Covid-19: An opportunity to reflect on evidence-based practice

Uma oportunidade para refletir sobre a prática baseada em evidências

Covid-19: una oportunidad para reflexionar sobre la práctica basada en evidencias

Ramon Antônio Oliveira[1]

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1. Faculdade Israelita de Ciências da Saúde Albert Einstein. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0001-9668-7051

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An outbreak of pneumonia, often associated with fever, dry cough, fatigue and occasional gastrointestinal symptoms, in a Chinese city, involved approximately 70% of workers in a seafood market in December 2019.[1] At that time, an epidemiological alert was issued by the local government and later, in March 2020, the World Health Organization declared a pandemic by SARS-Cov-2. Several resources were mobilized for the provision of care to patients, in addition to the implementation of social distance measures and profound changes in the life activities of each of us, in order to reduce the spread of the virus and limit the impact on health systems.[2]

Measures to mitigate the spread of the virus have changed over the past few months. Laymen in public places were not recommended to use face masks until a second time, for example. This resulted from the deepening of scientific knowledge about the virus, the ways of transmission, the recognition of those most at risk and the outcomes for patients. During that time, we live with the suffering of patients and families, in addition to the superhuman work of health care providers.[3]

The search for researchers for effective treatments and care for patients affected by the infection has been tireless. It seems evident to us, even among the general population, the need for quick responses from science to solve this specific health problem. This search can be compared to Evidence-Based Practice (EBP).[4]

EDITORIAL

EBP can be defined as the conscious, explicit and judicious use of the best and most current scientific evidence, combined with clinical experience and patient preference, for the provision of health care.[4-5] Thus, EBP seeks not only to encourage health professionals to use scientific evidence for the provision of care, since we assume that this has been done routinely by them, but to define what constitutes acceptable evidence, that is, that meets scientific standards , in contrast to the evidence considered clinical and/or personal.[6]

The term EBP was coined from the work developed by Dr. Gordon Guyatt, in the 1990s, during his teaching activities in the medical residency course at McMasters University, Canada.[7] Additionally, several advances were necessary for the advancement of EBP, such as the refinement of epidemiological analysis methods and the incorporation of software to carry out statistical analysis. In addition, epidemiologist Dr. Archie Cochrane (1909-1988) published criticisms of the British medical profession due to the absence of rigorous standards for health decision-making and excessive clinical freedom, which exposed patients to procedures with little or no efficiency. His work culminated with the founding of the Cochrane Collaboration, an international network that seeks to direct the provision of health care guided by high-quality scientific evidence.[6]

Despite wide acceptance, there are severe criticisms of EBP. Currently, EBP is supported by results of systematic reviews of scientific literature and meta-analyzes. The meta-analysis process synthesizes the results of multiple studies that addressed a specific topic. It is not just a matter of collecting the results of several small studies that tested a given intervention; the meta-analysis employs statistical methods to integrate the various results into a single value - the measures of effect - in addition to providing a synthesis of the available evidence on the subject under study.[8] However, in the process of selecting and including the primary studies that provide data for performing the meta-analysis, slight differences in the designs may be lost in an attempt to gather enough data to perform the calculation.[8] Thus, in this procedure, the reviewer can include results from studies in which patients have undergone slightly different procedures and, thus, compare results considered incomparable.[8]

Another criticism of EBP deals with the reduction of the freedom of the health professional in clinical decision-making, since care will be increasingly guided by guidelines based on scientific evidence. This is common among those concerned with the relationship between epidemiological data resulting from meta-analyzes and their significance to patients, individually. However, the accumulation of experiences in providing evidence-based care has provided greater security for these health professionals.[9]

The United States National Academy of Medicine established that by 2020, at least 90% of clinical decisions would be based on up-to-date scientific evidence.[10] Given the importance of EBP in health care provision scenarios, there is a great movement for the inclusion of the theme in the curricula of undergraduate courses for health professionals, which includes strategies for teaching and learning methods for obtaining and critically evaluating health care. scientific evidence.[11] However, according to Guyatt et al.,[12] only the training of professionals focused on EBP is not enough for the assistance to be based on scientific evidence. The interrelationship of several characteristics, such as the development of skills to assess the quality of scientific evidence, and their implications require intensive study, which often requires a lot of time. In

addition, some professionals do not have the desire to develop advanced skills for the evaluation of scientific evidence and health facilities do not have the necessary resources to implement EBP, which can negatively impact its implementation.

Thus, in addition to the training of new professionals qualified for the development of critical reasoning aimed at PBE, Melnyk et al.[4] declare that joint efforts are necessary; for example, the establishment of EBP as a policy in health systems, the training of institutional managers, the training of trained professionals and specific financing so that health services are able to provide the necessary conditions for the provision of scientific evidence-based care.

Therefore, it seems appropriate to highlight that all health professionals, managers and researchers must address this method in order to incorporate it into clinical practice. As a result, it is expected to reduce regional divergences in the provision of care, increase the quality of health care and optimize the use of financial resources for the health area, in addition to respecting the preferences of users of health services.[5] These aspects would have a positive impact not only in the current Covid-19 pandemic scenario, but in all clinical treatment approaches.

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Correspondent Author
Ramon Antônio Oliveira
Faculdade Israelita de Ciências da Saúde Albert Einstein
4.293 Prof. Francisco Morato St. ZIP: 05.521-200.
Butantã, Sao Paulo, Sao Paulo.
oliveiraramon@yahoo.com.br

Acute Kidney Injury due to Tumor Lysis Syndrome in the Intensive Care Unit - Nurses Knowledge

Lesão Renal Aguda por Síndrome da Lise Tumoral em Unidade de Terapia Intensiva- Conhecimento do Enfermeiro

Lesión renal aguda por síndrome de lisis tumoral en la Unidad de Cuidados Intensivos - Conocimiento de las enfermeras

Camila Andrade Pereira[1], Roberto Bezerra da Silva[2]

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REVISA

1. Instituto Multidisciplinar Brasileiro de Educação em Saúde. Rio de Janeiro, Rio de Janeiro, Brazil.
https://orcid.org/0000-0003-4190-7533

2. Instituto Multidisciplinar Brasileiro de Educação em Saúde. Rio de Janeiro, Rio de Janeiro, Brazil.
https://orcid.org/0000-0002-3528-3069

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RESUMO

Objetivo: analisar a produção científica sobre a lesão renal aguda causada pela síndrome da Lise tumoral no paciente internado em unidade de terapia intensiva, bem como o conhecimento do enfermeiro sobre tal patologia. **Método**: Trata-se de um artigo de revisão integrativa realizado através da leitura de 30 artigos científicos retirados da Biblioteca Virtual de Saúde. **Resultados:** Identificou-se a ocorrência da lesão renal aguda e síndrome de lise tumoral através das alterações metabólicas e hemodinâmicas nos pacientes internados na unidade de terapia intensiva e observou-se que não há publicações com relatos do enfermeiro sobre o conhecimento desta patologia. **Conclusão:** Apesar dos estudos atuais e a busca constante pelo conhecimento, sabe-se que a lesão renal aguda e Síndrome de Lise Tumoral é uma emergência oncológica com alta taxa de morbidade, onde a principal estratégia para melhorar a evolução de pacientes é estabelecer medidas profiláticas e o tratamento adequado com urgência. Deve existir uma análise contínua do enfermeiro, bem como de toda equipe, estratificação dos riscos e elaboração de protocolos de controles hidroeletrolíticos e laboratoriais para estabilização hemodinâmica do paciente oncológico na unidade de terapia intensiva.
Descritores: Lesão Renal Aguda; Unidade de Terapia Intensiva; Síndrome da Lise tumoral.

ABSTRACT

Objective: to analyze the scientific production on acute kidney injury caused by tumor lysis syndrome in patients admitted to the intensive care unit, as well as the nurses' knowledge about such pathology. **Method:** This is an integrative review article carried out by reading 30 scientific articles taken from the Virtual Health Library. **Results:** The occurrence of acute kidney injury and tumor lysis syndrome was identified through metabolic and hemodynamic changes in patients admitted to the intensive care unit and it was observed that there are no publications with nurses' reports on the knowledge of this pathology**. Conclusion:** Despite current studies and the constant search for knowledge, it is known that acute kidney injury and Tumor Lysis Syndrome is an oncological emergency with a high morbidity rate, where the main strategy to improve the evolution of patients is to establish prophylactic measures and appropriate urgent treatment. There must be a continuous analysis of the nurse, as well as the entire team, risk stratification and elaboration of hydroelectrolytic and laboratory control protocols for hemodynamic stabilization of the cancer patient in the intensive care unit.
Descriptors: Acute Kidney Injury; Intensive care unit; Tumor Lysis Syndrome.

RESUMEN

Objetivo: analizar la producción científica sobre la lesión renal aguda por síndrome de lisis tumoral en pacientes ingresados en la unidad de cuidados intensivos, así como el conocimiento de los enfermeros sobre dicha patología. **Método:** Se trata de un artículo de revisión integradora realizada mediante la lectura de 30 artículos científicos extraídos de la Biblioteca Virtual en Salud. **Resultados:** Se identificó la ocurrencia de daño renal agudo y síndrome de lisis tumoral a través de cambios metabólicos y hemodinámicos en pacientes ingresó en la unidad de cuidados intensivos y se observó que no existen publicaciones con informes de enfermeras sobre el conocimiento de esta patología. **Conclusión:** a pesar de los estudios actuales y la búsqueda constante de conocimiento, se sabe que la lesión renal aguda y el síndrome de lisis tumoral es una emergencia oncológica con una alta morbilidad, donde la principal estrategia para mejorar la evolución de los pacientes es establecer medidas profilácticas. y tratamiento urgente apropiado. Se debe realizar un análisis continuo de la enfermera, así como de todo el equipo, estratificación de riesgo y elaboración de protocolos de control hidroelectrolítico y de laboratorio para la estabilización hemodinámica del paciente oncológico en la unidad de cuidados intensivos.
Descriptores: Lesión renal aguda; Unidad de terapia intensiva; Síndrome de lisis tumoral

REVIEW

Introduction

The occurrence of renal function and tumors are closely correlated. It should be considered in two different situations: kidney disease caused by the presence of cancer and / or its treatment, particularly nephrotoxicity of antineoplastic drugs and kidney disease as an additional risk factor for morbidity and mortality in the course of the neoplasia. Several data suggest a role for chronic renal failure (CRF) as a risk factor independently for the development of cancer, with high incidence rates. Acute renal failure (ARF) is the most frequent renal complication induced by chemotherapy, which occurs in 12 to 49% of patients with terminal cancer. Although pre-existing renal failure can influence the outcome, it is estimated that 9 to 32% of cancer patients need hemodialysis, showing a high mortality rate (72 to 85%).[1-11]

The prediction of future health conditions in these patients is crucial, and doctors try to predict changes in their clinical conditions as early as possible, with the aim of adjusting the results, correcting in the event of early organ failure and avoiding unfavorable results. Acute kidney injury (AKI) is one of the most common organ failures in treated and affected patients about 40% of ICU admissions. [7]

Among hospitalized patients, AKI is a common complication, among cancer patients, the incidence reaches 12% of cases and often, AKI develops within the first 48 hours of admission. A Danish study of 37,257 cancer patients showed a 17.5% incidence of AKI, according to the definitions of the Rifle classification (Risk, Injury, Failure, Loss of kidney function and end-stage kidney disease). In an intensive care environment in oncology hospitals, the incidence increases to approximately 50%, with the epidemiological transition of the last decades, cancer has become the subject of several clinical studies that have resulted in more options for the diagnosis and treatment of the disease. Thus, there was an increase in patient survival and the management of disease complications and adverse treatment effects also became more common.[8]

Critical patients need specific support to preserve the functions of their vital organs, which is why they are treated in intensive care units (ICU). The prediction of the future health conditions of these patients is crucial, and doctors try to predict changes in their clinical conditions as soon as possible, in order to adjust treatments, influence the eventual organ failure at an early stage and avoid unfavorable results. Nursing care for patients with AKI is a constant challenge in clinical practice, as it requires reasoning and clinical judgment in decision making. For nurses to provide assistance with quality and safety, professional interest and an incentive from the institution to achieve knowledge is necessary. It appears that the incessant search for learning is based on internal and external motivations and the effort to acquire new essential skills in the care process. [9,12]

The tumor lysis syndrome is a complication of chemotherapy for hematological neoplasms, in particular, aggressive leukemias and lymphomas. For hematological cancers, therapies targeted as small molecule inhibitors and monoclonal antibodies, have high antitumor activity, are well tolerated and have a low incidence of associated tumor lysis syndrome.[11]

Acute tumor lysis syndrome arises from a sudden release of intracellular products from a massive breakdown of tumor cells in the spontaneous blood circulation or secondary to radiation or chemotherapy. This complication is

characterized by tumor lysis syndrome, it is an oncometabolic emergency resulting from rapid cell death. The tumor lysis syndrome can occur as a consequence of tumor-directed therapy or spontaneously. Doctors should stratify all hospitalized cancer patients and especially those receiving chemotherapy for the risk of tumor lysis syndrome. Various aspects of prevention include adequate hydration, use of therapies to lower uric acid, use of phosphate binders and minimization of potassium intake. High-risk patient for the development of tumor lysis syndrome should be monitored in the intensive care unit.[11,13-18]

In view of the researched and explained context, the guiding questions of this study are: what is the scientific production related to acute kidney injury caused by tumor lysis syndrome in the patient admitted to the intensive care unit? What is the nurse's knowledge about such pathology?

In this sense, the objective of this study was to analyze the scientific production on acute kidney injury caused by the tumor lysis syndrome in the patient hospitalized in an intensive care unit, as well as the nurses' knowledge about such pathology.

Method

This is an integrative review of publications related to acute kidney injury and tumor lysis syndrome in patients with neoplasms with a higher hematological incidence, also including published reports by the professional nurse in the intensive care unit.[13]

For the elaboration of the integrative review, six different steps were taken: the identification of the theme and the guiding question; establishment of criteria for inclusion and exclusion of studies / sampling; definition of information to be extracted from selected studies / categorization of studies; evaluation of included studies; interpretation of results and presentation of the review / synthesis of knowledge.[13]

To search for scientific articles relevant to the study, bibliographic searches were carried out on the Virtual Health Library (VHL) Portal, on the databases of Latin American Health Sciences (Lilacs) and Scientific Electronic Library OnLINE (Scielo).

The descriptors used in the study were: Acute kidney injury, Intensive Care Unit, Tumor Lysis Syndrome. The cause of the tumor lysis syndrome has been evidenced in recent publications, as well as the epidemiology and physiology of the disease, the main cancer patients affected by the disease undergoing chemotherapy during hospitalization in the intensive care unit.[13]

Results and Discussion

Thirty articles from 2008 to 2020 were found in relation to the relevant aspects of kidney injury due to tumor lysis in patients in the intensive care unit and the reports of the nurse professional in publications about this complication, so rarely reported by this professional. The inclusion and exclusion criteria were applied and 4 articles were explained in a table with a period of time from 2013 to 2020.[13]

Chart 1- Stratification of the main factors of tumor lysis syndrome, as well as the epidemiology, pathophysiology and therapy used and the search for the knowledge of the professional nurse in related articles.[14-17]

Author	Title	Objective	Results	Conclusions
Tallo FS et al	Tumor Lysis Syndrome: a review for the clinician	Describe, through the integrative review, the Tumor Lysis Syndrome and the current aspects of its treatment.	Cancer Metabolic emergency Cell lysis	It's highlighted the therapy and cause of SLT and the risk factors for the disease. Did not demonstrate and / or cited the nurse's knowledge about the pathology.
Giongo SM et al	Tumor Lysis Syndrome	Describe the protocol of therapeutic options for cancer patients with SLT.	Tumor lysis syndrome Treatment Prevention Epidemiology Pathophysiology	It was explained about the treatment and prevention, as well as the epidemiology of the disease and pathophysiology, without demonstrating the knowledge of nursing and the care performed by it.
Wang Y et al	Impact of daytime continuous veno-venous haemofiltration on treatment of paediatric Tumour Lysis Syndrome	Describe the efficacy of continuous venous venous hemofiltration during the day in pediatric treatments	Renal therapy Pediatric treatment Acute kidney injury	It aimed at the efficacy and results of continuous daytime venous venous hemofiltration for pediatric treatment of SLT, not mentioning the role of the nursing team as well as their knowledge about the disease.
Armaly Z et al	Tumor Lysis Syndrome in chronic lymphocytic leukemia: a rare case repost from nephrology	Justify a case of a patient with spontaneous tumor lysis syndrome in the initial low dose of steroid therapy.	Tumor Lysis Syndrome Chronic lymphocytic leukemia Acute kidney injury	He stressed the less frequent chance and the case reports of the occurrence of the tumor lysis syndrome in chronic and solid tumors, not to mention the knowledge of the intensive care nurse.

The articles that were explained in the table above showed a review of the neoplasms most likely to have tumor lysis syndrome (SLT), as well as the factors of their clinical presentation and metabolic investigation. In the first article, the criteria for the laboratory diagnosis of tumor lysis syndrome, which is uric acid greater than or equal to 8mg / dL or 25% than the baseline value, potassium greater than or equal to 6 mEq / L or 25%, can be observed. baseline, phosphate greater than or equal to 4.5 mg / dL in adults, greater than 6.5 mg / dL in children than or above baseline, calcium less than or equal to 7 mg / dL or 25% less than the baseline value, with criteria for 3 days before and up to 7 days after treatment.

All anamnesis must be performed, as it may disappear. It also showed that there is a greater risk of clinical tumor lysis syndrome occurring in patients with cardiac arrhythmia, seizures, oliguria or increase of 0.3 mg / dL of creatinine.10 It can also be noted in the first article in the table that there are few studies published investigating the best form of monitoring. A guideline proposes the following form: in high-risk patients: DHL, uric acid, creatinine, potassium, sodium, phosphorus and calcium and every 12 hours for the first three days and every 24 hours for the following.[14] It was observed in the second table the tumor therapy and the prevention of tumor lysis syndrome, that suspicion and surveillance are fundamental in patients at risk, cytotoxic therapy can be postponed in order to institute prophylactic measures in order to reduce clinical manifestations. Hydration and monitoring through the hydroelectrolytic balance every six hours is essential.[15]

In the third article, the efficacy of veno-venous hemofiltration was continuously observed in the pediatric treatment of lysis of the tumor syndrome, since this pathology has a rare occurrence in this type of patient. Observations were made of 08 patients aged 5 to 14 years recently treated for acute lymphoblastic leukemia. Treatment of tumor syndrome lysis was started with CVVH Veno-venous hemofiltration lasting 8-80 hours with assessment of urinary production, uric acid, potassium, phosphate, calcium. It was evaluated that the calcium returned to normal levels, however the recovery of renal function was slow. Urine production in three patients with anuria or oliguria returned to normal within three days after CVVH. The number of serum creatinine returned to normal in all patients after 23 days of CVVH, the phosphate was regularized in the 5 days of treatment, the potassium level at 1 days and hyperuricemia at 4 days after CVVH. Hear evidence of metabolic improvement after starting treatment by continuous venous venous hemofiltration.[16]

A rare report of chronic stable lymphocytic leukemia has been described that spontaneously evolved to tumor lysis syndrome after a short dose of steroids. With that we talk about the importance of making the differential diagnosis of any acute renal failure in the constellation of any malignancy.[17]

Final Consideration

Tumor lysis syndrome is the most common oncological emergency in both adults and children. Although there is no universally accepted definition or diagnostic criteria, SLT is understood as a set of metabolic disorders that result largely from the distribution of tumor cells that can be spontaneous or secondary to the initiation of treatment. Tumor lysis generates massive release of intracellular content, including nucleic acids and electrolytes into the bloodstream, which can trigger the development of hyperkalaemia.

Among the risk factors for developing AKI, preexisting clinical diseases and therapeutic interventions stand out, in addition to individual susceptibility that can affect renal function. There is also a relationship with the aging process, linked to chronic-degenerative diseases and morphofunctional renal changes. The early diagnosis of AKI is directly related to the best prognosis of critical clinical patients, and among the commonly used strategies, there is the

measurement of biological markers, based on the analysis of laboratory data, which signal acute changes that interfere with renal function.

Based on the assumption that AKI worsens the prognosis of patients in the ICU and that prevention and early treatment strategies ensure a better evolution of the clinical picture, the performance of a specialized multidisciplinary team is essential to minimize complications and start the appropriate treatment early. case, in the intensive scenario. Emphasis should be placed on the nursing team, as it is the largest provider of specialized care. It can be said that the nurse has a substantial role.

Acute Kidney Injury (AKI) is a systemic, multifactorial disease that contributes to increased morbidity and mortality in patients admitted to the Intensive Care Unit (ICU). In the hospital environment, it is one of the most frequent complications in hospitalized patients, whose prevalence ranges between 15 and 30%, however, in ICUs, this value is practically doubled. It is estimated that 13% of patients in these units will be treated with renal replacement therapy, of which 50 to 60% will die. Among the risk factors for developing AKI, preexisting clinical diseases and therapeutic interventions stand out, in addition to individual susceptibility that can affect renal function. There is also a relationship with the aging process, linked to chronic-degenerative diseases and morphofunctional renal changes.

Despite current studies, the constant search for the knowledge of the professional nurse is known that SLT is an oncological emergency with a high morbidity rate, where the main strategy to improve the evolution of patients is to establish prophylactic measures and appropriate treatment with urgency. There must be a continuous analysis of the nurse, as well as of the entire team, risk stratification and elaboration of hydroelectrolytic and laboratory control protocols and the direct care provided to this patient profile in the intensive care unit.

In view of the research carried out, it can be highlighted as a limitation of the study that there are no reports from nurses about the lysis of the tumor syndrome, since the reports of this pathology are extremely important in decision-making and in the care process. Therefore, there is a need for a new updated future study with an approach on the topic.

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Correspondent Author
Camila Andrade Pereira
493 Fabiano Pereira St. ZIP: 29800-000.
Campo Novo. Barra de São Francisco,
Espírito Santo, Brazil.
camilaandrade16@hotmail.com

Nursing working conditions: an integrative review

Condições de trabalho da enfermagem: uma revisão integrativa

Condiciones laborales de enfermería: una revisión integradora

Gabrielle Alves da Anunciação Barreto[1], Juliana Mascarenhas Leite Oliveira[2], Beatriz Araújo Carneiro[3], Mineia Araújo Carneiro Bastos[4], Gustavo Marques Porto Cardoso[5], Wilton Nascimento Figueredo[6]

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1. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-1051-4518

2. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-6716-4769

3. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0001-7352-9827

4. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-3600-8904

5. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-0125-6492

6. Universidade Estadual de Feira de Santana, Health Departament. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-2066-0914

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RESUMO

Objetivo: descrever as condições de trabalho do enfermeiro, com ênfase na exposição a doenças ocupacionais e influência da carga horária na qualidade de vida do profissional. **Método:** Trata-se de uma revisão integrativa, realizada em agosto de 2020 nas bases de dados: Scientific Eletronic Libray Online (SciELO), Literatura Latino-Americana e do Caribe em Ciências (LILACS) e PubMed. Utilizando os descritores saúde: saúde do trabalhador; qualidade de vida; riscos ocupacionais e enfermagem. **Resultados:** Foram selecionados 19 artigos, nos idiomas inglês, português e espanhol, publicados entre os anos de 2015-2020. O trabalho da enfermagem exige alto grau de atenção e responsabilidade, as condições em que esses profissionais estão inseridos os submetem a variados agentes produtores de danos à saúde. Estresse ocupacional, acidentes de trabalho, carga horária excessiva foram fatores associados à baixa da qualidade de vida desse grupo. Enfermeiros realizam suas atividades com grande pressão psicológica e desgaste físico, decorrente de condições de trabalho precárias, má organização da gestão do sistema, deficiência de equipamentos básicos e imprescindíveis ao desenvolvimento do trabalho, bem como a grande demanda de pacientes em relação à oferta de profissionais. **Conclusão:** Destaca-se a importância da criação de medidas para segurança desse grupo, através de investimentos financeiros e políticas públicas para melhora das condições de trabalho, assim como o fortalecimento das entidades de proteção a essa classe trabalhista.
Descritores: Condições de trabalho; Enfermagem; Doenças ocupacionais; Qualidade de vida; Saúde do trabalhador.

