotic twins, familial aggregation of cases of the disease and association with other syndromes. In addition, there is mention of genetic variants associated with CM1, mainly related to collagen and extracellular matrix genes, which may predispose to diseases co-occurring in individuals with CM1, such as osteogenesis imperfecta and scoliosis. Interactions between FGFR-RAS-PI3K pathways may explain some overlapping phenotypic features and may have a significant role in the pathogenesis of CM1. In addition, a study carried out with whole exome sequencing identified two new haplotypes linked to 1q43-44 and 12q23-24,11 for small posterior fossa, a phenotype of 83% of patients with CM1. Genes such as MYBPC1, COX20 and AKT have been highlighted as potentially relevant to the causal variants of CM1. **CONCLUSION:** CM1 most likely has polygenic manifestations, in which multiple genetic variations determine the condition and impact of the syndrome, making it necessary to perform a multidisciplinary clinical and neurological evaluation, so that the identification of a genetic relationship between associated diseases can help to understand the etiopathogenesis of this condition.

**317. FACTORS ASSOCIATED WITH HIV/AIDS CASES IN THE STATE OF MARANHÃO**

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**INTRODUCTION:** The transmission of the Human Immunodeficiency Virus (HIV) is one of the most common infections currently, leading to the occurrence of Acquired Immunodeficiency Syndrome (AIDS). This disease deteriorates the immune system, triggering the onset of other illnesses, and possesses a high transmission and mortality rate. It is noteworthy that many municipalities in the State of Maranhão face public health issues and have experienced an increase in HIV cases in recent years. Thus, the aim of this study is to analyze the factors associated with the rise in HIV/AIDS cases in Maranhão.

**METHODS:** This is an integrative review, where articles from different national and international databases were utilized: BVS, Pubmed, and Lilacs. The descriptors considered were "HIV," "Maranhão," and "AIDS," and the inclusion criteria referred to studies in Portuguese and English, published between 2019 and 2022. Additionally, articles conflicting with the theme and inclusion criteria were excluded.

**RESULTS:** Approximately 10 articles were analyzed, mostly quantitative in nature and published between 2020 and 2022. Two studies addressed the increase in HIV cases in Maranhão, focusing on regions in the northern part of the State - the capital São Luís - and central regions - such as São Mateus and Pedreiras. In 3 of the analyzed articles, socioeconomic and educational factors were considered the main reasons for HIV transmission due to lack of access to information. There was divergence among studies regarding the multiplicity of partners as a predominant factor for AIDS cases, as 1 article contradicted 2 others characterizing the heterosexualization of HIV as an important aspect. Additionally, 4 articles pointed to the lack of routine exams and Testing and Counseling Centers (TCCs) as aggravating factors for the increased HIV transmission rate. **CONCLUSION:** Based on this study, the current situation of increasing HIV/AIDS cases in Maranhão is understood. According to the analyzed articles, socioeconomic status, multiplicity of partners, and lack of routine exams are factors linked to the rise in AIDS cases in the State. The provision of educational actions focused on condom use and increased availability of TCCs are highlighted as important public policies in the studies for reducing the HIV/AIDS rate.

**318. PATHOPHYSIOLOGY OF NEUROPSYCHIATRIC LUPUS: A REVIEW**

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**INTRODUCTION:** Systemic lupus erythematosus is an idiopathic autoimmune disease with systemic repercussions on the body, including the central nervous system in its neuropsychiatric form, which can affect 30 to 40% of patients. Although the pathophysiology related to neuropsychiatric manifestations has not yet been fully elucidated, new lines of research are seeking to clarify these issues.

**METHODS:** A search was carried out in the Scielo and PubMed databases, using the descriptors "Lupus Vasculitis", "Central Nervous System", "Etiology", "Immunology" and "Physiopathology". The inclusion criteria were articles that were available in full and that covered the subject of this study. There was no limitation on publication time.

**RESULTS:** There are two main pathogenesis hypotheses. The first assumes the existence of a primary inflammatory process, mediated by autoantibodies and cytokines (IL-2, IL-6, TNF- $\alpha$ , etc). Some biomarkers, such as the aquaporin-4 antibody and antiphospholipid antibodies are promising in their association with neuropsychiatric SLE. The presence of the anti-ribosomal protein P antibody in cerebrospinal fluid was also found to have a strong association with neuropsychiatric SLE. Another hypothesis is that neurological manifestations are mediated by vascular disease, associated with a process of destruction or hyalinizing proliferation, mainly in the small vessels. Some studies suggest that the vascular and inflammatory etiology may damage the blood-brain barrier, a process associated with TWEAK/Fn14 signaling, from the TNF family. **CONCLUSION:** The pathophysiology of neuropsychiatric SLE has not yet been fully clarified, but new studies point to inflammatory and vascular involvement, as well as the emergence of possible biomarkers that allow the condition to be screened.