ABSTRACT

Objective: to describe the nurses' working conditions, with an emphasis on exposure to occupational diseases and the influence of the workload on the professional's quality of life. **Method:** This is through an integrative literature review, performed in august 2020 through research in the databases: Scientific Eletronic Libray Online (SciELO), Latin American and Caribbean Literature in Sciences (LILACS) and PubMed. Using the descriptors health: worker health; quality of life; occupational risks and nursing. **Results**: 19 articles were selected, in English, Portuguese and Spanish, published between the years 2015-2020. Nursing work requires a high degree of attention and responsibility, the conditions in which these professionals are inserted subject them to various agents that produce damage to health. Occupational stress, work accidents, excessive workload were factors associated with the low quality of life of this group. Nurses perform their activities with great psychological pressure and physical exhaustion, due to precarious working conditions, poor organization of system management, deficiency of basic and essential equipment for the development of work, as well as the great demand from patients in relation to the supply of professionals. **Conclusion:** The importance of creating measures for the safety of this group is highlighted, through financial investments and public policies to improve working conditions, as well as the strengthening of entities that protect this working class.
Descriptors: Working conditions; Nursing; Occupational diseases; Quality of life; Worker's health.

RESUMEN

Objetivo: describir las condiciones laborales del enfermero, con énfasis en la exposición a enfermedades ocupacionales y la influencia de la carga de trabajo en la calidad de vida del profesional. **Método:** Se trata de uma revision integradora realizada en agosto de 2020, mediante la investigación en las bases de datos: Scientific Eletronic Libray Online (SciELO), Literatura Latinoamericana y Caribeña en Ciencias (LILACS) y PubMed. Utilizando los descriptores salud: salud del trabajador; calidad de vida; riesgos laborales y enfermería. **Resultados:** Se seleccionaron 19 artículos, en inglés, portugués y español, publicados entre los años 2015-2020. El trabajo de enfermería requiere un alto grado de atención y responsabilidad, las condiciones en las que se insertan estos profesionales los someten a diversos agentes que producen daños a la salud. El estrés laboral, los accidentes laborales, la sobrecarga de trabajo fueron factores asociados a la baja calidad de vida de este grupo. Las enfermeras realizan sus actividades con gran presión psicológica y agotamiento físico, debido a las precarias condiciones laborales, la mala organización de la gestión del sistema, la deficiencia de los equipos básicos y esenciales para el desarrollo del trabajo, así como la gran demanda de los pacientes en relación a la oferta de profesionales. **Conclusión:** Se destaca la importancia de crear medidas para la seguridad de este colectivo, a través de inversiones financieras y políticas públicas para mejorar las condiciones laborales, así como el fortalecimiento de las entidades que protegen a esta clase trabajadora.
Descriptores: Las condiciones de trabajo; Enfermería; Enfermedades profesionales; Calidad de vida; Salud del trabajador.

REVIEW

Introduction

Nursing work can be influenced by several issues, such as: power relations and class and gender struggles. These direct the professional to seek greater positioning and autonomy in their activities, in addition to the social and professional recognition that, at times, is weakened.[1]

The deterioration of working conditions in the health field is present in the entire nursing service and occurs due to several factors, such as the lack of material resources and the shortage of professionals, creating overload on employees in certain sectors, in addition to fragile and low salaries.[1-2]

Occupational diseases present themselves as a major enemy in the health sector. Nurses during their daily activities are exposed to the most diverse biological, chemical, physical and ergonomic risks, thus becoming a vulnerable group for the development of diseases (physical and emotional), affecting both their quality of life and their quality of care provided.[3] These professionals in their working conditions are in charge of activities with high levels of responsibility, in addition to providing excessive hours, leading them to exhaustion, high level of stress, psychological damage and physiological problems.[2,4]

Occupational stress is defined as a physiological and psychological pressure caused by an imbalance between personal requirements and the conditions in which the individual works. Baldonedo et al.[5] in a study on nurses' stress at work concluded that situations in which the individual experiences a lack of resources necessary for the activities in charge, expose them to constant stress, developing damage to their health, evolving slowly and progressively towards a state of disorder in the body. This situation creates exhaustion conditions, increasing the frequency of occupational accidents, since poor service conditions influence the performance of their tasks.[5-6]

The initiative of measures for safety and protection of this nursing team becomes partly the responsibility of the institution where this professional performs his work. Machado et al7 in a study on nursing work conditions shows that only 40.6% of professionals are assisted when they fall ill by the institution they work for. Those who are not (30.5%) and those who 'sometimes' (19.1%) are assisted add up to 49.6%, that is, almost half of the team directly faces other people's health problems, but it has no institutional support when it comes to your own personal health.

Considering the growing interest in the activities performed by the nurse and the health status of these workers, this study aims, through an integrative literature review, to analyze the working conditions of nursing in a general context, with specificity in the exposure to occupational diseases and the influence of hourly load on your quality of life.

Method

This is a descriptive, exploratory study, developed through a critical analysis of the literature. At first, a bibliographic survey of the proposed theme was carried out, through research in virtual environments, in the following databases: Scientific Eletronic Libray Online (SciELO), Latin American and Caribbean Literature in Sciences (LILACS) and PubMed.

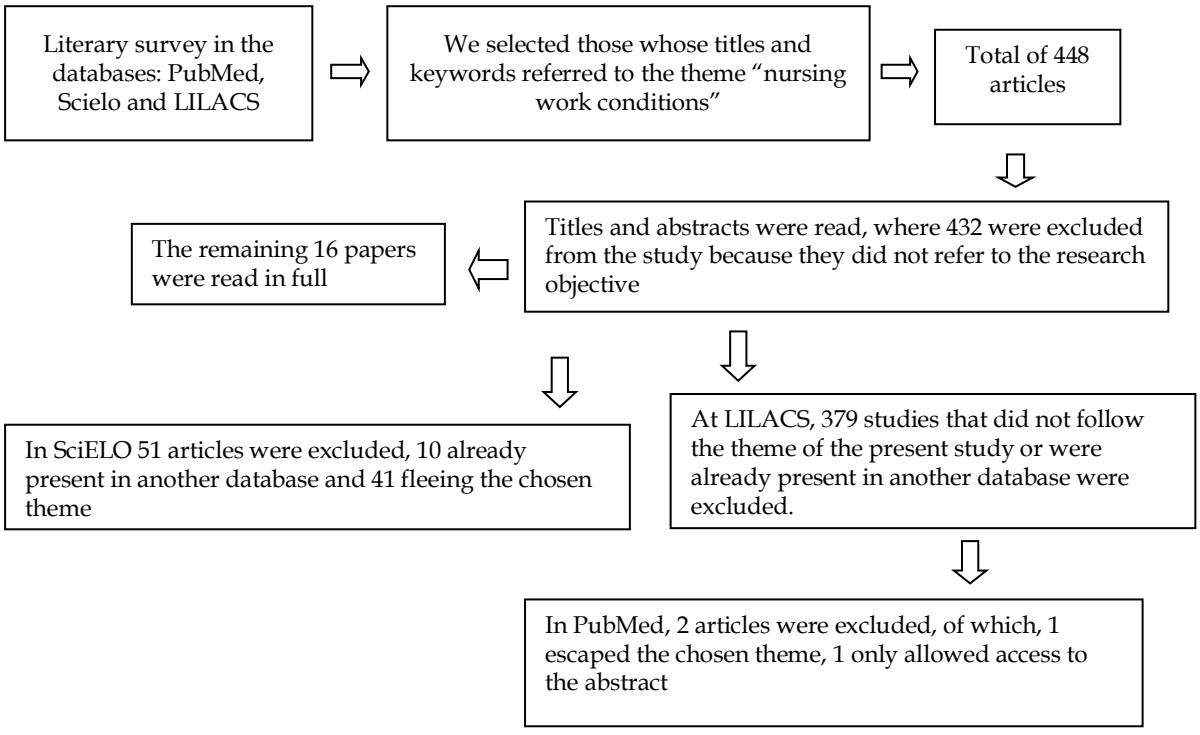
The descriptors used during the integrative literature review were: worker health; quality of life; occupational risks; nursing.

After selecting the descriptors, a crossover was carried out in the VHL (Virtual Health Library) with the Boolean operator AND as follows: "work conditions" AND "Nursing" AND "Nursing working conditions", where articles from the databases were obtained data, LILACS, PubMed and Scielo. The studies obtained in each database were described, in due order, in Chart 1 below:

Chart 1– Number of articles in the final sample per database, 2020.

Data bases	Search structure	Identified Sample	Excluded	Final Sample
SCIELO	"Nursing working conditions"	63	51	12
PUBMED	"work conditions" AND "Nursing"	3	2	1
LILACS	"work conditions" AND "Nursing"	382	379	3
TOTAL	--	448	432	16

Figure 1- Methodological process of the review, 2020.



The screening of the articles was developed by a group of reviewers, previously calibrated, so that both had access to the same references, but selected them independently.

The inclusion of the articles followed previously established criteria, in order to refine the indexed publications. The literary survey consisted of a sample of 16 articles published by the courses: Nursing and Psychology, chosen and characterized, focusing on the area of Nursing. Articles published between the years 2015-2020 were selected, and papers in English, Portuguese and Spanish were obtained.

Results

The screening of the articles was developed by a group of reviewers, previously calibrated, so that both had access to the same references, but selected them independently.

Titles and abstracts were read, where 432 were excluded from the study because they did not refer to the research objective, were duplicated in the databases or did not have open access. In LILACS, 379 studies that were not included in the theme of the present study or were already present in another database were excluded; 51 articles were excluded from SciELO, 10 of which were already present in another database and 41 from the theme, and 2 from PubMed were excluded, of which 1 was not in the chosen theme, 1 was not in open access.

Thus, the study sample consisted of 16 articles to be further analyzed, as can be seen in Chart 2.

Chart 2 - Authors, year of publication, objective and results of the 16 selected studies, 2020.

AUTHORS	YEAR	OBJECTIVE	RESULTS
Freire SKA, Santiago EJP.[1]	2017	Knowing the scientific production on occupational diseases in Brazil in relation to nursing workers	Factors such as stress, workloads and working conditions influence nurses' health
Dias MO, et al.[2]	2019	Discuss the impact of gender and socioeconomic issues of nursing workers in coping with the precariousness of nursing work	The female predominance, double shift, social issues and cultural, professional devaluation, reduced participation in spaces of struggle and bureaucratic labor issues were presented as justifications for the low involvement at work
Souza KHJF, et al.[3]	2020	Identify the associations between the variables associated with the nursing worker in a psychiatric hospital	The factors associated with the risks of illness were: complaints of insomnia, night work and working hours
Oliveira MM, et al.[4]	2017	To verify the repercussions of occupational risks on nursing professionals working in the hospital area	The way nursing work is organized at the hospital level as well as its process, are the main causes of exposure to occupational risks for workers

Baldonedo M, et al.[5]	2018	To know and compare the stress levels of Spanish and Portuguese nurses working in Hospitals	The most stressful factors were work overload and difficulty in dealing with death
Macedo ATB, et al.[6]	2020	Check for the presence of psychosocial stress and resilience scores in nursing professionals who care for adults with multidrug-resistant germs	It was observed that 69.23% (27) of the professionals had high psychosocial stress and 56.41% (22) low resilience
Machado MH, et al.[7]	2015	Analyze the situation of the working conditions in which the nursing team operates, including variables in relation to working and relationship conditions	More than ¼ of the team see their distant, inaccessible bosses when they need help; high degree of insecurity and violence in the workplace; few are assisted, when they get sick, by the institution where they work; plus professional wear
Santos AP, et al.[8]	2020	Understand the difficulties encountered by the nursing staff during Pre-Hospital Care	The main barriers to assistance were accessibility to service locations, scene safety and the occurrence of occupational violence against professionals
Costa KNFM, et al.[9]	2017	Assess the quality of life related to the health of nursing professionals	Among the eight domains of the health-related quality of life instrument, three resulted in significant impairment of the scores. Those who obtained the lowest average were: Pain (22.4), General Health Status (25) and Social Aspects (22.5)
RB, Silva RM, Moraes-Filho IM.[10]	2017	Analyze the scientific evidence on the main difficulties that the Occupational Health Nurse faces in preventing accidents and caring for diseases in the organizational environment	There are difficulties related to the labor market and internal problems, involving the relationship between companies and workers, mediated by nurses.
Oliveira CAFB, et al.[11]	2020	Analyze the repercussions of teaching work on the health of nursing teachers	Due to pressure from high labor demand and inadequate working conditions, this activity favors the illness of these professionals
Ferenc AVF, Brandão ACP, Braúna RCA.[12]	2015	Analyze the teaching work conditions in a public university in Minas Gerais and its implications for professional development pathways	Teachers perceive the effects of the intensification processes, and the precariousness of their work, due to high pressure and high workload.
Marin J, Ribeiro CDM.[13]	2020	Analyze the genesis and bioethical problems that emerge in the work process among teams of a basic health unit in Brazil	The reasons for this bioethical problem are associated with the collection of municipal management to increase production and achieve goals, the lack of appreciation of team workers and the efforts made by them in the work by management and asymmetric esteem.

Cardoso CML et al.[14]	2016	Understand the experiences of Moral Suffering expressed in the daily life of the Family Health Strategy.	Daily health system issues lead professionals to experience a challenging practice in dealing with everyday situations that go against their ethical precepts and can compromise the quality of work, becoming triggers of Moral Anguish.
Worm FA, et al.[15]	2016	Map the risk factors for illness related to the work of the Nursing professionals of the Mobile Emergency Service Team	The Indicators Pleasure and Suffering at Work pointed to freedom of expression for professionals, on the other hand there is a lack of recognition and professional exhaustion. For the evaluation of work-related damages, physical damages stand out.
Cunha LS et al.[16]	2016	Identify the point of view of nursing professionals on the adaptation and improvisation of materials in hospital work and analyze the advantages and disadvantages of this practice for work in health and nursing	It was evident that the practice of adapting / improvising and dialectics, with feelings of suffering and pleasure. Because, while ensuring care, it also puts the safety of patients and workers at risk

Discussion

The work environment in all its context encompasses several situations that affect the quality of life of the employees who compose it, situations that are the responsibility of public health, such as the issue of violence in the daily lives of health institutions. The professional nurse in this condition is unprotected to attacks coming from both the team in which he is part and the population using the service. In a study where the perception of professionals regarding the feeling of protection against violence was obtained, only 29%, that is, less than 1/3 of the team feels safe at work, against 21.8% who feel 'sometimes 'and 40.1% who do not feel protected.[7-8]

The high workload due to hospital shifts, shift changes and double jobs associated with low wages, significantly affects the quality of life of nurses.[9] Situations of physical and psychological exhaustion leave no doubt as to the conditions experienced by the team in the institutions in which they operate, a survey reported that 65.9% of these workers consider their activity exhausting, with one of these factors triggering excessive hours.[7]

The work environment in which nursing operates is facing several elements that cause risks, due to the proportion of complex, collective and risky procedures as in confinement environments, which occurs in offshore oil platforms.[10] Nurses face constant occupational diseases, capable of causing biopsychosocial damage, resulting from procedures performed by them, even producing various lesions at the cellular level (burns, skin and eye irritations, toxicity).[3]

Nursing works in the most diverse areas of health, with challenges and particularities. In a study addressing the work and health conditions in the reality of nursing professors, it was identified that 69.2% of these professionals reported the absence of rest breaks and meals during the working day, regarding space for rest in the institution 75 % of participants report that there is no suitable resting place.[7,11-12]

Factors considered stressful surround the routine of these workers, being producers of potential injuries the health condition of these individuals and causing problems that compromise the physiological balance of the organism. Among these factors, there are barriers in communication between the team and management in health institutions, the unpreparedness of one member affects the other, in view of this, the manager when unable to perform his role efficiently is due to the lack of experience, knowledge or false authoritarian power relations, generate work overload and psychological pressure on the entire team.[13-14] A recent study revealed the illness of nursing as a serious issue that affects more than half of the participants involved, their data show that 56.1% declared that they needed medical care in the first 12 months of service.[7]

Worm[15], in his research on the risk of illness of nursing professionals at work in mobile emergency care, obtained a positive assessment when reporting the working conditions in this sector, having as protagonists factors the quality of materials and environment where this group works, in addition to good availability of equipment and materials to carry out their proposed activities. The study also concludes that disorganization and professional accommodation is what generates dissatisfaction and frustration at work, resulting in a negative balance in the performance of the work performed and in the quality of care.

When the environment and materials are precarious, there is a greater exposure to risks and suffering in nurses, as they cannot apply safe knowledge and techniques, limiting them in their own area. Improvisation is often entered into the activities performed, where rapid resolution of problems is required, further increasing the psychological pressure of workers, this adaptive capacity, despite increasing greater creativity in the task, has a greater negative charge because it is configured in dangerous practices for a profession that even when acted correctly already has great risks.[16]

Conclusion

During the research it was observed that the articles had themes that were often corroborated. These themes covered the working conditions of this class, exposure to occupational diseases in nursing, and several other causes of damage to workers' health such as excessive hours, occupational stress and accidents at work, which makes it essential to apply measures that alleviate those damages. It can expand from investments in the working conditions of these professionals, as well as adjusting the demands with a greater number of nurses. From the concern to offer integrative health practices for them in the work environment and encouraging healthy eating and physical activity.

Another point to be highlighted is the strengthening of the relationships of entities that protect this class, the development of in-service education actions that are capable of reducing the risks of exposure and guaranteeing the quality of life at work, encouraging greater autonomy for nurses.

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Correspondent Author
Gustavo Marques Porto Cardoso.
177 D St., Morada do Sol Building. ZIP: 44008-440. Calumbi. Feira de Santana, Bahia, Brazil.
gugampc@hotmail.com

The benefits of male prenatal for the consolidation of the mother-father-son trinomial: an integrative review

Os benefícios do pré-natal masculino para a consolidação do trinômio mãe-pai-filho: uma revisão integrativa

Los beneficios del prenatal masculino para la consolidación del trinomio madre-padre-hijo: una revisión integrativa

Gabriel da Silva Lopes[1], Thais Vilela de Sousa[2], Dnise de Araujo Freitas[3], Francidalma Soares Sousa Carvalho Filha[4], Erika Silva de Sá[5], Andréia Coelho de Vasconcelos[6], Wemerson Passos[7], Iel Marciano de Moraes Filho[8]

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1. Universidade Paulista, Campus Brasília. Brasilia, Federal District, Brazil. https://orcid.org/0000-0003-1146-0574

2. Universidade Federal de Goiás. Goiania, Goias, Brazil. https://orcid.org/0000-0002-7498-516X

3. Hospital das Clínicas da Universidade Federal de Goiás. Goiania, Goias, Brazil. https://orcid.org/0000-0002-9120-1128

4. Universidade Estadual do Maranhão. Balsas, Maranhao, Brazil. https://orcid.org/0000-0001-5197-4671

5. Centro Estadual de Reabilitação e Readaptação Dr. Henrique Santillo. Goiania, Goias, Brazil. https://orcid.org/0000-0002-3026-6091

6. Universidade Federal de Goiás. Goiania, Goias, Brazil. https://orcid.org/0000-0001-7310-4976

7. Hospital das Clínicas da Universidade Federal de Goiás. Goiania, Goias, Brazil. https://orcid.org/0000-0003-0332-7845

8. Universidade Paulista. Brasilia, Federal District, Brazil. https://orcid.org/0000-0002-0798-3949

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RESUMO

Objetivo: Evidenciar, por meio de revisão de literatura, a importância do envolvimento paterno no decorrer do ciclo gravídico-puerperal, no favorecimento do trinômio mãe-pai-filho. **Método:** Trata-se de revisão integrativa da literatura, realizada em outubro de 2020, nas bases de dados Biblioteca Virtual em Saúde, Portal de Periódicos Capes e o Scielo, com recorte temporal de 20 anos em que 24 artigos foram analisados. **Resultados:** Observou-se predomínio de estudos com abordagem qualitativa (n=24) 100%, em periódicos nacionais (n=23) 95,83%, seu nível de evidência muito baixo, segundo método Grade (n=24) 100%, se concentraram em periódicos da área de enfermagem (n=16) 66,66% e na base de dados BVS (n=21) 87,50%. **Conclusão:** A inclusão durante as consultas de pré-natal, além de promover da saúde, previne e facilita diagnósticos de enfermidades e fortalecimento de vínculos que, por sua vez, possibilitam um melhor desenvolvimento fetal e um acompanhamento de saúde do casal durante todo o ciclo gravídico-puerperal, a partir da inserção precoce dos pais no trinômio mãe-pai-filho.
Descritores: Relações Pai-Filho; Pré-natal; Parto humanizado.

ABSTRACT

Objective: to highlight, through a literature review, the importance of paternal involvement during the pregnancy-puerperal cycle, in favor of the mother-father-son trinomial. **Method:** This is an integrative literature review conducted in October 2020 in the databases Virtual Library in Health, Portal de Periódicos Capes and Scielo with a 20-year time frame in which 24 articles were analyzed. **Results:** There was a predominance of studies with a qualitative approach (n = 24) 100%, in national journals (n = 23) 95.83%, their level of evidence very low according to the Grade method (n = 24) 100%, if concentrated in nursing journals (n = 16) 66.66% and in the VHL database (n = 21) 87.50%. **Conclusion:** inclusion during prenatal consultations, in addition to promoting health, prevents and facilitates diagnoses of illnesses and strengthens bonds, which, in turn, enable better fetal development and health monitoring of the couple throughout the pregnancy cycle -puerperal, from the early insertion of parents in the mother-father-son trinomial.
Descriptors: Parent-Child Relations; Prenatal; Humanizing delivery.

RESUMEN

Objetivo: Resaltar, a través de una revisión de la literatura, la importancia del involucramiento paterno durante el ciclo embarazo-puerperal, en favor del trinomio Madre-Padre-Hijo. **Método:** Se trata de una revisión integradora de la literatura, realizada en octubre de 2020, en las bases de datos Biblioteca Virtual en Salud, Portal de Periódicos Capes y Scielo, con un plazo de 20 años en el que se analizaron 24 artículos. **Resultados:** Predominó los estudios con enfoque cualitativo (n = 24) 100%, en revistas nacionales (n = 23) 95,83%, su nivel de evidencia muy bajo, según el método Grade (n = 24) 100%, si concentrado en revistas de enfermería (n = 16) 66,66% y en la base de datos BVS (n = 21) 87,50%. **Conclusión:** La inclusión durante las consultas prenatales, además de promover la salud, previene y facilita el diagnóstico de enfermedades y fortalece lazos que, a su vez, permiten un mejor desarrollo fetal y seguimiento de la salud de la pareja durante todo el ciclo del embarazo -puerperal, desde la inserción temprana de los padres en el trinomio madre-padre-hijo.
Descriptores: Relaciones entre padres e hijos; Prenatal; Nacimiento humanizado.

REVIEW

Introduction

Body autonomy is instituted as a human right, from which the person has freedom over his body, and that means that the decision to have children or not is the private sphere of a woman or a couple. However, when the woman is pregnant, her autonomy is relativized, due to the existence of another being, the unborn child, who also has her rights guaranteed by the constitution.[1]

Thus, it is essential to provide quality care to these pregnant women, which is expressed in prenatal care, through effective and timely actions to avoid unexpected problems, guaranteeing a healthy birth and birth, in addition to ensuring maternal, paternal, fetal and newborn.[1] The main objective of prenatal care is to welcome them since the beginning of pregnancy - which is characterized by a period of physical and emotional change that each pregnant woman experiences in a unique way and these transformations can generate doubts, fears, anguish or a curiosity to know what will happen inside your body.[2]

In this context, prenatal care is carried out through consultations that will be carried out by both doctors and nurses, whose pregnant women are referred after generating the opening number of the Pregnant Monitoring System (SISPRENATAL) to perform immunizations, exams and ultrasounds. The ideal is to start in the first three months of pregnancy and with recommendations for at least six prenatal consultations throughout the pregnancy.[3]

During prenatal care, the conscious and active involvement of the father/ partner becomes a predictive factor for the rupture of conceptions covered historically that, paternity only seems to exist when the child is born or when he is older. Thus, pregnancy is also a man's issue and stimulating the participation of the father/partner throughout this process can be fundamental for the biopsychosocial well-being of the mother, the baby and himself, with prenatal care being the opportune and propitious moment for this.[4]

In the beginning, childbirth was seen as an essentially female event, which favored an exclusion of the father/partner. With the struggle to implement more humanized practices and natural childbirth experiences, it was realized that male/ father participation could be positive, during the gestation period, in which the presence of a partner is a predictor that favors the strengthening of family bonds, providing the father with recognition of his role before the pregnant woman, in addition to providing feelings of importance and fulfillment.[5-6]

Thus, baby care begins when the pregnancy is confirmed. From there, the woman and her partner will have access to prenatal consultations, from which they will receive necessary guidance for monitoring the pregnancy. In 2005, Federal Law No. 11,108 was instituted, which guarantees the right of a companion of free choice for women during the pregnancy-puerperal period, with this, the Companion Law can positively contribute to the insertion of men in pre- and consolidate, according to the Ministry of Health (MS), the crucial paradigm shift - from the mother-child binomial to the mother-father-child trinomial.[4]

In continuity, in 2018, the Ministry of Health institutionalized the Partner's Prenatal Guide for Health Professionals, aiming to address and contextualize the importance of conscious and active involvement of adolescent men, young adults and the elderly in all actions aimed at reproductive planning and , at the same

time, contribute to the expansion and improvement of access and reception of this population to health services, with a focus on Primary Care. And it brought the prenatal care of the partner who proposes to be one of the main doors of entry to the services offered by Primary Health Care to the male population, highlighting actions oriented to prevention, promotion, self-care and the adoption of healthier lifestyles. It should be emphasized that these attitudes will not only be positive for children and women, but especially for men, as they bring them closer to the arena of affection and care.[4,7]

Similar to the norms, a third stage of a national survey related to Men's Health, Paternity and Care, carried out by the Ministry of Health, with 26,965 participants, it was clarified that 72.25% of the interviewed parents or caregivers participated in the pre- with their partners in the country. Of this total, it was also found that 80.71% (21,763) stated that this involvement motivated them to take better care of their health. And these data also demonstrate that paternity is the main way for men to access the health unit so that they also take care of themselves.[4]

Thus, the discussion in this area has been certified about the benefits of paternal stay during the conception process. In addition, the paternal presence during labor, accompanying the whole process and constantly supporting the parturient woman, has positive consequences in unleashing the baby's birth, providing significant improvements in the construction of the paternal bond, stimulating the woman at the time of parturition and decrease of neonatal complications.[5]

Therefore, their presence should be emphasized during care practices to prepare the couple for the time of delivery, strengthening the perception that pregnancy, delivery / birth and the puerperium are events loaded with deep feelings, moments of constructive crises and with strong positive potential for stimulation and formation of important bonds, which can cause positive personal transformations, encouraging changes with the partner that will improve during this pregnancy.[8,3]

We highlight that for first-time parents, so many revelations can show themselves as factors that can lead them to have feelings of stress, pressure, causing difficulties in coping with such situations, but it is of fundamental importance that they prepare themselves to live this process with peace of mind, and remember that everything will be worth it for your successor.[5]

Thus, the objective of the study is to highlight, through a literature review, the importance of paternal involvement during the pregnancy-puerperal cycle, in favoring the mother-father-son trinomial. This work will highlight the paternal inclusion during the pregnancy-puerperal cycle, contextualizing the importance of monitoring the father during this cycle and highlighting the entrance of the male population to health services through prenatal care.

Method

This is an integrative review of the scientific literature. The integrative review is a study based on the analysis of relevant research from secondary sources through a bibliographic survey that gathers knowledge about the phenomenon to be investigated. It constitutes a research technique with

methodological rigor, judicious and conscientious, which increases the credibility and depth of conclusions that can contribute to reflection on the conduct of future studies, thus also contributing to decision-making that seeks to improve recent evidence.[9]

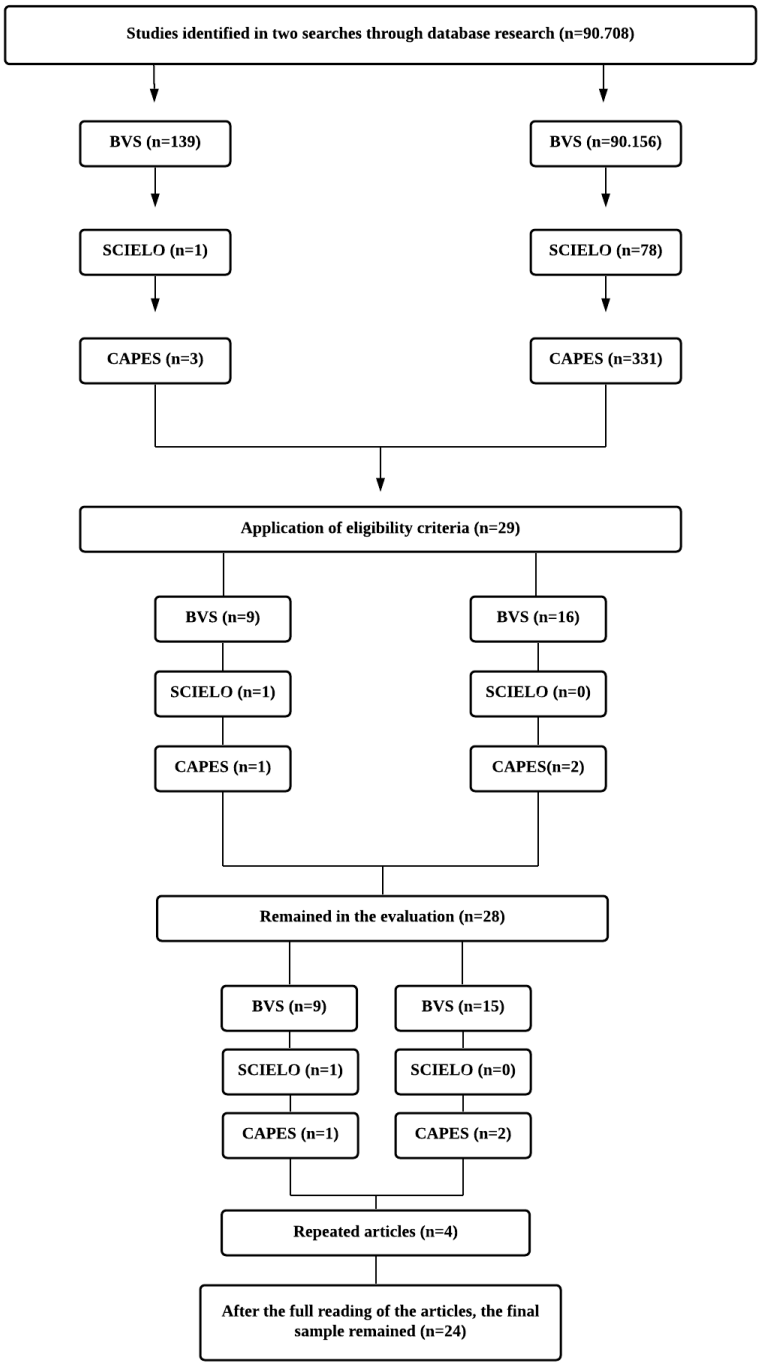
In this study, it was decided to search in databases with wide scientific dissemination in the national environment, using the Virtual Health Library (VHL), the Capes Journal Portal and Scielo (Scientific Electronic Library Online). In the digital search for scientific articles indexed in the aforementioned databases, the following Health Science Descriptors (DeCS) were used: "Father-Child Relations", and "Prenatal", in addition to the uncontrolled male prenatal descriptor, combined by the Boolean operator "AND" as shown in the table below.

Chart 1 - Database search strategy. Brazil, 2020.

Data base	Search strategy	Results	Filtered	Selected	Repetition
BVS	relações pai-filho AND pré-natal AND (fulltext:("1") AND la:("pt"))	139	9	9	3
	pré-natal masculino AND (fulltext:("1") AND la:("pt"))	90156	16	15	0
Scielo	Relações Pai-Filho and pré-natal	1	1	1	1
	Pré-natal masculino	78	0	0	0
Portal of journals CAPES -	Relações Pai-Filho and pré-natal	3	1	1	0
	Pré-natal masculino	331	2	2	0
Total		90.708	29	24	4

Data collection was carried out in October 2020. The language (texts published in Portuguese), publication period (between 2000 and 2020) and its full availability (available online) were used as filters within the databases. literature), dissertations, theses and editorials were excluded. After selecting titles and abstracts, studies that answered and met the research objective continued to be read in full. When comparing the results found in the searches between the databases, there was a repetition between the VHL databases with three articles and one article between VHL and SCIELO, and four articles were then excluded. This process is explained in the flowchart below.

Figure 1- Flowchart referring to searches in the databases. Brazil, 2020.



After reading the articles thoroughly, twenty-four made up the final research sample included in this review. From these studies, information was extracted for the composition of the synoptic table, such as authors, title, year of publication, basis, periodical of publication, level of evidence according to the Grade10 method, method, and the involvement of the father / partner in the pregnancy-puerperal cycle.

The studies were further categorized and presented by central themes: The benefits of the companion's rights in relation to the mother-father-son trinomial; Male prenatal care a predictive factor for the admission of men to the health service; Father's participation during the puerperal pregnancy cycle; Father's involvement in breastfeeding.

Results

Table 2 shows a predominance of studies with a qualitative approach (n = 24) 100%, in national journals (n = 23) 95.83%, their level of evidence very low according to the Grade method (n = 24) 100%, concentrated in nursing journals (n = 16) 66.66% and in the VHL database (n = 21) 87.50%.

Chart 2- Synoptic chart of the final sample according to authors, title, year of publication, database, publication period, level of evidence according to the Grade method, method and the involvement of the father / partner in the puerperal pregnancy cycle (n = 24) . Brazil, 2020.

Authors	Title	Year*	Data base	Journal	Evidence Level	Method	Parent / Partner Involvement in the Puerperal Pregnancy Cycle
Carvalho MLM	Parental participation at birth in public maternity hospitals: institutional difficulties and motivations of couples	2003	BVS	Cadernos de Saúde Publica	Very Low	Qualitative of ethnographic type	Involvement of the father / partner in the care of children, their participation in the birth and formation of the father-baby bond.
Brito RS, Enders BC, Soares VG	Maternal lactation: the father's contribution	2005	BVS	Revista Baiana de Enfermagem	Very Low	Descriptive qualitative	Involvement of the father / partner in the contribution of breastfeeding.
Piazzalunga CRC, Lamounier JA	The current context of the father in breastfeeding: a qualitative approach	2011	BVS	Revista Médica de Minas Gerais	Very Low	Qualitative dialectical method type	Contribution and involvement of the father / partner during breastfeeding.
Francisco BS, et al	Parents' perceptions of their experiences as companions during childbirth and birth	2015	BVS	Revista Mineira de Enfermagem	Very Low	Descriptive qualitative	Involvement of the father / partner about their experience during the child's birth process.
Melo RM, Angelo BHB, Pontes CM, Brito RS	Men's knowledge of labor and birth	2015	BVS	Escola Anna Nery Revista de Enfermagem	Very Low	Descriptive qualitative	Analyze the father / partner's perception of their presence in the delivery room, in order to favor a smooth delivery for both.
Rêgo RMV, Souza AMA, Rocha TNA, Alves MDS	Paternity and breastfeeding: nurse mediation	2016	BVS	Acta Paulista de Enfermagem	Very Low	Qualitative research-action type	Involvement of the father / partner in contributing to the success of breastfeeding and in providing care to the newborn.

Gabriel MR, Poli RG, Dall'Agnol LF, Tudge J, Piccinini CA	Paternal involvement at 24 months of life	2017	Periódicos CAPES	Psicologia: Teoria e Pesquisa	Very Low	Descriptive qualitative	Parent / partner involvement in caring for children, their participation in the child's life and forming the parent-child bond.
Lima JP, Cazola LHO, Pícoli RP	The father's participation in the breastfeeding process	2017	BVS	Cogitare Enfermagem	Very Low	Descriptive qualitative	Parent / partner involvement in the breastfeeding process.
Henz GS, Medeiros CRG, Salvadori M	Paternal inclusion during prenatal care	2017	BVS	Revista de Enfermagem e Atenção à Saúde	Very Low	Descriptive qualitative	Parent / partner participation during the prenatal period and baby care since the gestational period.
Silva RDM, et al.	Insertion of the father in municipal maternity hospitals in Recife: opinion of technicians and nursing assistants	2017	BVS	Revista de Enfermagem em foco	Very Low	Descriptive quantitative	Involvement of the father / partner as a companion in the parturition process.
Santos JA, Santos DFC, Rennò GM, Bitencourt AC, Alves GE	The companion's perception of his acceptance during delivery	2018	BVS	Revista de Enfermagem UFPE	Very Low	Descriptive qualitative	Companion's perception regarding their reception during work childbirth and childbirth.
Cardoso VEPS, et al	The partner's participation in the prenatal routine from the perspective of the pregnant woman	2018	BVS	Cuidado é Fundamental Online	Very Low	Descriptive qualitative	Parent / partner involvement in participating in the prenatal routine.
Braide ASG, et al	Yes, I am a man and a father! (Re) building male identity from participation in childbirth	2018	Periódicos CAPES	A Revista Pan-Americana de Saúde Pública	Very Low	Qualitative of the ethnographic type	Understand how the experiences of man's active participation in prenatal care and childbirth influence the re-signification of male identities.
Quitete JB, Monteiro JAMB	The participation of the father in the planned home birth: a significant act for the woman	2018	BVS	Revista de enfermagem da UERJ	Very Low	Descriptive qualitative	Parent / partner involvement in participation during labor, favoring the development of labor and reducing obstetric interventions.
Cavalcant MAA, Tsunechiro MA	Paternal behavior in prenatal consultations	2018	BVS	Revista Paulista de Enfermagem	Very Low	Descriptive qualitative	Parent / partner involvement in prenatal consultation.
Ribeiro JF, et al.	The father's perception of his	2018	BVS	Revista de enfermagem UFPE	Very Low	Descriptive qualitative	Parent / partner involvement in the parturition process.

	presence during the parturition process						
Holanda SM, Castro RCMB, Aquino PS, Pinheiro AKB, Lopes LG, Martins ES.	Influence of partner's participation in prenatal care: satisfaction of primiparous women regarding support during childbirth	2018	SCIELO	Texto e Contexto Enfermagem	Very Low	Correlational quantitative	Parent / partner involvement in support during pregnancy, prenatal care and labor.
Anjos AM, Gouveia HG	Companion presence during the parturition and birth process: analysis of the practice	2019	BVS	Revista de Enfermagem da UERJ	Very Low	Transversal quantitative	Companion's involvement in the parturition process.
Medeiros RMS, et al.	Male prenatal care: challenges in nursing practice in primary health care	2019	Periódicos CAPES	Revista de Divulgação Científica Senna Aires	Very Low	Descriptive qualitative	Implementation of male prenatal care (Men's health).
Climaco LCC, Vilela ABA, Boery EN, Yarid SD	Male prenatal care: an experience report in the context of health education	2020	BVS	Revista de Enfermagem em foco	Very Low	Descriptive qualitative	Involvement of the father / partner in prenatal care from the perspective of health education to promote health and self-care.
Mello MG, Parauta TC, Saldanha BL, Lemos A	Young father's participation in prenatal care: the view of the health professional	2020	BVS	Revista de Pesquisa: Cuidado é Fundamental	Very Low	Qualitative documentary type	Adolescent parenthood; identify actions directed to the young father in prenatal care.
Souza MAR, Wall ML, Tuler ACM, Souza SRRK	Prenatal care with facilitator in the companion's participation in the labor and delivery process	2020	BVS	Revista de Pesquisa: Cuidado é Fundamental	Very Low	Descriptive qualitative	Companion's involvement during prenatal care.
Couto PLS, Gomes AMT, Vilela ABA, Pereira SSC, França LCM, Nogueira VPF	The presence of the parent in prenatal care: a study of social representations with pregnant women	2020	BVS	Revista de Enfermagem da UERJ	Very Low	Descriptive qualitative	Parent / partner involvement during prenatal care, analyzing their presence during this process.
Almeida DCS, Donaduzzi DS da S, Fettermann FA, Cortes LF, Sehnem GD.	Potentialities and weaknesses related to the participation of the father / partner in prenatal care in the perception of nurses	2020	Periódicos CAPES	Research, Society and Developmen	Very Low	Qualitative of the descriptive and exploratory type.	Parent / partner involvement during prenatal care, nurses' perception of Primary Health Care.

Discussion

The benefits of the companion's rights in relation to the mother-father-child trinomial

With the amendment of Law No. 8,080 of September 19, 1990, parturient companion presence was guaranteed (anyone of their choice) within the scope of the Unified Health System (SUS) in public hospitals, and insured (by Ordinance no. 2418 / GM in accordance with Law No. 11,108 of April 7, 2005 of the Ministry of Health), during the parturition, childbirth and immediate postpartum process, thus favoring the relationship between mother, child and companion, encouraging the structuring and family formation, which contributes positively to the inclusion of men in prenatal consultations, and thus consolidate the crucial change in the paradigm of the mother-child binomial to the mother-father-child trinomial.[11-14]

The presence of a companion chosen by the parturient during the delivery process contributes significantly to the provision of support, revealing her importance and contribution to facilitate and make the moment more pleasant and healthy for the woman, providing physical well-being and offering comfort and encouragement , which she really needs, which will allow the reduction of feelings of loneliness, anxiety, and therefore, the stress levels that can be caused by vulnerability, providing a good evolution of the clinical periods of childbirth. Thus, the child's father at that opportune moment will be able to create greater bonds and bonds with the newborn, since he will accompany the entire parturition process, and may even engage in a more positive way in the care of the newborn. [13,15-17]

Therefore, as this review can see, the presence of the father / companion during childbirth is the subject of several studies, as it is a non-invasive technology for several positive outcomes. According to the study by Anjos and Gouveia (2019)[16] at the Obstetric Inpatient Unit in a university hospital in southern Brazil with 586 puerperal women, women who had a companion reported having had a more satisfactory experience, in addition to a lower rate of analgesia use and a tendency towards short and spontaneous vaginal delivery.[16]

However, even in the face of the efforts of Organs federated bodies to make it possible to guarantee such rights to the parturient, the partner and the family, many times, the man or person chosen by her, is prevented from remaining at her side according to the collection of information. information from a study developed at a University Hospital in the municipality of Santa Cruz, located in Rio Grande do Norte with 12 men. This is due to the fact that some hospital institutions still adopt the health model centered on medicine and not on user needs.[18]

Still in the meantime, with regard to the reasons for the non-participation of partners in labor and postpartum, studies highlighted as difficult factors: impediments to the presence of parents and difficulty to leave work to monitor the child's birth. On the other hand, in a research carried out in two units of the Family Health Strategy in a municipality in the interior of Mato Grosso with 11 pregnant women, another factor that called attention was the fact that some women prefer to be unaccompanied during the visits, observing that they

consider that prenatal care is a space destined exclusively to women, and thus, they take for themselves only the pregnancy process.[19-21]

In addition, an investigation carried out in a public maternity hospital in Rio de Janeiro, with 11 parents, found that the majority showed fear and unpreparedness to deal with the situation. But even so, the parents expressed an adaptation to the partner's labor, giving solidarity and the desire to help the woman, determining the learning and emotional support to the pregnant woman.[19]

Therefore, it is necessary to invest in the implementation of good practices, based on scientific evidence, in services that assist in the entire puerperal pregnancy process, which will result in professional training with humanistic views, in improving the reception, information transferred, infrastructure adequate to meet the demand of maternity wards and evaluation of care models, providing conducts that emphasize the role of women and aiming at continuous support not only for her during childbirth and birth but for the mother-father-son trinomial.[12,15,18]

Male prenatal care: a predictive factor for the admission of men to the health service

Male health has been debated in the scientific community due to the great spread of epidemiological data and the creation of public policies aimed at this population. In this scenario, male prenatal care is a strategy that aims at valuing male models through welcoming, skillful listening skills and the possibility of insertion of men in health services.[23]

Thus, when considering the various diseases that affect the male population and that do not frequent health services, the Ministry of Health, through Ordinance GM / MS No. 1944, created the National Policy for Integral Attention to Men's Health (PNAISH), which aims to promote health actions that contribute positively to the understanding of the reality of the male universe.[23]

From this perspective, the proposal of the male prenatal strategy appears as part of the PNAISH and addresses that the male prenatal should see pregnancy as a phenomenon that goes beyond conception, therefore, it requires actions that involve men from the very beginning. family planning and contraception until the postpartum period, in which male participation in prenatal care expands health care, both for women and for their own health, especially with regard to Sexually Transmitted Infections (STIs).[23-25]