319. **HOSPITAL EXPENDITURES OF STROKE ADMISSIONS IN THE HEALTHCARE SYSTEM OF MARANHÃO**

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**INTRODUCTION:** Stroke, defined as the interruption of blood flow to the brain due to vessel rupture or obstruction, falls within the spectrum of cerebrovascular diseases and accounts for a significant number of deaths in Brazil. Given its impact, stroke stands out as a leading cause of public health resource utilization, particularly during hospitalization. The aim of this study is to quantify hospital expenses related to stroke patient admissions. **METHODS:** This study employs an ecological, cross-sectional, quantitative approach utilizing data from the Department of Informatics of the Unified Health System (DATASUS). Data on hospital admissions, including gender, race, age group, and macro-regions, were collected. Statistical analysis was performed using SPSS 25.0 for Windows, employing Kendall's Tau-b and chi-square tests at a significance level of 5%. **RESULTS:** Hospital admissions of stroke patients incurred a total cost of R\$48,717,550.29 for the Unified Health System (SUS) during the evaluated period, with 87.11% attributed to hospital services and 12.89% to professional services, averaging R\$1,100.27 per admission. The majority of admissions were male individuals of mixed race (22.59%), accounting for a total expenditure of R\$9,055,370.35. Patients aged 70 to 79 years constituted the largest proportion of admissions (27.01%), with individuals over 60 years old representing 72.54% of admissions. The Northern macro-region stood out, with hospitals in this region incurring the highest total costs (56.2%). Statistical analysis revealed a significant positive correlation between the number of admissions and hospital expenses ( $\tau = 0.733$ ;  $p = 0.016$ ). **CONCLUSION:** The magnitude of stroke admissions and associated costs was substantial, with predominantly male individuals of mixed race being affected, especially those aged 70 to 79 years. The northern region of the state incurred the highest costs. Thus, there is a clear need for the implementation of targeted public policy initiatives aimed at reducing admission rates and consequently curbing hospital expenses.

320. **PREGNANCY AND LACTATION IN TRANS MEN: A LITERATURE REVIEW**

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**INTRODUCTION:** Pregnancy and lactation involve sociocultural aspects associated with women, however, in trans men who have not undergone surgeries such as hysterectomy, metoidioplasty or phalloplasty, pregnancy and breastfeeding are a possibility. However, as hormonal therapy with testosterone causes the cessation of ovulation, it must be interrupted 8 to 10 months before and remain suspended throughout pregnancy, and can be reintroduced during breastfeeding, despite interfering with the hormones necessary for the production of milk. **METHODS:** This is a literature review, in which the Google Scholar and Pubmed portals were searched, using as eligibility criteria original articles published from 2019 onwards, without language restrictions, and which specifically presented the topic. The descriptors used were: "transgender individuals"; "pregnancy" and "lactation". **RESULTS:** The term transsexual is used to describe a person who does not identify with the gender identity designated by their biological sex, deviating from the sociocultural standards of female or male. Therefore, this discrepancy can be a source of dysphoria, leading to gender transition, which is the search for alignment of the body with gender identity, such as social name, hormone therapy and gender adjustment surgeries. Therefore, trans men who have not undergone hysterectomy, metoidioplasty or phalloplasty can become pregnant, simply by stopping hormonal therapy, preferably 8 to 10 months beforehand. However, stopping hormone therapy reverses the appearance of typically cis-masculine secondary characteristics, which causes an increase in gender dysphoria and feelings of anxiety, depression, isolation and loneliness. Because of this, many trans men choose not to breastfeed, to increase breast size and maintain testosterone suspension, but some choose to breastfeed, to strengthen the bond and attachment. Regarding lactation, the use of testosterone is safe, as it is not significantly excreted in milk, but it interferes with the hormones necessary for milk production, such as prolactin. **CONCLUSION:** Therefore, it is clear that there is a possibility of pregnancy and lactation in trans men, but multidisciplinary monitoring is necessary to reduce the increase in dysphoria.