This invitation for the father to participate in the prenatal care must take place after confirming the pregnancy in a medical or nursing consultation, in which the participation of the father / partner in the monitoring routines of the pregnant woman begins, which will encourage their participation in educational activities and he will inform that he will be able to clear up doubts and prepare himself adequately to exercise his role during pregnancy, childbirth and postpartum. In addition to explaining the importance of exams and vaccination as the most effective measure for the prevention of vaccine-preventable diseases, whose father / partner, during the monitoring of the gestational period, must update their Vaccination Card and seek to participate in the process of vaccination. vaccination of the whole family and not only the pregnant woman and the baby.[4]

With regard to exams and procedures, to include the parent / partner in promoting their own health, prevention and diagnosis of illnesses, the Ministry of Health in 2018 suggested that the following exams should be requested for companions: Blood typing and HR Factor (if the woman has a negative HR); Hepatitis B virus (HBsAg) surface antigen research; Treponemic and / or non-treponemic test for syphilis detection using conventional or rapid technology; Anti-HIV antibody research; Hepatitis C virus (anti-HCV) antibody screening; Blood count; Lipidogram: HDL cholesterol measurement, LDL cholesterol measurement, total cholesterol measurement, triglyceride measurement; Glucose measurement; Hemoglobin electrophoresis (for detecting sickle cell disease); Blood pressure measurement; Checking weight and calculating body mass index. Thus, through these examinations and providing this moment when men go to the health service, they consequently contribute to the process of health promotion, prevention and treatment, enabling the improvement of paternal health practices, which will also encourage the companion to walk the prenatal routine.[4]

We highlight that these procedures and exams must be requested respecting the protocols established by the MS in the partner's prenatal strategy. And if any changes are detected in any of these tests, the patient must be referred for treatment within the Unified Health System network, therefore, the same procedure must be adopted if the professional verifies the need for other tests.[4]

Thus, through the implementation of this strategy, significant contributions are being pointed out in Brazil and other countries in the world and have been identified as predictors in parents' adherence to prenatal care such as: health education and strategies for preventing diseases through access to exams and assessment by health professionals, along with infection control.[24]

Thus, male prenatal care has been showing itself as a means of encouraging the participation of men in the health service, it must be implanted in the Primary Health Care service, considering that health education is characterized as an important strengthening mechanism the performance of the professional who favors and encourages health and self-care.[23]

Father's participation during the puerperal pregnancy cycle

Pregnancy is a moment of transition to parenting and requires future parents to undergo a series of changes and adaptations, both on a psychological and biological level and serves as preparation for the new roles they will have to assume. However, it is necessary to understand that the act of gestating is not the exclusive task of the woman as a mother, but of the couple. Therefore, the early reception of the partner will facilitate the development of the feeling of fatherhood and this will contribute to the bonding with the child to occur as soon as possible.[20]

However, a study[26] carried out regarding the views of nurses and doctors on fatherhood in adolescence, in two FHS units located in the south of the city of Rio de Janeiro, carried out with five nurses and three doctors, found that even though it is known that the insertion of a partner in prenatal care is essential for a good development of this process, the young father is not yet included in the consultations. Although the study has a very small sample, it brings a wealth of testimonies gathered, in which the need for intervention by health professionals

is observed, seeking new practices aimed at the insertion of adolescent parents in health services, providing a reformulation of the consultation prenatal care and making it more participatory.[26]

The participation of the father / partner during care during the puerperal pregnancy period promotes greater interaction, since the man / father may come to establish emotional bonds and feel like a father, before the arrival of the new being. The moment the father recognizes the family pregnancy, he starts to feel included in this "pregnancy" cycle, acquiring a new perception of care and being a caregiver.[27,19]

Nevertheless, research shows that the father's presence can favor the emotional support of the partner, understanding that the responsibilities with the child are of both and must be divided. Therefore, in order to allow a safer experience for women, it is important to share this moment with their partner. In Brazil, the Ministry of Health states that the presence of the father / partner during prenatal care, childbirth and the puerperium is an offer of support to the puerperal women during these periods, providing tranquility and security and contributing to the success of maternal and neonatal outcomes.[5,27]

The presence of the father brings a mixture of feelings not only for the man, but mainly for the woman who feels more secure and prepared for this special moment, besides stimulating the creation of a husband-wife, father-son bond. The participation of the father / partner offers emotional support, helping the woman to better withstand the pain and tension of childbirth, the presence of a person she trusts next to her makes them feel more satisfied, confident and happy.[28-29]

In this context, the woman's partner can be considered the ideal companion in the parturition process, due to the development of monitoring from prenatal to childbirth, in which he would be validating his paternity and valuing his role. The benefits of your company during the parturition process can be seen, which are stated in: positive factors in the construction of the paternal bond, encouragement / support to women during the parturition, reduction of neonatal complications and in the achievement of experiences which will be memorable the couple's life.[18,30]

In view of this, a survey carried out with 27 parents about the father's involvement at 24 months of the child's life, in the metropolitan region of Porto Alegre, observed that the parents were involved in interacting with the children, as well as being available and being responsible for them. . In addition, the results indicate that parents were involved with their children in different ways and with different frequencies, but their participation was still perceived as less than that of the mother. In this sense, the findings of the study can be used to support interventions with families, in actions aimed at promoting greater paternal involvement in the child's life, which will bring contributions not only for the child but also for the fatherhood experience itself.[31]

Thus, the man starts to assume a more egalitarian stance in relation to his partner, in addition to acquiring greater awareness about its importance in the family environment, positively corroborating the outcome of the baby's birth and the raising of his child.[18,30]

Father's involvement in breastfeeding

Breastfeeding (BF) is the oldest and most effective mode of feeding for the human species. The influence of this food on the health of the child is of paramount importance, being pointed out as the most appropriate way for the healthy development of infants and the only food that is effective in adequately meeting all the physiological needs of children under six months. Therefore, it is essential to emphasize that the father's participation during breastfeeding becomes one of the main elements of support for the mother, contributing to the effective act of breastfeeding.[32-33]

Paternal involvement in breastfeeding, in the first 10 days after delivery, is extremely important for the continuity of BF, due to the difficulties that can usually occur in breastfeeding. It is essential that a link between mother-father-baby be formed since pregnancy for this practice, thus, the father's more active presence in the preparation phase for motherhood can encourage the mother to breastfeed for longer and thus, the approval for breastfeeding is a major factor for successful breastfeeding.[33]

In this context, regarding the conception and participation of the father / partner in the AM, a study carried out in five health units of the Municipal Health Secretariat, in the Western Sanitary District of the city of Natal, Rio Grande do Norte, with a sample of 50 parents who lived with their partners showed that only 46% of the interviewees understand the importance of breastfeeding. In this analyzed sample, the participants were unanimous in recognizing that BF is important for the child and 84% of the participants reported having attitudes to encourage and encourage the nursing mothers. Also as a result of this study, participants reported helping mothers, especially in the first three months of their child's life and justified that during this period the woman has physical impossibility, breast pain and lack of experience.[32,34]

Consequently, the father's contribution to the process of natural breastfeeding is extremely important and must occur with actions and attitudes that permeate the care of the child and partner, helping with domestic chores, especially in the child's first six months as a way of dedication to the partner during lactation. As a result, the insertion and contribution of the partner during this period favors the success in maintaining exclusive and more prolonged BF.[33,31]

The study has limitations due to the lack of publications, especially as of 2016 regarding male prenatal care. In addition, the lack of consistency of information regarding the Partner's Prenatal Guide for Health Professionals, the level of evidence for the entire sample is very low and studies with a qualitative approach that portray only a specific perspective of the phenomenon and little discussion on the elapsed theme. However, the study provided an important reflection on the insertion of father / partner in prenatal care, which reflects the need to break the old paradigm and precepts that the male figure should not occupy this space.

Conclusion

As soon as the pregnancy is confirmed, prenatal care begins and the professionals' performance and perceptions in this area must be turned to the mother-father-son trinomial, enabling the improvement of paternal health

practices, which they will encourage the partner to walk the prenatal routine and will influence positive factors in the construction of the paternal bond.

It is worth mentioning the importance of the father / partner during the entire pregnancy process until breastfeeding and the child's growth and development, bringing benefits in relation to physical well-being, in addition to offering comfort and encouragement to the mother, which will allow the reduction of feelings of loneliness, anxiety, the levels of stress that can be caused by vulnerability, thus providing a good evolution of the clinical periods of childbirth, stimulating and supporting the woman at the time of parturition and promoting the reduction of neonatal complications and providing achievements of experiences which will be memorable and remarkable in the couple's life.

Therefore, the participation of men in prenatal care expands health care, helping women to better support the pain and tension of childbirth. The presence of a person you trust by your side makes them feel more satisfied, confident and happy. In this way, parents will develop knowledge about their role in relation to paternity in actions aimed at their inclusion during prenatal consultations, in addition to health promotion, prevention and diagnosis of illnesses and strengthening of bonds that, in turn, enable a better fetal development and a couple's health monitoring throughout the pregnancy-puerperal cycle, and the woman's prenatal care is also seen as an opportunity for insertion and motivation of the male universe in the practice of self-care, therefore, being able to emphasize even more the importance of early insertion of parents in the mother-father-son trinomial.

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Autor de Correspondência
Iel Marciano de Moraes Filho
Universidade Paulista, Departamento de Enfermagem. Quadra 913, Bloco B - Asa Sul. CEP: 70390-130. Brasília, Distrito Federal, Brasil.
ielfilho@yahoo.com.br

Reproductive planning and the limiting factors for male participation: an integrative review

Planejamento reprodutivo e os fatores limitantes para participação masculina: uma revisão integrativa

La planificación reproductiva y los factores limitantes de la participación masculina: una revisión integradora

Fabíola Barbosa Cardoso[1], Jones Sidnei Barbosa de Oliveira[2], Ivana Santos Pinto[3], Rodrigo Duarte dos Santos[4], Cleuma Sueli Santos Suto[5]

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1. Escola Baiana de Medicina e Saúde Pública. Salvador, Bahia, Brazil.
https://orcid.org/0000-0002-8700-1094

2. Universidade Federal da Bahia. Salvador, Bahia, Brazil.
https://orcid.org/0000-0002-1170-2652

3. Escola Baiana de Medicina e Saúde Pública. Salvador, Bahia, Brazil.
https://orcid.org/0000-0003-0312-2962

4. Universidade Federal do Vale do São Francisco. Petrolina, Pernambuco, Brazil.
https://orcid.org/0000-0003-4156-8527

5. Universidade do Estado da Bahia. Senhor do Bonfim, Bahia, Brazil.
https://orcid.org/0000-0002-6427-5535

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RESUMO

Objetivo: identificar o que tem sido retratado na literatura acerca da participação dos homens no planejamento reprodutivo e os fatores intervenientes a inserção masculina nos serviços de saúde. **Método:** trata-se de uma revisão integrativa, realizada no período de setembro de 2018, com artigos científicos completos nas bases de dados SciELO, BVS e BDENF, publicados em português (nacionais e internacionais), no período de dez anos (2008-2018). Foram analisados 10 artigos, no qual, 100% destes apresentam uma abordagem qualitativa, com maior parcela publicada no ano de 2014 (50%) e realizada no Brasil (90%). **Resultados:** evidenciou-se que as questões de gênero e masculinidade estiveram mais associadas as principais dificuldades para a participação e inserção dos homens no PR, como a persistência de uma desigualdade de papeis sociais entre o homem e a mulher, historicamente construída por uma cultura patriarcal, no qual, a mulher é tida como a única responsável pelos cuidados de reprodução e dos filhos. **Conclusão:** para uma maior adesão masculina ao PR, é necessário que os serviços se tornem mais apropriados para homens, como já acontece em algumas regiões brasileiras com a flexibilização de horários das unidades, além de capacitar os profissionais para trazer os homens para junto das equipes de saúde, incentivando a desmistificação dos preconceitos, com a finalidade de contribuir para uma participação mais efetiva.

Descritores: Planejamento Reprodutivo; Saúde do Homem; Relações de Gênero.

ABSTRACT

Objective: to identify what is portrayed in the literature about the participation of men in reproductive planning and the factors involved in male insertion in health services. **Method:** this is an integrative review, carried out in the period of September 2018, with complete scientific articles in the SciELO, BVS and BDENF databases, published in Portuguese (national and international), in the period of ten years (2008-2018). 10 articles were analyzed, in which 100% of them have a qualitative approach, most of them published in 2014 (50%) and carried out in Brazil (90%). **Results**: it became evident that gender and masculinity issues were more associated with the main difficulties for the participation and insertion of men in public relations, such as the persistence of an inequality of social roles between men and women, historically built by a culture. patriarchal, in which the woman is considered solely responsible for the care of reproduction and children. **Conclusion:** for greater male adherence to PR, services need to be more suitable for men, as is already the case in some Brazilian regions with the flexibility of the units' schedules, in addition to training professionals to bring men to the teams. health, promoting the demystification of prejudices, in order to contribute to a more effective participation.

Descriptors: Reproductive planning; Men's health; Gender relations.

RESUMEN

Objetivo: identificar lo retratado en la literatura sobre la participación de los hombres en la planificación reproductiva y los factores involucrados en la inserción masculina en los servicios de salud. **Método:** se trata de una revisión integradora, realizada en el período de septiembre de 2018, con artículos científicos completos en las bases de datos SciELO, BVS y BDENF, publicados en portugués (nacional e internacional), en el período de diez años (2008-2018). Se analizaron 10 artículos, en los cuales el 100% de ellos tienen un enfoque cualitativo, la mayoría publicados en 2014 (50%) y realizados en Brasil (90%). **Resultados:** se evidenció que las cuestiones de género y masculinidad estaban más asociadas a las principales dificultades para la participación e inserción de los hombres en las relaciones públicas, como la persistencia de una desigualdad de roles sociales entre hombres y mujeres, históricamente construida por una cultura. patriarcal, en el que la mujer es considerada la única responsable del cuidado de la reproducción y los hijos. **Conclusión**: para una mayor adherencia masculina a la RP, los servicios deben ser más adecuados para los hombres, como ya ocurre en algunas regiones brasileñas con la flexibilidad de los horarios de las unidades, además de capacitar a los profesionales para traer hombres a los equipos. salud, promoviendo la desmitificación de los prejuicios, para contribuir a una participación más efectiva.

Descriptores: Planificación reproductiva; Salud de los hombres; Relaciones de género.

Introduction

Sexual and reproductive rights are recognized as basic human rights, present in national and international documents. Among these documents, the Federal Constitution of 1988 stands out, which on reproductive rights, determines that Family Planning (FP) should be the couple's free decision, being the State's responsibility to provide educational and scientific resources for the exercise of this right, any coercive form is prohibited by official or private institutions.[1]

Pursuant to Law 9,263 of January 12, 1986, FP is defined as the set of fertility regulation actions that guarantee equal rights to the constitution, limitation or increase of offspring by women, men or couples.[2]

Historically, FP was basically associated with birth control, in which the distribution of contraceptive methods to control the number of children by families was prioritized, using the economic criterion in defining the amount of offspring.[3] However, nowadays, this purely economic conception has been modified, since it also covers the possibility of developing capacities such as deciding on one's own body and sexuality, especially for women, in addition to being able to expand the ways of individuals thinking, planning, feeling and live the act of having children.[4]

Another change that has occurred is related to the change of the term "Family Planning" to "Reproductive Planning", considering that the right to the regulation of fertility itself is a right of each person, man or woman, and reproductive decisions are not always made in a marital context.[5] Thus, it is understood for this research that the most appropriate term to be used is Reproductive Planning (RP).

In Brazil, although the RP is the responsibility of all levels of health care, this service is mainly developed in Primary Care (PC) through the Family Health Strategy (FHS).[6] Since this is a strategy that works with guidelines for the definition of registered territory, intersectoral actions, promotion, prevention and health care, providing links of relationship, affection and trust between users and professionals, thus ensuring continuity, resolvability and longitudinality care.[1]

Thus, it is the role of PC to offer individual and group educational actions, as well as access to information, means, methods and techniques available for the regulation of fertility that do not compromise people's lives and health. This ensures equal rights for women, men or couples, in a context of free and informed choice.[1] In this context, the main health professionals involved in RP are doctors and nurses who work serving the community and carrying out important activities such as counseling, educational activities, clinical activities and monitoring of individuals.[7]

Although many theoretical / legal documents highlight the importance of male participation in the RP, most scientific studies show a greater role for women in these services, and a lack of the presence of men in the same scenario.

This lack can be explained by some reasons, such as male resistance in the search for health services, especially with regard to primary prevention measures. Many injuries could be avoided if men used the services of PC more frequently, such as the fact that men are more vulnerable to diseases, especially serious and chronic illnesses, and die earlier than women.[8]

Another reason for the removal of men from access to health services is the fact that these users place little value on self-care and illness actions.[9] Corroborating this idea, the male clientele perceives health care as something that is not peculiar to masculinity. The authors explain that since the beginning, the formation of masculinity has been guided by a patriarchal cultural process where man is seen as supreme and invulnerable.[10]

In addition to the cultural variables mentioned above as barriers to men's access to the health system, it is recognized that services, policies and communication strategies still favor health actions for children, adolescents, women and the elderly to the detriment of the population male.[8] Thus, men need more significant and specific health care policies to recognize their socio-cultural conditions.[11]

This is how the National Policy for Integral Attention to Men's Health emerged in 2008 with the aim of promoting health actions that significantly contribute to the understanding of the unique male reality in its different socio-cultural and political-economic contexts.[8] The National Policy for Integral Attention to Men's Health, works through 5 thematic axes with the general objective of expanding the access of the adult male population which are: 1. Access and Reception, 2. Sexual and Reproductive Health, 3. Paternity and Care, 4. Prevalent diseases in the male population and 5. Prevention of violence and accidents (12).

Regarding the thematic axis of Sexual and Reproductive Health, the document highlights the importance of seeking to sensitize managers, health professionals and the population in general to recognize men as subjects of sexual and reproductive rights, involving them in actions aimed at this end and, implementing strategies to bring them closer to this issue.[12]

Male participation in PR has a positive impact in reducing gender inequalities, allowing men and women to share experiences, choices, responsibilities, and consequently, have the possibility to exercise the same rights.[13]

Despite this and other advantages, there are few published studies that make it possible to analyze more closely the aspects related to male participation in RP, thus justifying the construction of this work. In view of this, understanding man as an indispensable subject for the active construction of the health-disease process, this research aims to identify what has been portrayed in the literature in Portuguese about the participation of men in RP, making it possible to better understand the associated factors male insertion in this service.

Method

Integrative review type research. The term “integrative” comes from the integration of opinions, concepts or ideas from the research used in the method.[14] This is a type of methodology that enables the ability to systematize scientific knowledge in such a way that the researcher has the possibility of approaching the problem he wishes to appreciate, tracing an overview of his scientific production in order to know the evolution of the theme over time and, with that, visualizes possible research opportunities.[15]

This review method has a broader approach, as it allows the inclusion of several types of studies for a broader understanding of the analyzed phenomenon.[16] Data collection was performed through a search in the Scientific Electronic Library Online (SciELO), Virtual Health Library (VHL) and Nursing Database (BDENF). SciELO and the VHL are considered one of the main research bases in the health area, as well as BDENF, which is specialized in the nursing area. These databases allow the facility to find searches in Portuguese.

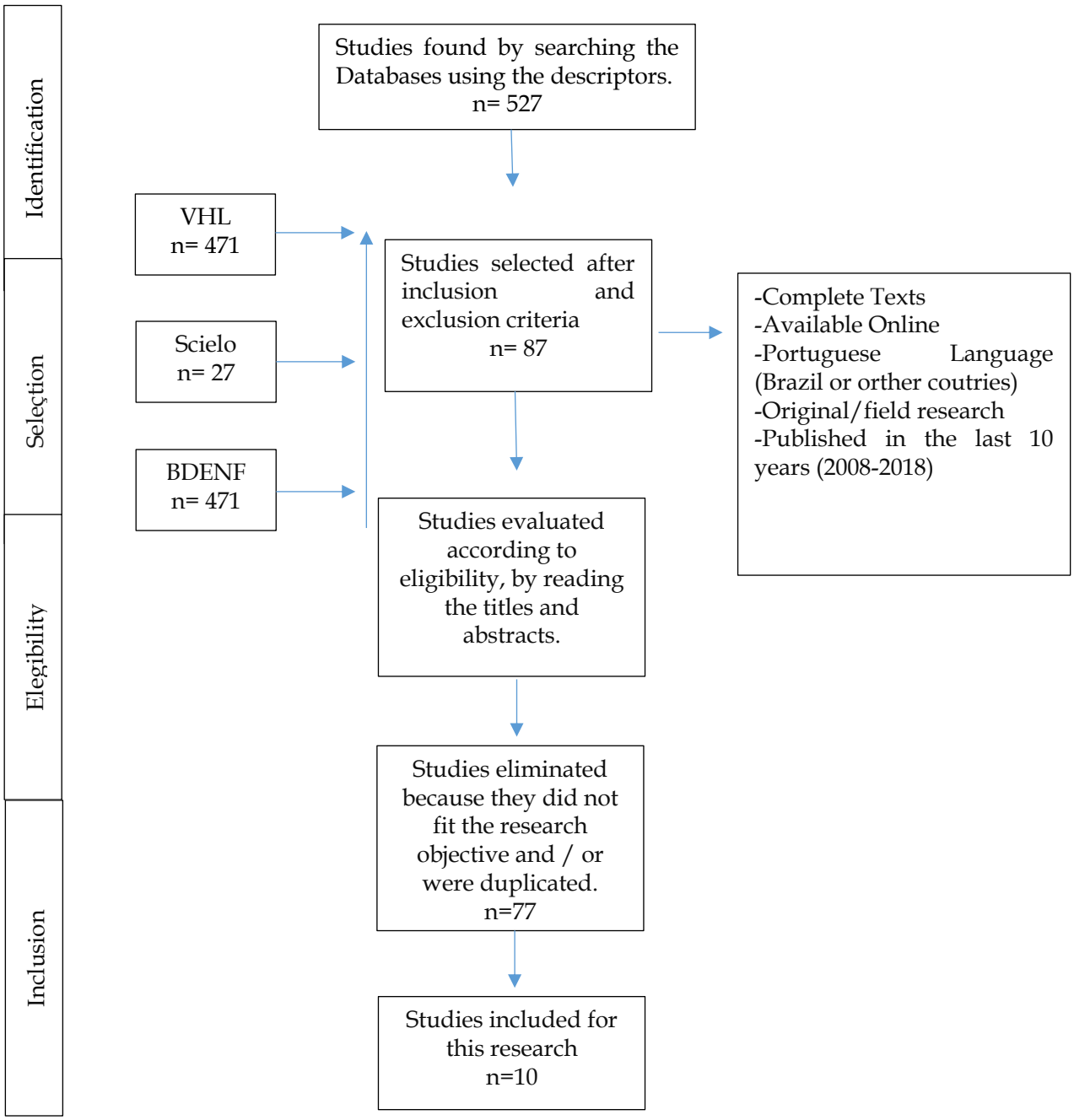
The search for the articles was carried out in the period of September 2018, using the descriptors "Family Planning" and "Man", taken from the Health Sciences Descriptors (DeCS). The term "Reproductive Planning" was not found in DeCS, so the descriptor "Family Planning" was used. For the research, the Boolean Operator AND was used in the combination of the descriptors.

The inclusion criteria selected were full texts, available online that were in the Portuguese language, which may be Brazilian or foreign-language research published in the last ten years (2008-2018) that were original / field research in health services. PC and tertiary as hospitals. As an exclusion criterion, we chose to eliminate studies that did not fit the objectives and theme of the proposal, and that were not in the format of articles such as monographs, theses and case studies.

The initial selection in the databases with the combination of descriptors, resulted in a total of 527 surveys, 471 of which belonged to VHL, 29 to BDENF and 27 to SciELO. Of this total, after filtering with the inclusion criteria, 87 surveys remained. All the files were submitted to the initial reading of the titles and abstracts and after similarity with the objective of the proposed work, 10 articles were chosen, which were studied in detail and used for the construction of this research and justified the elaboration of the following categories: 1. Factors related to the gender and masculinity issues and 2. Factors related to institutional barriers.

As this is a literature review research, this study did not need to be submitted to the Ethics Committee on Research with Human Beings, but all ethical precepts related to this type of research were ensured and the authors used in the study were cited. The flowchart below shows step by step the steps for selecting articles.

Prisma Flowchart



Results and Discussion

10 articles were analyzed. All material found was organized in codes according to titles, authors, main results and years of publication, as shown in Chart 1.

Regarding the type of study, 100% of the researches have a qualitative approach. Most articles were published in 2014 (50%), followed by 2016 (20%) and other years 2010, 2013 and 2017 represented by 10% each. With regard to the conditions of this research, it is clear that the texts are current, as 80% of the studies found were published in the last five years. The growth of research that

addresses this theme, contributes to the implementation of sexual and reproductive rights for men, aiming that health actions involve men in the choices, use of contraception methods and sharing responsibilities with women.

With regard to the location / region of the surveys, most studies were carried out in Brazil (90%) and only 1 (10%) in Mozambique. The Brazilian regions with the highest publication were the Northeast and the South with 44% each. The Southeast region, on the other hand, presented 11% and the North and Midwest regions did not present publications. Such data are in line with a study carried out on regional scientific collaboration in Brazil between the years 2007 to 2009, in which the North and Center-West regions had the lowest contribution rate.[17]

As for the professional categories of the researchers, it is clear that the largest portion is represented by professional nurses (50%), followed by doctors (20%) and in 30% of the studies they did not explain what the categories would be. This result is compatible with the structure of the Brazilian health network, since most of the RP consultations are performed at the AB in which the nurse is a member of the team and focuses on performance in programs such as Prenatal, PR, Childcare, among others.

Table 1. Presentation of articles regarding titles, authors, results and years of publication. Salvador - Bahia, 2019.

Code	Title	Author (s)	Results	Year
1	Male knowledge of contraceptive methods	Soares M.C.S; Souza V.C.D; Costa P.F.A; Paiva R.M.O.A.S; Guerra J.C.A; Freire T.V.V	Respondents do not know about contraceptive methods	2014
2	From decision to results: adult men's narrative about vasectomy	Cícero A.C.V.F.P.P; Mandadori F; Marcon S.S et al.	The participants informed that they had not received information about the surgery from the nurses	2014
3	Partner participation in family planning from a female perspective: a descriptive study	Silva G.S et al	The woman takes contraception as her responsibility	2013
4	Male participation in family planning and its factors	Morais A.C.B; Ferreira A.G; Almeida K.L; Quirino G.S	The factors that hindered the inclusion of men in Family Planning were related to the limited availability of time	2014
5	Male participation in family planning: What women think	Morais A.C.B et AL	The idea of male participation in contraception was summed up only in the act of providing the methods, whether taking them from the health unit or failing them, buying them at the pharmacy.	2014

6	Men's perceptions and experiences about family planning in southern Mozambique	Vânia M.P et al.	A portion of the research participants understand that Family Planning is solely the woman's responsibility.	2016
7	Family planning and men's health in the view of nurses	Casarin S.T; Siqueira H.C.H	The opening hours of most units coincide with the working hours of men, so professional activities are first in the list of male priorities	2014
8	Family Planning and Parenting Roles: the Traditional, Change and New Challenges	Mozzaquatro, C. O.; Arpini, D. M.	In general, women are seen as largely responsible for issues of contraception and childcare	2017
9	Social representations of men about the family planning	Bezerra M.S; Rodrigue D.P	The speeches tend to trigger the concept of the theme as a reflection of the male function of supply material needs to maintain its position as provider	2010
10	Knowledge and practices of men before reproductive planning	Coelho A.C.S; Pereira A.L; Nepomuceno C.C	There is still a certain lack of knowledge regarding aspects and rights related to reproductive health. The responsibility of conception / contraception still falls on the female sex.	2016

Through the detailed and complete reading of the texts, it was observed that contents related to two categories emerge: 1. Factors related to gender and masculinity issues and 2. Factors related to institutional barriers. Among the formulated categories, it is clear that the association of gender and masculinity was more associated with the main difficulties for the participation and insertion of men in PR.

Factors related to gender and masculinity issues

Throughout human history, men and women had a social formation based on power relations and division of functions.18 In the centuries before the insertion of women in the labor market, this was restricted to the home, children and domestic chores, obeying the impositions of the husband, while the man, was responsible for the external activities and of decision and support of the

family. Over the years, these social conformations have been modified through the popular feminist struggle against gender inequality. However, many aspects of patriarchal culture remain today, dictating ways in which men and women view the world and behave.

Thus, the construction of this category was based on the analysis of the articles that mostly revealed that the male public assumes a passive posture in relation to the PR, as it understands that women are the only responsible for the activities that involve pregnancy and contraception19 -26, this misconception is one of the factors limiting male insertion in the PR.

In a study carried out with 16 men in the city of Crato (CE), the participants revealed limited knowledge about the PR, justifying their participation only with the financial support to purchase contraceptive methods from their partners and material resources for the family's subsistence, leaving the responsibility for women to attend consultations and use contraceptives. In the same research, it was observed a low adherence of men with regard to the use of male condoms and little negotiation among couples about the choice of methods, indicating that it occurs unilaterally, with women being responsible for contraception.[20]

On the other hand, some articles have shown that the users themselves accept the RP as their responsibility[19,21,24-25,27], and a minority when asked about the importance of the participation of their partners, said they considered it unnecessary for them to be present at the consultations.[21]

In this sense, another limiting factor is related to the way men deal with the health aspect. According to the authors, men underestimate self-care and for various reasons such as prejudice, fear, shyness, shame, machismo, among other causes. This reflects in reality "that men seek health services much less than women", including the PR, with consequent repercussions on the male morbidity and mortality index.[23]

In this perspective, the fact that many men do not attend health facilities is also related to the feeling of invulnerability that they share. A sensation that integrates the concept of hegemonic masculinity, as the set of aspects, built in a sociocultural form of the figure of the strong, virile man, of power over the weakest (whether women or other men), of courage, power and resistance, that is, a fanciful concept that the male population does not get sick and does not need health care.[28]

However, they disagree with the previous authors, because for them the concept of hegemonic masculinity must be expanded and does not equate to a model of rigid typologies, since since its beginning in 1980 the definition of hegemonic masculinity has been changing over the decades and changes in multiple masculinity models. Thus, these authors suggest the reformulation of the concept in four areas: a more complex model of the gender hierarchy, emphasizing the agency of women; the explicit recognition of masculinities at the local, regional and global levels; more specific treatment in the contexts of privilege and power; and a greater emphasis on the possibilities of movement towards gender democracy.[29]

The issue of taboos regarding the use of the male condom and the performance of vasectomy surgery, were also perceived as harmful to male involvement in the RP.[19,20,26,30] As shown by a survey conducted in the city of Queimadas (PB), with men registered in a Basic Family Health Unit (BFHU),

which showed, through the interviewees' comments, the existence of many fears, taboos and little acceptability about the use of condoms, justified by the participants by the association of the referred method in conjugal relations with their partners as a symbol of infidelity and lack of confidence.[19]

As for the vasectomy surgical procedure, the indicators show that the absolute number of surgeries is still not satisfactory enough, often due to the stigmas / taboos that permeate it and men only opt for vasectomy as a last resort, when their spouses do not adapt to female methods.[19] According to the researchers of a study carried out with 13 vasectomized men, in a surgical sterilization center in Paraná, there was a significant number of users who believed that after performing the procedure their sexuality would be compromised, decreasing your sexual performance. As a method of preparing patients, before surgery, consultations and educational activities were carried out, assisted by doctors and psychologists to eliminate such stigmas.[30]

Factors related to institutional barriers

When talking about the difficulties associated with the participation of the male audience in PR, it is important to emphasize that not only gender issues are involved, but also the institutional barriers of health services have a direct relationship in the results. Institutional barriers are considered to be difficulties for men to access health care services, related to the internal characteristics of the services themselves, whether they are at primary, secondary or tertiary levels. However, in the case of the present study, these difficulties were more encountered in the units of AB.[31]

Eight articles pointed to the fact that there is little space reserved for men in health services.[19-20,22-26,30] According to a survey conducted with nurses from BA, the Basic Health Units are a feminized space, composed basically by professional women and frequented by an essentially female clientele. Such a situation would provoke in men the feeling of not belonging to that space.[23]

Reaffirming the previous discussion, it is necessary to clarify that the health services are still unable to fulfill the role of transformation, since the offer of health actions in RP, mainly within the scope of BA, is given primarily to women. In addition, the authors state that RP actions are carried out according to users' free demand agenda, with no specific strategies established with goals, objectives or priority actions, designed in the male category.[24]

Another barrier often cited in the literature, pointed out as an impediment factor, refers to the lack of time, since many men take on extra-family work activities, and the availability times are incompatible with the functioning of health services, especially those belonging to BA. Professional activities are first in the list of male priorities, especially in the case of men with low purchasing power, since the association between being a provider and being a man is still very present in the social imaginary[20,23,30], as seen in the category of barriers related to gender issues.

In addition to the lack of time, some studies reported that when the user comes to the health service for the PR, he finds an obstacle when he realizes that the main focus is purely the distribution of methods, mostly female, with little availability of male methods (only condoms and vasectomy), without prioritizing actions such as consultations and health education, and

consequently, these further distances the male population.[20-21,23,30]

Finally, the analysis of the articles found, as an institutional barrier, the lack of professional training on comprehensive health care for men, and with regard to the present work, the male insertion in the RP. Thus, professionals still do not recognize man as an individual capable of promoting self-care and being a protagonist in RP.[25]

The same problem was identified through the speeches of the vasectomized users, who in no time, the nurse was described as a professional who participated in the process of counseling on vasectomy[30], a regrettable finding, since the nurse is one of the main mediators between users and the health service.

Conclusion

The results pointed out as the main limiting aspects in relation to gender issues, the non-recognition of the man, by himself and his companions, as responsible for the RP, through the existence of prejudices, taboos, machismo, fear, shame and aspects of masculinity hegemonic. As well as the underestimation of the subjects regarding health care, mainly regarding self-care, promotion and prevention actions.

Thus, it is clear that the hierarchical constructions and patriarchal gender relations, reproduced mainly by the male category, need to be increasingly debated among health professionals and the population, in the search for deconstruction of stereotypes. It is also essential to carry out well-founded and structured health actions (operational and educational), with the objective of integrating man as the protagonist of the PR process.

Regarding institutional barriers, it was possible to identify that PR services are mainly directed to the context of the female audience, making it a more feminized space. The man also considers as an obstacle the incompatibility of the hours of his work with the opening hours of health centers and the lack of preparation of professionals to recognize their characteristics and real needs.

It is understood that, for a greater male adherence to the RP, it is necessary that the services become more appropriate for men, as already happens in some Brazilian regions with the flexibility of the units' hours (night hours, on Saturdays). It is also necessary to train professionals more and more to bring these men to the health teams, encouraging the demystification of prejudices, in order to contribute to a more effective and responsible participation of men in RP.

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Correspondent Author
Jones Sidnei Barbosa de Oliveira
400 Mucio Uchoa Cavalcante Av. ZIP 50730670.
Engenho do Meio. Recife, Pernambuco, Brazil.
jonessidneyy@gmail.com

Triggers of violence against women in the pandemic COVID-19: Integrative review

Fatores desencadeantes da violência contra a mulher na pandemia COVID-19: Revisão integrativa

Desencadenantes de la violencia contra las mujeres en la pandemia COVID-19: Revisión integradora

Ildenir Nascimento Sousa[1], Fernanda Campos dos Santos[2], Camila Cristine Antonietti[3]

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REVISA

1. Universidade Anhembi Morumbi, Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0002-9784-4474

2. Universidade Anhembi Morumbi, Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0003-0876-629X

3. Universidade Anhembi Morumbi. Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0002-3542-7691

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RESUMO

Objetivo: Analisar os dados disponibilizados na literatura nacional sobre os fatores associados ao aumento da violência contra a mulher durante a pandemia COVID-19. **Método:** Trata-se de uma revisão integrativa da literatura, a partir das bases de dados publicados no portal BVS, referente ao ano de 2020, em língua portuguesa. **Resultados:** Foi identificado que o isolamento social impactou a vida da população em geral, nos aspectos sociais e econômicos, com queda no número de denúncias de violência doméstica contra a mulher e aumento nos casos de feminicídios. **Conclusão:** Com o distanciamento social, as vítimas se restringiram em realizar as denúncias, pelo aumento do tempo convivência no mesmo ambiente familiar com o agressor e diante disso, é preciso refletir sobre as formas utilizadas para garantir proteção e segurança para essas mulheres. Pontua-se a necessidade da realização de mais estudos no Brasil, com o intuito de identificar novas estratégias de abordagem em Saúde Coletiva, com participação efetiva da equipe multidisciplinar de saúde nesse processo.

Descritores: Violência contra a mulher; Violência doméstica; Isolamento social; COVID-19.

ABSTRACT

Objective: To analyze the data made available in the national literature on the factors associated with the increase in violence against women during the COVID-19 pandemic. **Method:** This is an integrative literature review, based on the databases published on the VHL portal, referring to the year 2020, in Portuguese**. Results:** It was identified that social isolation impacted the lives of the population in general, in social and economic aspects, with a decrease in the number of complaints of domestic violence against women and an increase in cases of femicide. **Conclusion:** With the social distance, the victims were restricted to making the complaints, due to the increase in the time spent living in the same family environment with the aggressor and, in view of that, it is necessary to reflect on the ways used to guarantee protection and safety for these women. The need for further studies in Brazil is pointed out, in order to identify new strategies for approaching Public Health, with the effective participation of the multidisciplinary health team in this process. **Descriptors**: Violence against women; Domestic violence; Social isolation; COVID-19.

RESUMEN

Objetivo: Analizar los datos disponibles en la literatura nacional sobre los factores asociados al aumento de la violencia contra las mujeres durante la pandemia COVID-19. **Método:** Se trata de una revisión integradora de la literatura, basada en las bases de datos publicadas en el portal de la BVS, referidas al año 2020, en portugués. **Resultados:** Se identificó que el aislamiento social impactó la vida de la población en general, en los aspectos sociales y económicos, con una disminución en el número de denuncias por violencia intrafamiliar contra la mujer y un aumento en los casos de feminicidio. Conclusión: Con la distancia social, las víctimas se vieron restringidas a hacer las denuncias, debido al aumento del tiempo de convivencia en el mismo ambiente familiar con el agresor y, ante ello, es necesario reflexionar sobre las formas utilizadas para garantizar la protección y seguridad de estas mujeres. Se señala la necesidad de más estudios en Brasil, con el fin de identificar nuevas estrategias de abordaje de la Salud Pública, con la participación efectiva del equipo multidisciplinario de salud en este proceso. **Descriptores:** Violencia contra la mujer; La violencia doméstica; Aislamiento social; COVID-19.

Introduction

Violence against women has existed since the beginning of humanity, it is one of the main forms of violation of her dignity, it can be understood as any action or conduct based on gender that causes death or inflicts physical, sexual or psychological damage or suffering to women. , in the public or private spheres.[1]

According to the Maria da Penha law, five types of domestic and family violence against women are foreseen: physical, understood as any conduct that offends the integrity or bodily health of the woman, with the use of physical force by the aggressor; psychological, understood as any conduct that causes emotional damage and decreased women's self-esteem; sexual, understood as any behavior that constrains you, to witness, maintain or participate in any unwanted sexual intercourse; patrimonial, characterized as any conduct that constitutes retention, subtraction, partial or total destruction of your belongings, which are of any nature; morality, understood as any conduct that constitutes slander, defamation or injury against women.[2]

Femicide cases grew 22.2% between March and April of the year 2020, in 12 states of the country, compared to the year 2019 and public records still confirm a drop in the opening of police reports. In the state of São Paulo, the number of murders of women increased by 44.9% in March 2020, compared to the same period last year and women who already lived in situations of domestic violence without a safe place, were forced to remain more time in their own home with their abuser, often in precarious housing, with their children, without social interaction, thus reducing the chances of denouncing or fear of accomplishing the approach of the partner.[3]

he Covid-19 pandemic, was announced by the World Health Organization (WHO) on March 15, 2020, and has significantly affected the lives of the general population. In order to minimize the harmful effects of the COVID-19 pandemic, based on scientific evidence, WHO proposed that national authorities implement changes in habits in populations, among them, social detachment and became the most effective measure in preventing against spread of the virus, preventing the disease curve from reaching the top in an accelerated manner, with risk of overload in health services. However, these recommendations have triggered sudden changes in the lives of families and the population in general, with a negative impact on economic activities, and at all levels in life in society. However, when facing social distance, there were repercussions in interpersonal relationships, especially between intimate partners.

Due to the information presented here, before the pandemic one in three women of reproductive age was a victim of physical violence or sexual violence perpetrated by an intimate partner during their lifetime, and more than a third of homicides of women are perpetrated in their relationships. interpersonal. However, the current pandemic has amplified cases of domestic violence against women and girls, with a prevalence up to three times higher in cases of domestic violence compared to the same period last year.[4]

Since violence against women is a social and public health problem, which can lead to trauma, disability, even death, it can indirectly lead to health

problems, such as physiological changes caused by stress, substance use, lack of control of fertility and personal autonomy. Victims of domestic violence have more health problems, consequently greater the need to use health services, generating higher treatment costs, in addition to presenting more frequently to emergency care units in urgent and emergency situations.[5]

In this scenario, the countries that experienced the greatest increase in violence against women during the period of social detachment were China, the United Kingdom, the United States, France and Brazil.[6] In Brazil, the events that were carried out through the hotline 180 by the women's ministry , family and human rights from March 1 to June 2020, totaled 18,586 cases, and among these, 424 daily complaints are of violence against women. Thus, physical violence was characterized as the type committed.[7]

In view of the relevance of the impacts caused as a result of social isolation during the pandemic, this study aims to analyze the data made available in the national literature on possible factors associated with the increase in violence against women during the pandemic by COVID 19.

In this sense, the objective of the study was to analyze the data available in the national literature on the factors associated with the increase in violence against women during the pandemic COVID-19.

Method

An integrative literature review was carried out.[8] The following stages for the development of the research were delimited: the identification of the theme and selection of the research question; the establishment of criteria for inclusion and exclusion; Which are they? Example of inclusion criteria: study design and exclusion criteria: articles that were not published during the COVID-19 pandemic, in 2020 the definition of the information to be extracted from the selected studies and; the evaluation of the studies included in the integrative review; interpretation of results, presentation of the review; and the synthesis of knowledge.[9]

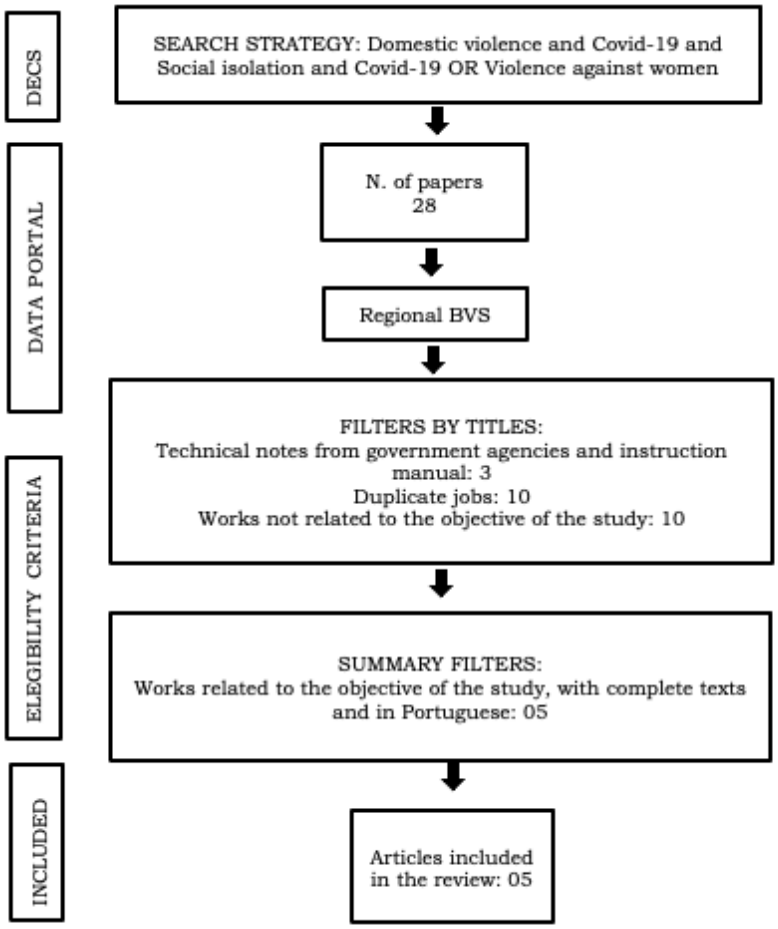
As a theme, studies were determined in order to answer the following guiding question: What are the main factors that resulted in the increase in violence against women in the context of COVID-19? In the construction of the appropriate question for the resolution of the researched clinical question, the PICO10 strategy was used: “P” corresponds to the population of women in situations of domestic violence; “I” to the intervention (research articles); "C" to the comparison (not applicable, as this is not a comparative study) and "O" to the outcome: to analyze which factors triggered the increase in violence against women during the COVID-19 pandemic period.

We used, as controlled descriptors, identified in the Health Science Descriptors (DECs). The search strategy using the Boolean operator AND and OR was: Domestic violence, social isolation and Covid-19, published in Portuguese. Data collection took place between September and November 2020. The databases searched were the Latin American and Caribbean Literature in Health Sciences (LILACS) and the Nursing Database (BDENF), through the VHL portal.