321. **HIPERCOAGULABILIDADE NA COVID-19: UMA REVISÃO DE LITERATURA**

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**INTRODUCTION:** COVID-19 caused by the SARS-CoV-2 coronavirus, declared in March 2020 as a pandemic by the World Health Organization, is still a topic of great relevance. Although most cases present with mild respiratory symptoms, many patients develop complicated conditions, requiring hospitalization. Of these, there is a high incidence of coagulopathies, which is associated with high mortality rates. Therefore, this present study intends to analyze the aspects of hypercoagulability of SARS-CoV-2 infection and its clinical repercussions. **METHODS:** This study is a literature review, using the Scientific Electronic Library Online (SciELO) and Latin American Literature in Health Sciences (LILAS) databases, considering the years from 2020. The inclusion criteria were articles available online and published in Portuguese and that presented the theme of the study. **RESULTS:** In SARS-CoV-2 infection, there is an imbalance in homeostasis due to an intense inflammatory response, which leads to thrombosis in the microcirculation. In this process, the innate immune system, chemokines, especially Tumor Necrosis Factor (TNF- $\alpha$ ) and Interleukins (IL), such as (IL-1, IL-6 and IL-8), pro-inflammatory processes, adhesion molecules, tissue factor expression and endothelial and platelet activation. The main hematological disorders related to COVID-19 are manifested by venous thromboembolism, such as pulmonary embolism and deep vein thrombosis, and arterial thrombosis, such as stroke. Both contribute to increased mortality, especially arterial thrombosis. **CONCLUSION:** Although the pathogenic mechanisms of hypercoagulability in COVID-19 are not yet fully understood, studies indicate that the "cytokine storm", characterized by a hyperactivation of the immune system, contributes to hypercoagulation, which leads to thrombotic conditions, ischemia and organic dysfunction. **Keywords:** ipsa, consequatur, galisum.

322. **TISSUE HYPOXIA IN THE PATHOGENESIS OF INTESTINAL DISEASE - A LITERATURE REVIEW**

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**INTRODUCTION:** Tissue hypoxia is the dysregulation of oxygen consumption and vascular dysfunction due to the infiltration of immune cells. This occurs in inflammatory bowel disease (IBD) which is marked by dysregulation of the epithelial barrier. The present review aims to delineate the functions of hypoxia-inducible factor (HIF-1) in the initiation and progression of IBD, and in parallel to differentiate physiological and pathological hypoxia. **METHODS:** This is a literature review, in which original articles written in English published in the SciELO, Web of Science, Scopus and PubMed databases were used. 15 articles were found in PubMed, of which 6 are related to the topic and were used in the present work. No articles on the topic were found in the other databases. **RESULTS:** Oxygen is the central element for the oxidative metabolism of tissues and for understanding cellular and tissue responses related to hypoxia. Therefore, HIF-1 acts in cellular adaptation by regulating oxygen levels. Therefore, it is important to emphasize that physiological hypoxia occurs in healthy tissues and pathological hypoxia is induced by active inflammation. Under physiological conditions, the gastrointestinal tract is characterized by a steep anaerobic oxygen gradient toward the highly vascularized submucosa. Dysregulation of this gradient is observed in IBD, due to the consumption and supply of oxygen, making the intestinal mucosa inflamed. Therefore, hypoxia will favor the occurrence of two pathologies: ulcerative colitis (UC) and Crohn's disease (CD). In UC, intestinal fibrosis is restricted to the mucosal and submucosal layers, but in CD it can encompass the entire dimension of the intestinal wall, causing the appearance of strictures. Furthermore, the HIF-1 subunit comprises a highly conserved oxygen-dependent degradation domain. The main oxygen sensors in the cell are prolyl hydroxylase domain (PHD) enzymes - - ketoglutarate-dependent dioxygenases, consisting of the isoforms PHD1 (EGLN1), PHD2 (EGLN2) and PHD3 (EGLN3). It is reported that PHD2 and PHD3 mRNA levels increase as a result of hypoxia, and PHD1 is not regulated by this feedback mechanism. **CONCLUSION:** Thus, the results revealed that there is a relationship between pathological hypoxia and UC and CD. However, the timing of the occurrence of these pathologies has not been well determined, and further studies are needed to elucidate this association.