Original research articles, whose theme answered the guiding question, published in 2020, in Portuguese, were included. Studies that lacked research methodology (case reports, reflections, recommendations), reviews and studies

that focused on other topics were excluded. The studies were also included because they consider the limitation in the number of studies with the studied population, in order to achieve the maximum information about this population. An exhaustive reading of the titles and abstracts was carried out, independently, between two authors, to ensure that the texts contemplated the guiding question of the review and met the established inclusion and exclusion criteria. In case of doubt regarding the selection, it was decided to initially include the publication, and to decide on its selection only after reading its contents in full. The analysis of the data of the integrative review was elaborated in a descriptive way. A table, constructed by the authors, was used for the extraction and synthesis of data from each study included in the review, with the following information: article, country of origin, area of activity of the authors, objectives, participants, study design, main results and conclusions. Figure 1 shows the methodological path for selecting articles.

Figure 1- Flowchart of the study inclusion process, São Paulo, Brazil, 2020.



Results

This table allowed the comparison and organization of data, according to their differences, similarities and the review question, which were critically analyzed and grouped. (Chart 1). Below is the summary table of the 5 analyzed articles.

Table 1- Synthesis of selected articles, São Paulo, Brazil, 2020.

Title	Author/ year 2020	Objective	Methods	Results	Conclusion
Impacts of the COVID-19 pandemic on violence against women: reflections based on Abraham Maslow's theory of human motivation	Santos et al[3]	Reflect on the impacts of the COVID-19 pandemic on violence against women, based on the analysis of Abraham Maslow's theory of human motivation.	This is a reflective study with documentary analysis carried out in June 2020, whose theoretical framework was Abraham Maslow's theory of basic human needs.	The hierarchical levels were described according to the Maslow pyramid and a parallel was drawn with the data on violence against women before and during the COVID-19 pandemic period, making it the most affected among women living with the aggressor in the same family environment.	The present study demonstrated that the COVID-19 pandemic can affect women who suffer domestic violence at all hierarchical levels in the Maslow pyramid. The basic, physiological, security, relationship and affection, self-esteem and self-realization needs.
Masculinity in times of pandemic: where power shrinks, violence sets in	Santos, et al[14]	The objective of this essay is to reflect on man-power-violence relations based on Hannah Arendt's conceptions, problematizing the normalized concept of hegemonic masculinity	Essay sought to deconstruct the idea that there is a single model of hegemonic masculinity and that proposes a global domination of men over women.	An increase in domestic violence was observed as an effect of the decrease in patriarchal power, in an attempt to stabilize the masculinity model defined by this patriarchal power, or attempts are made to reconstitute it in new configurations.	In view of this reality, it is necessary, within the scope of Collective Health, to reflect on the reformulation of the National Policy for Integral Attention to Men's Health, being the main one to gender changes, giving rise to new strategies in the power relationship.
COVID-19 violence against women, children and adolescents in times of pandemic: overview, motivations and ways of coping.	Marques, et al[6]	As a result of social detachment and the sudden increase in the number of cases of violence in the context of a pandemic, international research organizations and the lay media are concerned about the signs of increased domestic violence.	Review on the subject on social media and internet.	Violence against women and against children and adolescents was noted during the period of social detachment.	Based on the evidence and arguments described throughout this article, complementing the need for actions to combat violence against women, children and adolescents.

Intersectionality and other views on violence against women in times of pandemic by the covid-19	Barbosa, et al[15]	To problematize oppression and domestic violence during social isolation in times of pandemic	The essay sought to foster dialogue from an analysis of complexity, where it would be possible to articulate the local-singular, with the representations and forms instituted in a broader-social context, favoring the analysis of the socio-historical-political implications by the collective	When society fails to incorporate established standards, to distinguish wars, violence against women, racial / ethnic prejudices, among others.	We tried to show that the increase in violence against women during the pandemic can be understood as tension between resistance to racism, sexism and the inequalities built by capitalism.
Social isolation and the increase in domestic violence: what does this reveal to us?	Vieira, et al [4]	The article sought to establish some relationships between social isolation during the COVID-19 pandemic and the increase in violence against women, taking into account the context of a patriarchal society	Data, still incipient, published by the press of several countries were analyzed, as well as reports from international organizations and organizations aimed at facing domestic violence.	The confrontation of violence against women in the context of the pandemic cannot be restricted to the reception of complaints, efforts should be directed towards the increase of teams in the direct lines of prevention and response to violence, as well as expanding the dissemination of services available.	The state and society must be mobilized to guarantee Brazilian women the right to live without violence, although women are excluded from decision-making processes, the majority of the Brazilian population and make up the majority of the health workforce.

Discussion

According to the results evidenced in the research developed by Santos et al [3], the COVID-19 pandemic can affect women who suffer domestic violence at all hierarchical levels of the Maslow pyramid, as well as in their physiological, security, relationship and health needs. affection, self-esteem and self-realization, and although the containment strategy guided by health authorities is necessary and fundamental to coping with COVID-19, this social isolation has contributed to the exponential increase in domestic violence in several countries. In China, the country of origin of the virus and the first epicenter of the pandemic, a record number of divorce requests were registered, with evidence of the increase in marital conflicts, given the situation of family incarceration [15].

Similarly, factors related to masculinity contribute to the increase in violence against women in the context of the pandemic, as evidenced in the study conducted by Santos et al [14]. Within the scope of Collective Health, it is necessary to reflect on the reformulation of National Policy of Integral Attention to Men's Health, being the main one to gender changes, giving rise to new strategies in the power relationship, because where violence settles where power shrinks, according to the concept of hegemonic masculinity and this cannot be understood as an inherent characteristic of men, it is necessary to abandon this essentialist character.

It is clear that cultural power and hierarchy is still a global aspect of men over women and in times of pandemic by COVID-19, it is essential to seek to understand the instrumentalization of the subject, the fragility and the annihilation of the source of legitimate power. more egalitarian human interactions and the consequent loss of human condition, related to the growing domestic violence. During the pandemic period, although the numbers of official records in police reports have declined, so-called underreporting, the numbers of female homicides and homicides are on the rise, indicating that domestic and family violence is on the rise, with an urgent need to implement new ones. strategies to enable women to access services to combat domestic violence. Crime by feminicide in the country increased by 22.2% during the months of March and April 2020, compared to the same period in 2019.[14]

Marques et.al[6] pointed out in his study national data and in Rio de Janeiro, the State Prosecutor's Office revealed a 50% increase in cases of domestic violence, in the first weekend after a decree from the state government recommending the distancing from the social, the largest part of the occurrence reports that involved violence against women. In the same way, in Paraná, which obtained a 15% increase in the records of domestic violence attended by the Military Police on the first weekend of social distance. Similar situations are reported in Ceará, Pernambuco and São Paulo. In the same line of argument, the author Santos et.al evidenced, in São Paulo, the increase of crimes by feminicides reached 46% in the comparison between March 2020 and March 2019, having doubled in the first half of April. In Acre, the growth was 300%, in Maranhão, the variation was 166.7%, and in Mato Grosso the increase was 150%. Only three states recorded a reduction in the number of femicides: Espírito Santo (-50%), Rio de Janeiro (-55.6%) and Minas Gerais.[14]

The selected studies also highlighted possible factors, such as the impacts generated on economic activities, as facilitators in the increase in violence against women, as many workers faced a reduction in their monthly incomes, making it difficult to fund basic items for survival, such as food. , water and clothes. In many homes, the payment of basic bills such as water, sewage and electricity has been postponed, with the aim of prioritizing essential items. The widespread economic difficulty, makes the family environment weakened by insufficient access to basic items [3].

Due to the information described here, to receive reports of domestic and family violence, MMFDH launched digital platforms for NDH's service channels: the Human Rights BR app and the ouvidoria.mdh.gov.br website, which can also be accessed at disque100.mdh.gov.br and ligue180.mdh.gov.br. Where family members, neighbors or even strangers can send photos, videos, audios and other documents that record situations of domestic violence and other human rights

violations.

However, tackling violence against women in the context of the pandemic cannot be restricted to the reception of complaints, strategies must be created to increase the number of teams in the direct lines of prevention and response to violence, as well as for the wide dissemination of services available, empowering health workers, especially public health workers to identify risk situations, as well as the expansion and strengthening of support networks, including ensuring the functioning and expanding the number of places in shelters for surviving women . Informal and virtual support social networks need to be encouraged, as they are means that help women feel connected and supported and also serve as a warning to aggressors that women are not completely isolated. The State and society must be mobilized to guarantee Brazilian women the right to live without violence, although they are excluded from decision-making processes because women are the majority of the Brazilian population and make up the majority of the health workforce [4].

Conclusion

According to the present study, the increase in violence against women is associated with concerns about safety, health and money. The social isolation imposed by the national, health and epidemiological authorities, had an even greater impact on the lives of women victims of violence, who in turn, were forced to be "trapped" in their homes along with their aggressors, often prevented from keeping a social contact, and with difficulties to make complaints, ask for help or even because of the fear of leaving home and contracting the disease. There was also an impact on economic activities, which increased tensions within the home, generating more stress, fear and uncertainty, making cases of violence against women even more frequent, making it necessary to reflect on the ways used to guarantee protection and safety in these times of calamity.

It points out the need for further studies in Brazil, in order to identify new strategies for approaching Public Health, with the effective participation of the multidisciplinary health team, in the face of cases of violence against women, in order to reduce the incidence of new cases and provide appropriate treatment for victims.

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Correspondent Author
Ildenir Nascimento Sousa
58 Germano Augusto St. ZIP: 03277-110, Vila Ema.
Sao Paulo, Sao Paulo, Brazil.
ildenir.sousa@outlook.com

Health care practices of adolescent men in a peripheral community: collective subject discourse

Práticas de cuidado de saúde de homens adolescentes em comunidade periférica: discurso do sujeito coletivo

Prácticas asistenciales de los hombres adolescentes en una comunidad periférica: discurso del sujeto colectivo

Tatiane Bastos Pereira[1], Rosa Maria de Almeida[2], Anderson Reis de Sousa[3], Alcione Assunção Correia Lima[4], Ana Margarete Cordeiro da Silva Maia[5], Michelle Teixeira Oliveira[6], Josielson Costa da Silva[7],Cléa Conceição Leal Borges[8]

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1. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-8171-6734

2. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-4317-6749

3. Universidade Federal da Bahia. Nursing School. Salvador, Bahia, Brazil. https://orcid.org/0000-0001-8534-1960

4. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-3815-3083

5. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-3901-8721

6. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-3333-9556

7. Universidade Federal da Bahia, Nursing School. Salvador, Bahia, Brazil. https://orcid.org/0000-0002-5198-9491

8. Universidade Federal da Bahia, Nursing School. Salvador, Bahia, Brazil. https://orcid.org/0000-0002-9523-6272

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RESUMO

Objetivo: apreender as práticas de cuidado de saúde exercitadas por homens adolescentes, que convivem em comunidades periféricas na zona urbana. **Método:** Estudo qualitativo realizado com homens adolescentes com idade entre 18 e 21 anos, que frequentavam uma escola pública no município de Feira de Santana, Bahia, Brasil. Realizou-se entrevista individual submetidas à análise metodológica pelo Discurso do Sujeito Coletivo e interpretadas pelo referencial de praxeologia do cuidado. **Resultados:** o cuidado de saúde masculino teve centralidade na compreensão do cuidado como dimensão da vida humana, das relações cotidianas, da preocupação com os bens materiais e da família, em que a saúde ocupa lugar de importância. As práticas de cuidado de saúde estiveram concentradas no corpo com o controle e manutenção da higiene, imagem corporal e aparência física, na alimentação balanceada, melhoria da condição imunológica, na hidratação e na prática de atividade física. Foram consideradas também a adoção de comportamentos de proteção dos fatores ambientais e voltados ao controle do consumo de álcool, e por fim, as relações de trabalho, a busca por atenção médica nos serviços de saúde, a realização de exames diagnósticos e a prevenção de doenças a partir da imunização. Os homens se valerem de recursos preventivos e aspiraram contribuições positivas no desempenho das práticas de cuidado centrado na saúde. **Conclusão:** O exercício das práticas de cuidado em saúde proporcionou a obtenção e manutenção da saúde, bem como influências positivas na qualidade de vida dos garotos, prevenindo possíveis complicações, evitando o adoecimento e promovendo um envelhecimento saudável.

Descritores: Saúde do Homem; Saúde do Adolescente; Cuidado em Saúde; Masculinidades.

ABSTRACT

Objective: to apprehend the health care practices exercised by male adolescents, who live in peripheral communities in the urban area. **Method:** Qualitative study conducted with adolescent men aged between 18 and 21 years, who attended a public school in the municipality of Feira de Santana, Bahia, Brazil. Individual interviews were carried out, submitted to methodological analysis by the Collective Subject Discourse and interpreted by the praxeology reference of care. **Results:** male health care was central to the understanding of care as a dimension of human life, daily relationships, concern for material goods and the family, in which health occupies an important place. Health care practices were concentrated on the body with the control and maintenance of hygiene, body image and physical appearance, balanced nutrition, improved immune status, hydration and physical activity. The adoption of behaviors to protect environmental factors and aimed at controlling alcohol consumption was also considered, and finally, labor relations, the search for medical attention in health services, the performance of diagnostic tests and the prevention of diseases from immunization. Men use preventive resources and aspire to positive contributions in the performance of health-centered care practices. **Conclusion**: The exercise of health care practices provided the achievement and maintenance of health, as well as positive influences on the boys' quality of life, preventing possible complications, preventing illness and promoting healthy aging.

Descriptors: Men's Health; Adolescent Health; Health Care; Masculinities.

RESUMEN

Objetivo: aprehender las prácticas de atención a la salud que ejercen los adolescentes varones, que viven en comunidades periféricas del área urbana. **Método:** Estudio cualitativo realizado con hombres adolescentes de entre 18 y 21 años, que asistían a una escuela pública en el municipio de Feira de Santana, Bahía, Brasil. Se realizaron entrevistas individuales, sometidas a análisis metodológico por el Discurso del Sujeto Colectivo e interpretadas por la praxeología referente del cuidado. **Resultados:** la atención de la salud masculina fue fundamental para la comprensión del cuidado como una dimensión de la vida humana, las relaciones cotidianas, la preocupación por los bienes materiales y la familia, en la que la salud ocupa un lugar importante. Las prácticas de cuidado de la salud se concentraron en el cuerpo con el control y mantenimiento de la higiene, imagen corporal y apariencia física, nutrición balanceada, mejora del estado inmunológico, hidratación y actividad física. También se consideró la adopción de conductas de protección de factores ambientales y orientadas a controlar el consumo de alcohol, y finalmente, las relaciones laborales, la búsqueda de atención médica en los servicios de salud, la realización de pruebas diagnósticas y la prevención de enfermedades. de la inmunización. Los hombres utilizan recursos preventivos y aspiran a contribuciones positivas en el desempeño de prácticas de atención centradas en la salud. **Conclusión:** El ejercicio de las prácticas asistenciales brindó el logro y mantenimiento de la salud, así como influencias positivas en la calidad de vida de los niños, previniendo posibles complicaciones, previniendo enfermedades y promoviendo un envejecimiento saludable.

Descriptores: Salud de los hombres; Salud de los adolescentes; Cuidado de la salud; Masculinidades.

ORIGINAL

Introduction

Adolescence is understood as a stage in human life, characterized by profound changes. Such changes interfere in the development of the individual, stimulating transformations in the physiological, anatomical, psychological and social structures, leading adolescents to experience situations or behaviors that make them more prone to health risks. [1]

Among the transformations characteristic of the adolescence period, the transformations resulting from body development, the constitution of the adolescent's identity, as well as changes in the forms of expression are evident. In this phase, many questions arise about life, about the choices and the way of living.[2]

The World Health Organization (WHO) conceptualizes adolescence as an essentially biological process marked by cognitive and personality development. Adolescents comprise an age range of 12 to 19 years, however an early phase is reported between 10 to 14 years. [3]

The Ministry of Health defines adolescence as a complex stage characterized by biopsychosocial development and intense physical growth. Such swift changes cause anxieties, fears, doubts, conflicts and a need for self-assertion that often motivates impulsive behavior, challenging the authority of the parents, as well as rebellion and arrogance. [4]

Transformations resulting from adolescence are inherent to the historical, political and economic context in which adolescents are immersed. Regarding the psychological aspect, studies maintain that there are several transformations, mainly those associated with mood instability.[5]

Seen as a sociocultural being, the adolescent requires a different look that understands him as a subject with needs related to the economic and social context in which he lives. This being in the process of adolescence is exposed to risk factors arising from the social context in which he is inserted. The idea of risk in adolescence takes on a unique dimension as it relates to exposure to situations of violence, drug use and anticipation of sexual experiences.[6]

In general, adults perceive adolescents as individuals who have no autonomy regarding their rights in the health field and establish ambiguous values in relation to adolescents, allowing them to be responsible for their actions. However, adults are not able to recognize the legitimacy of adolescents' rights, especially when related to health and care.[7]

Failure by society to recognize adolescents' rights can lead to little demand for health services by these young people. Such fact may be related to the little offer of shares aimed at this public.[8] Thus, thinking about the health of adolescents involves a reframing of health practices in interface with education, aimed at this segment of the population, since public policies aimed at the health and

education sectors are inefficient, not reaching equal to the population mass.

Therefore, in view of the above, this investigation emerged from the need to highlight how adolescent men deal with their health, as well as the care practices developed. What are the health care practices of adolescent men who live in peripheral communities? This article aims to understand the health care practices exercised by male adolescents, who live in peripheral communities in the urban area.

Method

Qualitative study conducted with adolescent men, who attended a public school in the state network located in a peripheral area, considered urban, in the municipality of Feira de Santana, Bahia, Brazil.

The study included 18 adolescents, high school students, male, heterosexual, aged between 18 and 21 years old, mostly single, most without children, predominant black race / color, predominant Catholic religion.

For data collection, we used the application of a semi-structured script, containing open and closed questions about sociodemographic and health characteristics, and the conduct of individual interviews. For the operationalization of the collection, the collaborators were invited to participate in the study, as well as in the interview, which took place in a private room, made available by the school, when the Informed Consent Form (ICF) was presented and explained after acceptance, he it was signed in two copies and the interview started.

For a reliable record of the data collected, the interview was recorded on a single professional recorder. This recording made it possible to obtain the full material provided by the employee, which was later transcribed and organized for analysis.

For the purposes of analytical treatment of the material, the method of organization and presentation of the data was adopted, which strictly followed the Discourse of the Collective Subject. This method constitutes a new approach in the qualitative field of research, and makes it possible to rescue collective discourses, as research procedures. They can be carried out as individual interviews that rescue thinking and through behavior, emerge a collective discourse, presented by the presence of the social factor in a single discourse.[9]

Methodologically, the Collective Subject Discourse allowed to retrieve and present the social representations obtained in empirical research. In this context, individual opinions expressed that were similar were expressed, being grouped into general semantic categories, often performed when dealing with open questions or questions. It is important to highlight that the DSC methodological differential is printed when in each category the contents of opinions

of a similar sense, present in different testimonies, are associated. This allows the construction of such contents in a synthesis statement, written in the first person singular, in order to deal with a group speaking in the person of an individual.[9]

To elaborate the DSC it was necessary to build two methodological figures: Key Expressions and Central Ideas. The first ones will constitute literal transcriptions of the discourse that will reveal the essence of the statements, then the Central Ideas that describe, through linguistic expression, in a more reliable way, the meaning of each homogeneous set of Key Expressions.[10] The interpretations were anchored in the theoretical and conceptual framework of praxeology of care from the perspective of Anne Marie Mol.[11]

In compliance with ethical issues in research involving human beings, this study contemplated the precepts of Bioethics, as well as the proposed determinations of Resolution 466 of 2012 of the National Health Council, being forwarded to the Research Ethics Committee of Faculdade Nobre, and approved under the opinion number: 1,673,863.

Results

From the analysis of the interviews of adolescent men, about the care practices understood and exercised by them, it was possible to build collective discourses about this relationship within a peripheral community in the urban region of the city. The speeches constructed are arranged in two thematic categories.

Central Idea 1: Health care and the intersections with adolescence and masculinities

The discourse of adolescent men, living in a peripheral community in a city in the Northeast of Brazil, extracted from the interviews, reveals the male understanding of care, health and the development and expression of care / health care practices, which will be presented to follow:

Central Idea 1A: Understanding care

The understanding of care was apprehended in the collective discourse of men, which showed a conceptualization focused on the dimension of human life and its daily nuances, with emphasis on the maintenance of life, concern with material goods and with the family. It is apprehended from birth based on maternal references and perpetuates itself throughout life, based on paternal references, and finally, it includes care with the personal life and mental health trajectory:

[...] care is everything in life, it is motivating, it is worrying about health and everything I do daily with my body in general, for example, food, oral health, physical exercises, hygiene , as well as personal life and mind. Care is something I have learned

since my birth and I take it with me for life. With my mother I learned the initial care and with my father the care for adult life. It is doing good to others and the family. Taking care of anything goes, having zeal, regularity, planning, is taking care of me and others too. It is to prevent and not be present in wrong situations. (DSC of men).

Central Idea 1B: Understanding health

The adolescents' discourse explained the understanding of adolescent men about health based on relationships directed to well-being, the adoption of healthy behaviors, the maintenance of activities of daily living, the search for professional health care services, medicalization , the absence of physical symptoms and aesthetics. The male discourse also revealed that there is an evaluation of importance for health and the association with the world of work and with care so that health is achieved or the opposite:

[...] health is the person living well, having a good diet, healthy living, maintaining hygiene, not smoking, not using drugs or drinking. It means having a good hour of sleep, working, because if you are not healthy you don't work, after all I never saw anyone sick working. It is also everything I do with my body to be taking care of my health, like taking medicine, always going to the doctor and not feeling anything strange. It is very clean, smelling and tidy. Without health, I am nothing, I am nobody, so health must come first, since everything depends on her presence and allows me to be well mentally and physically. (DSC of men).

Central Idea 2: Health care practices in practice

The health care practices exercised by male adolescents are structured in three central ideas, which collectively represent male experiences in the context in which they are located in the peripheral territory of which they are part.

Central Idea 2A: Healthcare practices performed

Health care practices were concentrated on the body, with the purpose of controlling and maintaining hygiene, body image and physical appearance, with a balanced diet aimed at improving the immune condition, hydration and physical activity. In another dimension, men sought to adopt behaviors that protect environmental factors and aimed at controlling alcohol consumption. They took care of work relations and carried out the search for medical attention in health services, carrying out diagnostic tests and preventing diseases from immunization:

[...] I take care of my body, like brushing and hygiene of the mouth and teeth, hair, beard and nails. I maintain good hygiene, I take a shower that is ideal to keep clean so that you are healthy. I am well dressed, I take care of my clothes and leave them ready the day before to avoid delaying my appointments. My diet is always balanced and very strong to improve immunity and at the right time and I drink a lot of water. I take care of my physical health. I do sports, run and play football. I avoid taking rain and serene and I don't drink too much. I take care of my work, I go to the health unit, I go to the doctor, I do tests when requested, I prevent illnesses and I get vaccinations. (DSC of men).

Central Idea 2B: Resources used to exercise health care

The adolescents highlighted that they use several resources to exercise health care, emphasizing that prevention must be present in all health actions:

[...] I take care of myself, but first I go to the doctors. I go to health units, whether at the clinic, polyclinics or hospitals. I take prescription drugs and do not buy at the pharmacy without guidance. I ask questions with Community Health Agents, when I feel bad, and I have to leave the trouble of wanting to take care of myself at home. My mom encourages me and I seek guidance at home with my parents and at school as well. I try to go to the gym and do some physical activity, even if it is a stretch, because if I stand still, hypertension and diabetes appear. I try to have a good education, peace and avoid stress. I also try to avoid exceeding speed and pay more attention to activities at home. (DSC of men).

Central Idea 2C: Contributions of perceived health care practices

The speech of adolescent men demonstrated the presence of contributions from health care practices, with emphasis on the promotion and maintenance of health and quality of life:

[...] health care is very important. There has to be care, even if it is minimal. Take care of your neighbor and especially yourself. Take care of my children, my family, my friends and my animals. This is important to me, because when I take care of others, I am taking care of my health. And when I take care of myself, I avoid getting sick, and admitted to the hospital. When a person is unhealthy, they abandon everything, they do not even have the strength to feed themselves, and by taking care of yourself you can avoid being bedridden, having a disease and dying, and you can have a long life. It is important to take care to live better, be zealous, because with health you go beyond life and live longer, and when I get older I will continue to be healthy and living well. (DSC of men).

Discussion

The findings of this study are able to highlight the understanding of adolescent men about care and health and reveal the practices of health care exercised, as well as the individual resources used to exercise self-care and the perceived contributions to the exercised care care.

The limitations of this study are concentrated on the sample size and the use of a data analysis technique, the conduct of the interview in the school environment, under the risk of the participants having their senses evaluated and consequently forging the speeches in an attempt to avoid the censorship.

The light of the speeches showed that the adolescents participating in the study understand care as an expanded concept, covering the social and mental scope, not being restricted to physical health.

The adolescents' report reveals a positive attitude towards self-care, as they stressed the need for healthy lifestyle habits, regarding food, physical activity and social relationships. Among the healthy habits mentioned, young people highlighted the importance of having a healthy diet, practicing physical exercises and taking care of personal hygiene.

According to what has been reported, the concept of care involves a set of measures to be taken daily and individually in search of physical, emotional, cultural and socioeconomic well-being, in order to maintain one's own health, prevent and deal with diseases . The understanding about care can be defined as something conceived in the mind, both empirically and abstractly. Thus, in a certain way in this discourse we obtained the collective concept of self-care.[12]

In the adolescents' discourse, the concern with self-care and the other is evidenced. This fact shows that the coexistence between people is characteristic of the human condition to live in society. In the development of human relationships, individuals are willing to take care of the other, in a perspective of seeking well-being, expressing a way of relating to the world. The young people's speeches showed the care offered to their family and friends, showing the increasing participation of men in care actions.[13]

The collective discourse of adolescents draws attention not only to the introduction of healthy lifestyle habits, but also emphasizes the need for preventive attitudes, such as going to the doctor and doing periodic examinations, pointing out the doctor as a health professional to be sought.

Some studies show that men are more prone to health-damaging behaviors, such as alcohol, tobacco and other drugs, violence, dangerous driving and unsafe sex.[14-16] In this context, it is possible to identify that the young participants in the study signaled in their speeches the concern with the conducts to be taken to guarantee protection, when they talk about care in life and the need not to get involved in wrong situations. Adolescents also highlighted body care, establishing corporeality as a determining factor for the promotion of self-care.

Care can be understood here as "a way of doing things in everyday life, which is characterized by attention, responsibility, zeal and care for people and things in different places and times".[17] In this perspective, care in the conception of these adolescent men takes on a broad concept, which is associated with internal care, such as body care, hygiene, self-image, food, which concerns basic human needs, but also with the external environment , expressed by care for work, neighbor and family, as well as protection. Thus, care is seen as an intrinsic act to life, as a search for maintenance of life.

When reporting on the understanding of health, the participants reported several situations about care, while revealing their attitudes related to care, which make them responsible for their own health. Health was assimilated by young people based on the assumption of physical and mental well-being. This concept of health as well-being was expressed by the perspective of "living well" in a state of satisfaction, which is linked to the subject's intimate experience, with his beliefs and values.[18]

In the young people's speeches, health was described as the result of care, which occurs through the adoption of healthy habits and other preventive attitudes. Still regarding prevention, the participants highlighted healthy behaviors such as "not smoking", "not using drugs" and "not even drinking", signaling that these preventive attitudes give visibility to care as a means of obtaining health. In this sense, it is understood that the responsibility for health care occurs throughout life, as they mentioned that "without health we are nothing, we are nobody, so it must be first, since everything depends on health".

Adolescents also reported health as access to traditional means of care, such as going to the health center. In this sense, the availability of health services can be seen as a guarantee of the rights of adolescents, constituting a duty for the State to enable universal access within the rules of the Unified Health System.[19]

Adolescence constitutes a crucial period in health care, since all the learning related to the ways of being and acting, as well as the behaviors adopted, for the maintenance of life, develops in this phase, providing the promotion of a style healthy lifestyle incorporated throughout the lives of these future adults.

With regard to the body, it is noted that the understanding of young people is directed to the aesthetic aspects, demonstrating the importance of care with appearance. It is perceived that the desire to look good is no longer seen as a sign of vanity, but as a need.[20]

Young people also showed in their speeches, the work factor as a means to obtain health. Thus, health enables the guarantee of staying active, meeting some basic needs. Work appears in adolescents' speeches as essential for men, relating them as a healthy being. For men, work is considered a masculine characteristic related to maintaining the status of provider, dominator and head of the family, characteristics that configure the way of being a man. For men, the condition of being sick means interrupting their professional life. Work confers a dignifying moral virtue, in addition to providing social recognition for them.[21-23]

The practices of these adolescents raised significant questions regarding health care. Among the young people, among the cares, body hygiene, the adoption of healthy eating habits and physical activity as strategies for health care. These behaviors lead to a reflection on the responsibility of these subjects for their own health.[24]

During the speeches, it was possible to learn that young people relate health care practices to medical assistance, in the prevention or cure of diseases. According to the statements of the adolescents, it is essential to seek out health professionals and services, regardless of the level of care and / or complexity. In their reports, there is a concern about not using drugs indiscriminately, that is, they try to take drugs prescribed by the doctor and do not buy at the pharmacy without guidance. This reflection made by adolescents shows the need to break with self-medicalization practices.[25]

The statements of adolescent men reveal that the family's participation in this process is essential in the exercise of health care, as the family acts as a promoter of guidance. In this way, the family constitutes a health system, and as such, a dynamic unit that has a care process that is unique and unique, where it supervises and acts with the health status of its members, makes decisions, monitors and evaluates the health and disease of its components.[26]

Another issue, which calls our attention, is related to the subjects' speeches when talking about the school space as a means of disseminating and promoting health education. On this issue, it appears that the school plays an expanded role in the perception of

these adolescents, constituting itself as a privileged space for promoting health actions; therefore, the school environment must be perceived not only as a space of knowledge, but also as one of the places to talk about education and health.[27]

We can see, in the speech of the adolescents, that another option of resources to take care of health is the search for therapeutic spaces, such as the gym and the gym. Adolescents indicate that physical activities as a means of reducing health problems.

In this sense, the speeches of the participants indicate the relevance of exercising care practices that contribute to the prolongation of life, to healthy aging, to the guarantee of well-being, maintenance of daily activities, reduction of complications, disability, injuries and death, expanding to the dimension of care beyond life. Thus, care is seen as an attribute to be performed in the collective to achieve satisfaction and personal well-being and as a possibility to avoid illness and associated complications.

Conclusion

In this study, the understanding of care and health revealed itself in a very significant way in the lives and daily lives of adolescents. Through the apprehension of the young people's speeches it was possible to understand how they think and experience health care in their lives.

The practices exercised by adolescent men for health care were permeated by actions intrinsic to human behavior, in the context of everyday life, permeated by relationships directed towards self-image, maintenance of vital energy, associated with body strength, and guarantee of the proper functioning of the physical health and restrictions and distances from factors that may compromise balance, in addition to being strongly associated with the investigation of health status, through the search for services and health professionals.

For the execution of care practices, resources were used by adolescent men, as a way of leading them to exercise health care. At that time, attitudes were carried out that were associated with the investigation of diseases, the adoption of preventive behaviors, the development of good life habits, the search for health professionals and services, family support, and other health promotion spaces, such as health clubs. weight training and gymnastics

We evidenced that the exercise of health care practices provided the acquisition and maintenance of health and promoted contributory influences on the quality of life of these boys, avoiding health complications, such as illness and enabling increased well-being and healthy aging. and with good prospects, with positive reflexes for themselves, for others, family and even animals.

In this context, the role attributed to school as a possibility to promote the improvement of adolescent care is emphasized. The school is a space for the construction of knowledge and, when linked to health, it can assist in the promotion, prevention and consolidation of healthy habits.

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Correspondent Author
Anderson Reis de Sousa
Nursing School of Universidade Federal da Bahia. 241 Basílio da Gama St. ZIP: 40110-907. Canela. Salvador, Bahia, Brazil.
son.reis@hotmail.com

Hemophyliacs profile from a patients' association in Brasília - DF, Brazil

Perfil dos hemofílicos de uma associação de pacientes de Brasília – DF, Brasil

Perfil hemofílico de una asociación de pacientes en Brasília - DF, Brasil
Perfil de pacientes hemofílicos em Brasília, Brasil

Daniel Benevides Ferreira[1], Larissa Castro Souza[2], Millena da Luz Soares[3], Denise Rodrigues Holsbach Sartorelo[4], Leonardo Costa Pereira[5], Kerolyn Ramo Garcia[6]

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1. Centro Universitário Euro Americano, Physiotherapy Department. Brasilia, Federal District, Brazil. https://orcid.org/0000-0001-8206-5382

2. Centro Universitário Euro Americano, Physiotherapy Department. Brasilia, Federal District, Brazil.. https://orcid.org/0000-0002-1848-6673

3. Centro Universitário Euro Americano, Physiotherapy Department. Brasilia, Federal District, Brazil. https://orcid.org/0000-0002-6911-1329

4. Centro Universitário Euro Americano, Physiotherapy Department. Brasilia, Federal District, Brazil. https://orcid.org/0000-0003-2546-2378

5. Centro Universitário Euro Americano, Department of Physical Education. Brasilia, Federal District, Brazil. https://orcid.org/0000-003-33195679

6. Universidade de Brasília. Brasilia, Federal District, Brazil. https://orcid.org/0000-0003-2464-6255

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RESUMO

Objetivo: Caracterizar o perfil de hemofílicos vinculados a uma associação de pacientes em Brasília - DF, Brasil. **Método:** Pesquisa transversal com amostragem por conveniência, realizada com 49 hemofílicos adultos, do sexo masculino, vinculados à Associação dos Voluntários, Pesquisadores e Portadores de Coagulopatias (AJUDE-C). O estudo foi aprovado pelo Comitê de Ética em Pesquisas com Seres Humanos. Através de um formulário foi coletado informações sociodemográficas e clínicas. A normalidade dos dados foi avaliada através do teste de Shapiro-Wilk. **Resultados:** Avaliaram-se 49 hemofílicos adultos com média de idade 37 ±8,4 anos, estando 43% na faixa etária de 30-39 anos. Predominou a raça/cor parda (49%), estado civil solteiro (61%), em atividade laboral (57%) e 53% residiam a menos de 30 Km do local de tratamento. Clinicamente, predominou a hemofilia A (79,6%), doença grave (77,6%) e o uso de profilaxia secundária (75,5%). **Conclusão:** Maior parte da amostra exerce atividade laboral. Esse fato pode ser explicado pela administração da profilaxia secundária e proximidade entre a residência/local de tratamento, mantendo os fatores de coagulação em níveis seguros, e dando capacidade de rápido atendimento em casos emergenciais, gerando maior autonomia nessa população.

Descritores: Hemofilia; Distúrbio de coagulação; Profilaxia.

ABSTRACT

Objective: To characterize the hemophiliacs profile linked to a patients association in Brasília - DF, Brazil. **Method:** Cross-cut survey with convenience sampling, carried out with 49 male hemophiliacs adults, linked to the Association of Volunteers, Researchers and People with Coagulopathies (AJUDE-C). The study was approved by the Ethics Committee in Research with Human Beings.The Sociodemographic and clinical information was collected through a form. The normality of the data was evaluated using the Shapiro-Wilk test. **Results:** Were evaluated 49 adult male hemophiliacs with an avarage 37 ± 8.4 years. 43% were in the 30-39 age range. The brown race predominated (49%), single marital status (61%), in work activity (57%) and 53% lived less than 30 km from the treatment place. Clinical prevalence hemophilia A (79.6%), severe disease (77.6%) and the use of secondary prophylaxis (75.5%). **Conclusion:** Most of the sample is in work activity. This fact can be explained by the administration of secondary prophylaxis and proximity between their residence / treatment place. This keeps the clotting factors at safe levels, and provids quick assistance to emergencies cases, generating greater autonomy in this population.

Descriptors: Hemophilia; Coagulation disorder; Prophylaxis.

RESUMEN

Objetivo: Caracterizar el perfil de hemofílicos vinculados a una asociación de pacientes en Brasilia - DF, Brasil. **Método:** Encuesta transversal con muestra de conveniencia, realizada con 49 hemofílicos adultos, vinculados a la Asociación de Voluntarios, Investigadores y Personas con Coagulopatías (AJUDE-C). El estudio fue aprobado por el Comité de Ética y Investigación en Seres Humanos. La información sociodemográfica y clínica se recogió por medio de un formulario. La normalidad de los datos se evaluó mediante la prueba de Shapiro-Wilk. **Resultados:** se evaluaron 49 hemofílicos adultos con una edad media de 37 ± 8,4 años, 43% estaban en el grupo de edad 30 a 39 años. Predominó la raza marrón (49%), estado civil soltero (61%), en la actividad laboral (57%) y el 53% vivía a menos de 30 km del sitio de tratamiento. Clínicamente predominaron: hemofilia A (79,6%), enfermedad grave (77,6%) y el uso de profilaxis secundaria (75,5%). **Conclusión:** La mayor parte de la muestra tiene actividad laboral. Este hecho puede explicarse por la administración de profilaxis secundaria y la proximidad entre el lugar de residencia / tratamiento, manteniendo los factores de coagulación en niveles seguros y promoviendo la capacidad de atender rápidamente los casos de emergencia, generando una mayor autonomía en esta población.

Descriptores: Hemofilia; Trastorno de la coagulación; Profilaxis.

ORIGINAL

Introduction

Hemophilia is an inherited hemorrhagic disease linked to the X chromosome, characterized by the deficiency or abnormality of factor VIII (hemophilia A) or factor IX (hemophilia B) coagulant activity. Hemophilia is transmitted almost exclusively to male individuals by mothers carrying the mutation (about 70% of cases).[1]

The incidence of hemophilia A is approximately 1: 10,000 to 1: 30,000 births, while hemophilia B is 1: 30,000 to 1: 50,000. Both have the same clinical presentation, making it necessary to measure the activity of specific coagulation factors, factor VIII and factor IX, to differentiate between them.[2]

The Society for Thrombosis and Hemostasis classifies the severity of hemophilia based on endogenous Factor VIII or IX activity as severe (<1 IU / dL), moderate (1-5 IU / dL) or mild (> 5-40 IU / dL), all three with a specific phenotype. Patients with severe hemophilia (approximately 40% of hemophiliacs) have spontaneous or soft tissue and joint bleeding, causing arthropathy, impaired quality of life and increased risks of intracranial hemorrhage or early death. Patients with moderate hemophilia, in contrast, are less affected, but suffer, for example, from prolonged bleeding or bruising. Patients with mild hemophilia only experience bleeding problems during and after trauma or surgery.[3]

Prophylactic replacement of the clotting factor is the most effective preventive measure against joint bleeding. It has been well demonstrated that the later the first bleeding, the less severe the arthropathies are, supporting the need for preventive treatment to begin in early childhood. The coagulation factor can be obtained from human plasma or manufactured synthetically by genetic engineering technologies - the so-called recombinant factor. Studies show that the success rate of the recombinant factor is 90% higher than the plasma.[4]

The development of neutralizing antibodies (inhibitors) against factor VIII or factor IX is the most serious complication of the treatment of hemophilia, occurring in 20% - 30% of patients with severe hemophilia A, 5% -10% in patients with hemophilia classified as mild to moderate and less than 5% in patients with severe hemophilia B. These antibodies make replacement therapy ineffective, with a consequent increased risk of severe bleeding and early onset of progressive arthropathy, as well as higher treatment-related costs.[5]

The Midwest has the lowest number of patients in the country, totaling 982 hemophiliacs of types A and B, however the Federal District shows an increase in the expected prevalence for both hemophiliacs (1.9 / 10,000 men) 2. Thus, the objective was to characterize the profile of hemophiliacs linked to a patient association in Brasília - DF, Brazil.

Method

This is a transversal and analytical research, with a quantitative approach. Convenience sampling, performed with patients with a clinical diagnosis of hemophilia linked to the Association of Volunteers, Researchers and People with Coagulopathies (AJUDE-C), located in Brasília - DF.

Patients with a clinical diagnosis of hemophilia (ICD 10 - D. 66 and D. 67), male, over 18 years of age were included. Associated with other coagulopathies and / or with some cognitive or physical impairment that prevented them from responding to the research protocol were not included.

Data collection was carried out at the AJUDEC association, in Brasília - DF, in the months of November and December 2019. The research team attended meetings and events at the said association on two previously informed dates. On these occasions, an individual invitation was made to patients, briefly explaining the research. Then, the Free and Informed Consent Form (ICF) was submitted for appreciation and signature. This term was signed in two copies, one for the patient's possession and the other for the research team.

In case of consent by the patient, the research protocol was subsequently applied, individually and privately.

The research protocol consisted of an instrument, developed by the research team, which aimed to collect sociodemographic information (age, race/color, marital status, employment status, distance between residence / place of treatment) and clinics (type of hemophilia, severity type of treatment).

For the organization and analysis of the data, a database was created in the Excel program. The results of this study were presented in the form of descriptive statistics or in the form of tables and graphs. The statistical analysis was performed using the SPSS statistical program, version 22.0, considering a significance level of 5%. The Shapiro-Wilk test assessed the normality of the data.

In compliance with CNS Resolution 466/12, all instruments completed during data collection will be kept in a physical file for a period of 5 years after the end of the study, under the responsibility of the responsible researcher. The study was approved by the Ethics Committee on Research with Human Beings, under opinion 1,300,316.

Results

49 adult hemophiliacs with a mean age of 37 ± 8.46 years were evaluated, with 43% in the 30-39 year age group. The race / brown color predominated (49%), single marital status (61%), with work activity (57%) and 53% lived less than 30 km from the treatment site. Clinically, there was a predominance of hemophilia A (79.6%), with severe clinical classification (77.5%) and use of secondary prophylaxis (75.5%). Sociodemographic characterization was performed as shown in Table 1.

Table 1- Sociodemographic information, of hemophiliacs evaluated in this study.

Age Range (years)	**% (n=49)**
20-29	18
30-39	43
40-49	31
50-59	8
Mean Age	37±8,46
Marital Status	**% (n=49)**
Singles	61
Married	39

Color / Ethnicity	% (n=49)
White	39
Brown	49
Black	12
Education Level	**% (n=49)**
Incomplete 1st Degree	6,12
1st Degree Complete	2
2nd Grade Incomplete	4
2nd Degree Complete	24,5
Incomplete 3rd Degree	20,4
3rd Degree Complete	42,9
Health Insurance	**% (n=49)**
Yes	47
No	53
Government Benefit / Financial Aid	**% (n=49)**
Yes	29
No	71
Distância da Residência ao Local de Tratamento	**% (n=49)**
Less than 30 Km	53
More than 30 Km	47

Table 2 shows the data referring to the characterization of hemophiliacs in relation to their work characteristics, developed physical activities and BMI.

Table 2- Profile of Work Activity, Physical Activity and Body Mass Index of Hemophiliacs.

Labor Activity	**% (n=49)**
Yes	57
No	41
Uninformed	2
Physical activity	**% (n=49)**
Yes	63
No	37
Body mass index	**% (n=49)**
Eutrophic	42,86
Overweight	42,86
Obesity	12,24
Low Body Mass	2

Table 3 presents the characteristics of the treatment and their therapeutic options.

Table 3-Characterization of hemophilia and treatments.

Virus Infection	**% (n=49)**
Hepatitis C	46,94
Not	44,9
Hepatitis B and C	4,08
Hepatitis C and HIV	4,08
Treatment Type	**% (n=49)**
P1	0
P2	75,5
P3	12,25
Demand	12,25
Type HF	**% (n=49)**
A	79,6
B	20,4
Gravity	**% (n=49)**
Serious	77,5
Moderate	18,4
Light	4,1
Inhibitor	**% (n=49)**
No	95,9
Yes	4,1

Legend: P1 - Primary prophylaxis; P2 - Secondary prophylaxis; P3 - Tertiary prophylaxis; Type HF - Type of hemophilia.

Discussion

The average age of the individuals was 37 ± 8.4 years, with the age group of 30 to 39 years having a higher prevalence, with 43% of the sample. Similar results were found in research developed by Booth et al. (2018)[6] using data from 1225 adult hemophiliac patients (≥18 years old), from five European countries: France, Germany, Italy, Spain and the United Kingdom, where the average age presented was 35.5 years. However, the Profile of Hereditary Coagulopathies (Brazil, 2018)[2], shows that there is a higher concentration of Brazilian hemophiliacs in the age group of 20 to 29 years, differing with the results found.

As for the marital status of the participants, there was a higher prevalence of singles (61%). Naous et al. (2019)[7] conducted a survey where 66.7% of individuals were also single. In the same study, 78.3% of individuals declare that they have no difficulty in talking about the disease to others, suggesting some transparency in their social life.

In the present study, 49% of individuals were brown, 39% white and 6% black. According to the 2010 demographic census of the Brazilian Institute of Geography and Statistics (IBGE), stratified by the age and estimated sex of the male population residing in the Federal District (1,161,048), 49.3% of individuals were brown, 42.2% were white and 8.5% black; a consistency with the ethnic distribution of Brasilia is observed. According to Kelley and Narváez (2006)[8], hemophilia affects predictably all ethnic groups and races, regardless of the

country.

As for the level of education, there was a predominance of individuals with complete higher education (42.9%). However, divergent results were presented by Moreno and Buitrago (2017)[9], where 68.3% of hemophiliacs had completed high school, taking into account that in this sample the age range was 18 to 82 years. Cutter et al. (2017)[10] suggest that the reasons for low education are school absenteeism, caused by bleeding or pain (69%), difficulties in attending school or participating in activities resulting from impaired mobility (44%), and absences related to hemophilia (32%).

The results of this study show that 53% of hemophiliacs did not have health insurance, and 71% did not receive any kind of benefit. A study carried out in Indiana (USA) with a sample of 704 hemophiliacs showed that 89.2% of the studied population had insurance during the study period.[11]

About 53% of hemophiliacs lived less than 30 km from the treatment site. These results are explained by Sousa et al. (2013)[12], noting that a smaller geographical distance between home and place of treatment can facilitate emergency care in case of bleeding.