323. **CARDIOVASCULAR HISTORY OF PATIENTS WITH CHRONIC HEART FAILURE**

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**INTRODUCTION:** Chronic Heart Failure (CHF) is a significant and challenging public health issue associated with outcomes such as death, hospitalization, and clinical emergencies. The multiple risk factors involved in its genesis make prevention and management difficult. This study aims to describe the cardiovascular history of patients with CHF in outpatient care. **METHODS:** This is an observational, cross-sectional study with a qualitative and quantitative analysis. Sample: 169 patients with CHF with left ventricular ejection fraction (LVEF) < 50%, treated at a University Hospital in Maranhão, aged ≥18 years. Information was obtained from medical records and questionnaire administration (CAAE:25756919.9.2004.5086). Variables are presented as mean, relative, and absolute values. **RESULTS:** The sample consists of 122 men (72.19%) and 47 women (27.81%), with a mean age of 59.23 years. Among the various etiologies of HF, the most prevalent is ischemic (32.54%; n=55), followed by hypertensive cause (26.04%, n=44). Among cardiovascular antecedents, 89.94% (n=152) of patients do not report a history of atrial fibrillation, and 96.45% (n=163) do not have a history of peripheral arterial disease or aortic vascular disease. However, 23.08% and 11.24% report at least 1 episode of acute myocardial infarction (AMI) (n=39) and stroke (n=19), respectively. Moreover, 79.29% of the sample (n=134) was hospitalized due to cardiovascular complaints. Regarding interventions through the implantation of electronic cardiac devices (ECDs), 10.06% of those analyzed (n=17) had an implantable cardioverter-defibrillator (ICD) implanted, while 5.32% (n=9) use a conventional pacemaker. On average, about 27.22% underwent elective surgical treatment of myocardial revascularization (n=17) or coronary transluminal angioplasty (CTA) (n=29). **CONCLUSION:** There is a higher prevalence among the male population and etiologies that support that HF is predominantly a complication of chronic diseases such as hypertension and atherosclerosis. The average age confirms the chronicity of this syndrome. The high rate of hospitalizations and the need for interventions highlight the severity of the condition, as well as the high social cost to public health. These pathological findings emphasize the complexity of HF and the need for personalized approaches in its treatment.

324. **EPIDEMIOLOGY OF HOSPITALIZATIONS FOR LEPROSY IN THE BAIXADA MARANHENSE AND IN BRAZIL**

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**INTRODUCTION:** Leprosy is a chronic infectious disease caused by the bacillus *Mycobacterium leprae*, and its early detection is considered the leading way to prevent progression to a state of physical disability. This more severe condition can lead to limitations in daily activities, restrictions on social integration, and discrimination for the affected individual. From this perspective, the study aims to analyze the epidemiological profile of hospitalizations by comparing records from the Baixada Maranhense (a microregion composed of 21 municipalities located in the northwest of the state of Maranhão, Brazil) with those from the entire Brazilian territory. **METHODS:** This is a descriptive epidemiological study with a quantitative approach, conducted through data collection provided by the Hospital Information System (SIH/SUS), on hospital morbidity by location of hospitalization, made available through the platform of the Information Technology Department of the Public Health Care System (DATASUS). The variables analyzed included age group, gender, and color/race in the period between August 2013 and August 2023 in the Baixada do Maranhão (MA) and Brazil as a whole. **RESULTS:** In the time interval studied, the highest rate of hospitalizations in the Baixada Maranhense corresponds to the 30 to 39 and 40 to 49 age groups, which together account for 40% of the total, while in Brazil, the highest sum is found in the age groups of 40 to 49 years and 50 to 59 years (36.3%). Male gender showed a higher prevalence of hospitalizations due to leprosy in both studied locations, with almost similar values, at 67.1% in the Maranhense microregion and 66.8% in the Brazilian territory. Additionally, both in the Baixada do MA and nationally, the self-reported brown-skinned had the highest incidence, at 72.8% and 37.7%, respectively. **CONCLUSION:** Therefore, it is understood that the disease predominantly occurs in self-declare as brown men in both studied areas. On the other hand, compared to data from Brazil, a younger age group is affected in the Baixada Maranhense, indicating the need for a thorough investigation of the factors associated with this particularity. Thus, it can be concluded that early detection of leprosy is a measure that should be encouraged, given its importance in reducing the number of hospitalizations and, consequently, reducing more severe sequelae - which, if not controlled, would contribute to reinforcing the stereotype of the disease.

**325. EPIDEMIOLOGY OF HOSPITALIZATIONS AND MORTALITY DUE TO TUBULO-ITIAL NEPHRITIS IN THE NORTHEAST**

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**INTRODUCTION:** Tubulointerstitial nephritis (TIN) is characterized by an infiltration of inflammatory cells in the renal interstitium and can be caused by drugs, infections, autoimmune diseases, and genetic conditions. TIN is responsible for 5% to 15% of cases of acute renal failure (ARF) in children and adults. Therefore, this study aims to evaluate the epidemiological profile of cases of hospitalization and mortality due to TIN in the Northeast region. **METHODS:** This is a descriptive and quantitative epidemiological study, based on data obtained from the SUS Hospital Information System (SIH/SUS) available by the Department of Informatics of the Unified Health System (DATASUS), between January 2018 and December 2022, with an emphasis on analysis of gender, age group and race. **RESULTS:** During the period studied, it was found that 8.22% of hospitalizations for diseases of the genitourinary system recorded in the Northeast Region were due to tubulointerstitial kidney disease. When approaching the different states of this region, a prevalence of 22.89% of cases was noted in the state of Maranhão, followed by Bahia (22.08%) and Pernambuco (17.59%). Regarding race, 57.46% of the registered numbers are brown people. As for gender, 65.08% of the affected public are women. Regarding the affected age groups, 17.93% are between 20 and 29 years old, followed by individuals between 30 and 39 (15.55%) and between 40 and 49 (12.81%) years old. The gender-age group relationship established by overlaying this data implies a certain increase in incidence in males as age increases, especially between 40 and 69 years old, while female incidence peaks between 20 and 49 years old. On the other hand, mortality has a steady upward trend as both sexes age, with a predominance in the over-60 age group (68.08%), and slightly higher rates in women (51.60%). The total mortality rate observed was 1.79% in relation to the number of hospitalizations. **CONCLUSION:** Therefore, the epidemiological profile of patients hospitalized for tubulointerstitial nephritis is predominant in Maranhão and in mixed race populations. Furthermore, it is also prevalent in women, especially between the ages of 20 and 29. Finally, the higher mortality rates in the elderly population indicate greater lethality of the pathology with ageing, even though its peak incidence does not occur during this period.

**326. PRIMARY CARE STRATEGIES IN THE PREVENTION OF INJURY RELATED TO HIGH BLOOD HYPERTENSION**

Anderson Gomes Nascimento Santana<sup>1</sup>, Erick Fernando Souza Rolins<sup>1</sup>, Giovana Ferreira Crispim<sup>1</sup>, Marisa Lacerda Guida de Brito<sup>1</sup>, Pâmella Maria Ferreira Cantanhêde<sup>1</sup>  
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**INTRODUCTION:** The effective management of systemic arterial hypertension (SAH) is a priority for the Family Health Strategy Teams – EESF, necessary to reduce the costs, morbidity and mortality associated with cardiovascular diseases. Therefore, this study aims to analyze effective methods and interventions in primary care for the prevention of health problems related to hypertension. **METHODOLOGY:** Bibliographic study carried out in the second half of 2023, through searches in the VHL, PubMed and Scielo databases, using the standardized descriptors “primary health care” AND “hypertension” AND “strategies” and the filter for the last 5 years, which resulted in 6 relevant articles. **RESULTS:** In the treatment of hypertension, women showed better adherence rates compared to men. Thus, with the aim of improving the quality of life of patients, in Brazil, several therapeutic strategies are used, in addition to establishing diagnostic, treatment and monitoring goals to be achieved by the EESF. Therefore, educational interventions associated with nutritional measures and physical exercise showed good results in terms of weight reduction and control of blood pressure levels. Furthermore, carrying out screening tests in health services showed a 34% increase in patient demand. Another means of identifying hypertensive patients is home visits promoted by multidisciplinary teams, which has proven to be a great strategy for identifying new hypertensive patients and patients with low adherence to treatment. Shared decision-making and management of SAH is a participatory strategy that has been shown to provide superior results in terms of adherence to antihypertensive therapies, resulting in higher quality care and greater patient satisfaction. In relation to pharmacological treatment, the use of affordable medicines, as well as those available free of charge at basic pharmacies, administered in a single daily dose according to guidelines, resulted in an improvement in the control of SAH. **CONCLUSION:** Therefore, the effectiveness of many of the interventions analyzed is evident, especially when applied in combination. However, due to the silent nature of hypertension, many patients, especially men, have an incomplete understanding of the need for consistent, lifelong management in the control and prevention of hypertension.

327. **DEEP BRAIN STIMULATION AS A TREATMENT FOR PARKINSON'S DISEASE.**

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**INTRODUCTION:** Parkinson's disease (PD) is a degenerative disease of neurological origin, characterized by alterations in the central nervous system in the substantia nigra region, through the loss of dopaminergic neurons and abnormal accumulation of the aggregated alpha-synuclein protein in brain tissues, thus, becoming part of the group of synucleinopathies. Furthermore, functional neurosurgical treatment of PD encompasses two techniques, which are microlesions of deep brain nuclei and deep brain stimulation (DBS), through modulation of typical oscillations related to PD. Therefore, this article aims to elucidate the Deep Brain Stimulation technique as a treatment and management of Parkinson's Disease.

**METHODOLOGY:** The study is a literature review, whose data comes from the Google Scholar platform, using the descriptors "treatment of Parkinson's Disease" and "brain stimulation in Parkinson's Disease", through which 3 were selected articles to carry out the work. The inclusion parameters were: studies written in English and/or Portuguese and published in the last 3 years. Articles that did not fit the chosen theme and the stipulated publication period were excluded. **RESULTS:** Initially, during surgery, brain mapping is performed using computed tomography and magnetic resonance images, in order to provide coordinates, target accuracy of 1mm and calculating possible probe trajectories. DBS stimulates certain areas of the global corticobasal ganglio-thalamo-cortical network, such as the target for parkinsonian tremor and essential tremor, which is the ventral intermediate nucleus of the thalamus, but it is only effective for this, modalities such as subthalamic nucleus and internal globus pallidus are the most common because they integrate more typical specificities of the motor system. Thus, DBS interacts with pathological neural networks, controlling and blocking the unwanted circuit in the basal ganglia loops, through an implantable pulse generator, which produces an electrical current, leading to a suspension of the flow of abnormal information. **CONCLUSION:** Therefore, the value of DBS in the process of treating patients with PD can be inferred, as it shows effectiveness and efficiency in modulating the areas responsible for the pathological characteristics of the disease. Therefore, it is essential to use this technique in the therapeutic environment.

328. **SUBARACHNOID HEMORRHAGE DUE TO COCAINE CONSUMPTION: A LITERATURE REVIEW**

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**INTRODUCTION:** The consumption of cocaine is a risk factor for increasing intracranial pressure (ICP), triggering the development of aneurysms and other neurological damages. In this work, subarachnoid hemorrhage (SAH) stands out as a worsening factor of the clinical condition of the patient, being one of the main causes of death among these users. **METHODS:** This is an integrative literature review of October of 2023, based on works published on PubMed, ScienceDirect, Scielo, and the Periodical Portal - CAPES. The descriptors "cocaine" and "subarachnoid hemorrhage" were applied, with the boolean operator "AND." The inclusion criteria consisted of publications that were from 2013 onwards, universally accessible and written in English or Portuguese. The exclusion criteria were other literature reviews and not related works. In summary, 11 articles were analyzed. **RESULTS:** Cocaine impacts the synaptic transmissions by inhibiting the reuptake of norepinephrine and dopamine, leading to the accumulation of these neurotransmitters in the synaptic cleft, causing psychological and behavioral changes. This substance and its metabolites are associated with aneurysms formation and rupture, increasing the risk of hemorrhages by more than 80% due to the increase in ICP caused by the elevated excitatory neurotransmission. Thus, there are recurrent damages to blood vessel tissues which causes aneurysms and, with persistent high ICP, their rupture, triggering SAH. Hence, cocaine is related to severe clinical outcomes and high hospital morbidity, as well as many complications such as cerebral ischemia. One study shows that among patients with SAH, a third was caused by recent cocaine use. Another study suggests a significant increase in the incidence and prevalence of SAH, ischemic stroke and intracerebral hemorrhage among cocaine users when compared to non-users, which shows this substance's impact on the body and the development of complications. **CONCLUSION:** Cocaine is a vasoactive substance, linked to significant implications in the central nervous system. Studies show that among patients with SAH, cocaine users have more severe clinical outcomes. However, as this substance is illegal, there is little information on the subject. Therefore, more studies are needed to better understand the effects of cocaine on the body, mainly its relationship with SAH.

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