Of the 49 individuals assessed, 63% were engaged in physical activity and 57% engaged in work activity, and 2% of the sample did not report in relation to work activity. Regarding physical activity Flaherty et al. (2017)[13] observed that hemophiliac patients who exercised regularly did not consider exercise dangerous, while those who did not exercise reliably, feared that the dangers of exercise might outweigh the benefits. Results indicate that, despite arthropathy and thanks to prophylactic treatment, adult patients with hemophilia are able to perform physical activities with a minimal risk of bleeding.[14]

Cutter et al. (2017)[10] showed similar results regarding work activity, where most individuals with hemophilia worked (81%). In this same study it was found that adults with hemophilia who had never worked were younger (<30 years, 73% vs 30-45 years, 20%), in addition, more than half (59%) of adults with hemophilia declare that the reason they were not working involves financial reasons related to hemophilia (for example, receiving disability benefits), and 55% reported to be due to hemophilia and its related complications (joint disease).

Regarding the body mass index (BMI), the sample was divided into eutrophic patients (42.86%), overweight (42.86%), obese (12.24%) and low body mass (2%) . Buckner et al. (2018)[15], with a sample of 381 adult hemophiliac men, observed that most individuals were overweight or obese (65%). In the present study, anthropometric measurements did not affect the number of bleeds.

In research developed by Targino Júnior et al. (2017)[16], no significant differences were found in any component of body composition (lean mass, fat mass, visceral fat) and in anthropometric indices (waist-to-hip ratio [WHR]), BMI and visceral fat of hemophiliacs.

Regarding the clinical characterization of the sample, the result of this study showed that hemophilia A was more prevalent than B, with 79.6% and 20.4% respectively. It is estimated that hemophilia A is more common than hemophilia B, and represents about 80% of cases.[2] Similar results were found in the study by Ferreira et al. (2018)[17], where the most frequent type was hemophilia type A with 82%, followed by 10% hemophilia B and 8% with von willebrand disease (DWW). Pérez-Moreno and Buitrago (2017)[9] found 79% of cases of

hemophilia A in a population of 196 participants.

The classification of the clinical severity of hemophilia is carried out according to the plasma level of factor VIII or factor IX and hemorrhagic manifestations.[1] In this study, it was observed that most cases were severe (77.5%), followed by 18.4% moderate and 4.1% mild. Similar results were found by Martinez-sanchez et al. (2017)[18], where there was a predominance of the severe type with 55.6%, moderate (22.2%) and mild (22.2%).

The main current complication in the treatment of hemophilia is the development of inhibitory antibodies against factor VIII or factor IX.[2] In the literature, the incidence of the development of inhibitors is reported in 25% to 30% of patients with severe Hemophilia A and up to 10% in those with severe Hemophilia B.[19] In the present study, of the 49 patients questioned, 79.6% are hemophiliacs with severe clinical classification, however 95.9% did not develop inhibitors, the results being below this statistic.

Among the patients, 55.1% had some type of viral infection, with 46.94% acquiring hepatitis C, 4.08% hepatitis B and C and the others, 4.08% Hepatitis C and HIV. In a study developed by Lianes et al. (2018)[20], with a sample of 34 hemophiliacs, they observed that 30 of these (88.2%) had antibodies against HCV by (EIA-3) UMELISA-HCV, while HCV-RNA infection was obtained in 23 patients (67.6%). Coinfection with the hepatitis B virus was found in 2 patients (5.8%) and the same percentage for the human immunodeficiency virus (HIV). Makris and Konkle (2017)[21] reported that co-infection with the hepatitis C virus makes the hemophiliac patient more likely to develop cancer or liver failure decades after infection, in addition, previous studies have shown that from 20 to 30% of infected patients, develop terminal liver disease. Current data reported in the European Hemophilia Safety Surveillance Program (EUHASS) up to 2015 further show that hepatocellular cancer is the most common cancer in patients with hemophilia, and liver disease is the most common cause of death in these individuals.

In this study, it was observed that 75.5% use secondary prophylaxis treatment, in which the main pillar is the replacement of the deficient coagulation factor.[2] Castaño et al. (2017)[22] also showed that almost all (96.6%) patients in their sample were being treated with prophylaxis, and also reported that the hemophiliacs who adhered to this treatment have a quality of life as high as the general population. Lianes et al. (2018)[20] emphasize that the concentrate of factors is considered the gold standard in this type of treatment. In addition, the same proved to be positive, where primary and secondary prophylaxis had advantages in the results of the following variables: pain, functionality, quality of life, recovery time measures, return to normal activities, orthopedic intervention, bleeding measures, and sustained productivity.

Conclusion

The sociodemographic and clinical characterization described in the present study shows that part of the patients was born in a period of great contagion due to infectious diseases through blood products, and more than half (55.1%) presented some type of viral infection, which increases morbidity and mortality in this population. The sample consisted mainly of adults who work and have completed higher education. This fact can be explained by the

administration of secondary prophylaxis, and proximity between the residence/place of treatment, keeping the clotting factors at safe levels, providing the capacity for rapid care in emergency cases and generating greater autonomy in this population.

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Correspondent Author
Denise Rodrigues Holsbach Sartorelo
Square 204, lot 5, Fênix Residential, Block B.
ZIP: 71939-540. Águas Claras. Brasilia , Federal District, Brazil.
denisesartorelo@hotmail.com

Epidemiological profile of urological disorders in cisgendered men in the municipality of Bahia, Brazil

Perfil epidemiológico de agravos urológicos em homens cisgêneros em município da Bahia, Brasil

Perfil epidemiológico de los trastornos urológicos en hombres cisgénero en el municipio de Bahía, Brasil

Carolina de Souza Ramos[1], Yully Ribeiro Pedra[2], Anderson Reis de Sousa[3], Sélton Diniz dos Santos[4], Daniella Carvalho Gomes de Cerqueira[5], Alcione Assunção Correia Lima[6], Ana Margarete Cordeiro da Silva Maia[7], Jamille Campos Oliveira[8], Maria Carolina Oliveira Reis[9]

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REVISA

1. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0001-9730-1368

2. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0001-8427-2887

3. Nursing School of Universidade Federal da Bahia. Salvador, Bahia, Brazil. https://orcid.org/0000-0001-8534-1960

4. Universidade Estadual de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-3992-4353

5. Faculdade de Tecnologia e Ciências. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-4807-4917

6. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-3815-3083

7. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0002-3901-8721

8. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/000000207467848

9. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-2366-7310

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RESUMO

Objetivo: caracterizar o perfil epidemiológico de agravos urológicos em homens cisgêneros em uma unidade de urologia, nefrologia e transplante na Bahia, Brasil. **Método:** Estudo descritivo, quantitativo, transversal, realizado a partir da base de dados oriundos de 160 prontuários de atendimento em um hospital público, filantrópico, especializado, localizado em um município da Bahia, Brasil no ano de 2016. Os dados foram analisados no software Statistic Package Science for Social (SPSS). **Resultados:** Dos 160 homens atendidos na unidade de referência, na faixa etária ≥ 60 anos, casados, raçacor parda, escolaridade não informada, zona urbana e aposentados. Dos agravos urológicos identificados, 12 tipos de agravos foram identificados sendo os mais frequentes: câncer de próstata e hiperplasia prostática. As características clínicas foram: os hábitos de vida tiveram quantitativo expressivo de informações não fornecidas. Entretanto, daqueles informados, destacaram: ser tabagista e etilista. As doenças de base não foram informadas. Daquelas apontadas, destacaram a Hipertensão. O modo de identificação da doença, a maioria não informou, mas destacou-se a apresentação de sintomas. Os exames realizados foram os laboratoriais e o PSA. Sobre os tratamentos, o medicamentoso e cirúrgico foram os mais frequentes. Quatro usuários foram a óbito. **Conclusão:** O perfil de atendimentos de homens com agravos urológicos no serviço de referência, predominou os idosos, da raça negra (pretos e pardos) e o câncer de próstata como principal agravo urológico.
Descritores: Doenças Urológicas; Neoplasias do Homem; Homens; Saúde do Homem.

ABSTRACT

Objective: to characterize the epidemiological profile of urological disorders in cisgendered men in a urology, nephrology and transplant unit in Bahia, Brazil. **Method:** Descriptive, quantitative, cross-sectional study, carried out from a database of 160 medical records in a public, philanthropic, specialized hospital, located in a municipality in Bahia, Brazil in 2016. The data were analyzed using the software Statistic Package Science for Social (SPSS). **Results:** Of the 160 men seen at the referral unit, aged ≥ 60 years, married, mixed race, uneducated schooling, urban area and retirees. Of the urological disorders identified, 12 types of disorders were identified, the most frequent being: prostate cancer and prostatic hyperplasia. The clinical characteristics were: life habits had a significant amount of information not provided. However, of those informed, they highlighted: being a smoker and alcoholic. The underlying diseases were not reported. Of those pointed out, they highlighted Hypertension. The mode of identification of the disease, most did not report, but the presentation of symptoms stood out. The tests performed were laboratory tests and PSA. Regarding treatments, medication and surgery were the most frequent. Four users died. **Conclusion:** The profile of visits by men with urological disorders at the reference service, predominated the elderly, blacks (blacks and browns) and prostate cancer as the main urological condition.
Descriptors: Urological Diseases; Neoplasms of Man; Men; Men's Health.

RESUMEN

Objetivo: Objetivo: caracterizar el perfil epidemiológico de los trastornos urológicos en hombres cisgénero en una unidad de urología, nefrología y trasplante de Bahía, Brasil. **Método:** Estudio descriptivo, cuantitativo, transversal, realizado a partir de una base de datos de 160 historias clínicas de un hospital público, filantrópico, especializado, ubicado en un municipio de Bahía, Brasil en 2016. Los datos fueron analizados mediante el software Ciencia del paquete estadístico para las redes sociales (SPSS). **Resultados:** De los 160 hombres atendidos en la unidad de derivación, de ≥ 60 años, casados, mestizos, sin educación, zona urbana y jubilados. De los trastornos urológicos identificados, se identificaron 12 tipos de trastornos, siendo los más frecuentes: cáncer de próstata e hiperplasia prostática. Las características clínicas fueron: los hábitos de vida tenían una cantidad significativa de información no aportada. Sin embargo, de los informados destacaron: ser fumador y alcohólico. No se informaron las enfermedades subyacentes. De los señalados, destacaron Hipertensión. El modo de identificación de la enfermedad, la mayoría no informó, pero se destacó la presentación de los síntomas. Las pruebas realizadas fueron pruebas de laboratorio y PSA. En cuanto a los tratamientos, la medicación y la cirugía fueron las más frecuentes. Murieron cuatro usuarios. **Conclusión:** En el perfil de visitas de hombres con alteraciones urológicas al servicio de referencia, predominó el anciano, la raza negra (negros y pardos) y el cáncer de próstata como principal afección urológica.
Descriptores: Enfermedades Urológicas; Neoplasias del hombre; Hombres; Salud de los hombres.

ORIGINAL

Introduction

The male health markers in Brazil presented by the Ministry of Health have been permeated by axes related to the access and reception of men in health services, paternity, sexual and reproductive health, prevalent diseases of the male population, prevention of accidents and violence, mental and work health. Recent research has drawn attention to other dimensions of health, namely: ways of living, subjectivities and individualities, social relationships and interactions - socio-affective, bodily, cognitive, environmental, bioenergetic, ecological, transcultural, communicative and technological and transpersonal ties.[1]

When observing the scope of men's health from the relationship with health services, it was observed that the data from the Outpatient Information System of the Unified Health System (SAI-SUS) in Brazil, from an analysis by region of the parents identified that the annual average of medical consultations performed by men aged 20 to 59 years was 0.06, a small number when compared to the search performed by women, which was 4.33, in 2010.[2] These data in addition to revealing the forms of male use of health services, which raise the resolution of existing problems, such as in the organization of the public network, of assistance, reception, structuring of health care [3], imply problematic access to the health system[4].

From the perspective of illness, one of the main demands for male demand by health units and services has been mediated by the appearance of urological disorders of the penile genital system, in which prostate problems, erectile dysfunction, penis problems, genitourinary infections, stones in the urinary tract and diseases of the testicles, resulting in high costs for the health system[5-8]. In view of this scenario, in the context of professional health practice, to know in an expanded way the most prevalent injuries among men with cisgenera gender identity - a term that is used to refer to the individual who identifies, in all aspects, with his "gender of birth", may imply strengthening health care and provision of care to the male public.

Based on the existing gaps in scientific production on the topic and added to the needs to strengthen urological care, we sought to carry out epidemiological investigations on the topic. Given the exposed reality, the objective of this study was to characterize the epidemiological profile of urological disorders in cisgendered men in a urology, nephrology and transplant unit in Bahia, Brazil.

Method

Descriptive, quantitative, cross-sectional study, carried out from the database of medical records in a public, philanthropic, specialized hospital, located in the municipality of Feira de Santana, Bahia.

The research was carried out in a urology, nephrology and transplant unit of the services performed in 2016. This service is located in the central region of Feira de Santana and currently has 145 (one hundred and forty-five) beds, including 12 beds. Intensive Care Unit (ICU). This unit is the only one of reference in two areas of high complexity in cardiology and oncology, providing services to users of the Unified Health System (SHS) and other agreements in the investigated municipality.[9]

The sample of this study consisted of primary care data, consolidated and

recorded in 160 records, in the urology, nephrology and transplant unit, of men with urological disorders, whether through clinical, outpatient, surgical or palliative treatment processes.

The study's analysis variables were concentrated in the following categories: type of injury, sociodemographic and socioeconomic characteristics (age group, race / color, marital status, education, area of residence and work situation), health status (life habits and underlying diseases) and clinical characteristics (method of disease identification, tests and type of treatment).

For data collection, a structured instrument with closed questions was used, referring to the sociodemographic and epidemiological characterization of men with urological disorders, accessed in the urological care database of the researched unit, being carried out by trained researchers.

The collected data were organized in the Microsoft Excel program, version 2013, systematized and grouped based on the composition of the study variables. Using the Statistic Package Science for Social (SPSS) software, version 23.0, statistical analyzes of simple frequencies, relative and represented in tables, were carried out to allow the descriptive characterization of the sample and interpretative analysis of the data, using the statistical method. and comparative.

This research was submitted to and approved by the Research Ethics Committee of Faculdade Nobre de Feira de Santana, Bahia, Brazil, under protocol number: 2, 367, 268, which preceded the authorization of the research field through the presentation of the Consent Term for Use Database (TCUD), as recommended by Resolution 466/12 of the National Health Council.

Results

Of the 160 men seen at the referral unit, there was a higher frequency in the age group ≥ 60 years (71.3% / 114), married (66.3% / 106), race / brown color (48.8% / 78), uneducated education (83.1% / 113), urban area (76.3% / 122) and retirees (35.6% / 57) (table 1).

Table 1 - Sociodemographic and socioeconomic characteristics of men with urological disorders seen at a referral unit. Feira de Santana, Bahia, Brazil - 2016 (n = 160).

Variables	n	%
Age Range (in years)		
16 to 30	3	1,9
31 to 59	43	26,9
≥ 60	114	71,3
Marital Status		
Married	106	66,3
Divorced	5	3,1
Not Married	35	21,9
Widower	12	7,5
Uninformed	2	1,3
Race/Color		
White	27	16,9
Brown	78	48,8
Black	42	26,3
Uninformed	13	8,1

Education		
Illiterate	3	1,9
Incomplete elementary school	7	4,4
Complete primary education	8	5,0
Incomplete high school	4	2,5
Complete high school	5	3,1
Uninformed	133	83,1
Residence zone		
Urban	122	76,3
Rural	38	23,8
Work situation		
Employee	5	,1
Retired	57	35,6
Housekeeper	1	0,6
Self-employed	20	12,5
Rural worker	32	20,0
Unemployed	1	0,6
Others	39	24,4
Uninformed	5	3,1

Of the urological disorders identified (table 2), 12 types of disorders were identified, the most frequent being: prostate cancer (78.8% / 126) and prostatic hyperplasia (6.3% / 10).

Table 2 - Urological problems in men seen at a referral service. Feira de Santana, Bahia, Brazil - 2016 (n = 157)

Variable	n	%
Prostate Cancer	126	78,8
Benign prostatic hyperplasia	10	6,3
Penile Cancer	3	1,9
Kidney Cancer	4	2,5
Bladder câncer	6	3,8
Urinary tract cancer	1	0,6
Urinary tract infection	2	1,3
Urethral lithiasis	3	1,9
Hydronephrosis	1	0,6
Urethral stricture	1	0,6
Varicocele	2	1,3
Hydrocele	1	0,6
Total		**100**

Source: Research data, 2016.

Regarding the clinical characteristics (table 3), life habits had a significant amount of information not provided (79.4% / 127). However, of those informed, 8.8% (14) reported being a smoker, 6.3% (10) alcoholics. Regarding basic diseases, 133 (83.1%) were not informed. Of those mentioned, 8.1% (13) of men were hypertensive. The mode of identification of the disease, most did not report (86.9 / 139), but the symptoms were the most relevant (8.8% / 14). Regarding the tests performed, the laboratory tests (23.9% / 146), PSA (19.6% / 120). Regarding treatments, medication and surgery (40.3% / 133 both) were the most frequent.

Finally, it was identified that 2.5% (4) users died (data not present in the table).

Table 3 – Situação de saúde e características clínicas de homens atendidos em serviço de referência. Feira de Santana, Bahia, Brasil - 2016 (n=160)

Variable	n	%
Life Habits		
Smoker	14	8,8
Non-smoker	2	1,3
Ex smoker	4	2,5
Alcoholic	10	6,3
Non-alcoholic	1	0,6
Ex drinker	2	1,3
Uninformed	127	79,4
Basic Diseases		
Systemic Arterial Hypertension	13	8,1
Diabetes Mellitus	3	1,9
Heart disease	3	1,9
Others	8	5,0
Not informed / does not present	133	83,1
Disease identification method		
Symptoms	14	8,8
Routine Tests	5	3,1
Health Campaign	2	1,3
Uninformed	139	86,9
Exams*		
Laboratories	146	23,9
Ultrasound	86	14,1
MRI	11	1,8
Computed tomography	21	3,4
X-ray	20	3,3
Electrocardiogram	52	8,5
Scintigraphy	20	3,3
Others	3	0,5
Digital rectal examination	13	2,1
Prostatic Specific Antigen (PSA)	120	19,6
Uninformed	120	19,6
type of treatment**		
Medicated	133	40,3
Surgical	133	40,3
Chemotherapy	16	4,8
Radiotherapy	23	7,0
Hormone therapy	25	7,6
Total	160	100

* Total frequency of 612. Patients underwent more than one exam to assess urological conditions.
* Total frequency of 330. Patients underwent another therapeutic intervention for urological disorders.

Discussion

This study is able to characterize the epidemiological profile of urological disorders in men who attended a specialized referral service in the area. The findings identified that the attendance profile of men with urological disorders at the referral service, predominated the elderly, blacks (blacks and browns) and

prostate cancer as the main urological condition.

As limitations found in the study, the difficulty found in the identification of the object of study (clinical and epidemiological characteristics) stands out, mainly with regard to epidemiological data, since the variables with category called uninformed, had high percentage indexes, results that they would be fundamental for the conclusion of the present study, such as: life habits (smoking, alcoholism), pathological antecedents and the history of the disease (as he discovered).

As this is a specialized service investigated in this study, there is a search for it when Primary Health Care is unable to manage the problem or worsen the condition. Therefore, it is more common for specialized services to serve a population with a larger age group. And, generally, men have sought health services at an older age, either due to the worsening or insistence of the family.[10-12] Furthermore, as it is a specialized service, the motivations for entering are important to be described in medical record.

The illness of men was the object of this study that allowed us to identify that they have occupied expressive and worrying spaces regarding male morbidity and mortality. Given this scenario, it is known that for every three people who die in Brazil, two are male, and the neglect of their health, the inefficiency of self-care are still factors that subsidize the health actions for this group.[13-14]

Although little registered in the data collected in the research, the appearance of previous basic diseases was verified, with emphasis on Arterial Hypertension and smoking, both situations already highlighted in the National Policy for Integral Attention to Men's Health and in institutional documents on the male health in Brazil released by the Ministry of Health of this country.[15-17]

In view of the need to evaluate clinically the appearance of antecedents, it is essential to strengthen the performance of an anamnesis and qualified physical examination, with clinical investigation of good accuracy and optimized compliance with health semiology. In this sense, attention is drawn to the clinical conduct to be adopted by health professionals who offer assistance to cisgendered men with urological clinical demands.

The majority of the population studied is married, as there is a predominance of elderly people and marriage is a very common social behavior. The family is one of the links between man and service. However, the number of single people also draws attention. Think more about how to discuss this data.[18]

As for the type of urological disorder that most affected men, prostate cancer prevailed, with 125 (78.125%) cases, followed by benign prostatic hyperplasia, with 8 (5%) cases, with emphasis on the occurrence of penis cancer, with 3 (1.875%) cases. Because the most frequent problem was prostate cancer, the therapeutic approach is to perform laboratory tests, ultrasound and PSA, the reason being the most frequent.

The Brazilian Society of Urology points out that of every 6 men over the age of 45, 1 may have the disease without even being aware of its diagnosis. Where Prostate cancer is the second neoplasm that most affects men.[19-20] The fear of being diagnosed with the disease, which leads to death and pain, are factors that keep men from seeking health services, at the same time that they approach them, when they seek care related to the prevention of prostate cancer.[21] In this sense, the authors point out fear as the main reason for the low demand for

prevention in primary health services in relation to this disease.

The life expectancy of the Brazilian population has increased, and thus the prevalence of this neoplasia has also increased, thus generating a huge public health concern regarding the adoption of preventive measures to combat disease prevention and early diagnosis, in addition to generation of costs for the sector.

Regarding the second most prevalent condition, benign prostatic hyperplasia[22], it is emphasized that this pathology is prevalent in men aged between 40 and 50 years, characterized by a benign enlargement of the prostate. And that variables such as age range and quality of life are also factors that may be associated with the etiology of the disease. The main complaint that causes men affected by this disease to go to health services is the difficulty in urinating, where drug therapy is the approach adopted in patients with mild to moderate discomfort and surgery for critically ill patients.[23]

With regard to penile cancer, Brazil is among the countries with the highest rate of the disease, especially the North and Northeast regions, second only to some African countries, which demonstrates that the problem is related to the low socioeconomic and cultural profiles. [24] Studies on penile cancer have shown that the age group most affected is 60 years or older. However, there are studies carried out in the state of Pará that point out cases of the disease in young patients, under the age of 40 years.[25] This last data matches those obtained in the present study, where 2 of the 3 cases found are of young patients (below 60 years).

Because it is considered a rare disease, penis cancer has limited studies with regard to its epidemiology and risk factors, which makes it a public health problem.[26] The authors still claim that the socioeconomic profile of men affected by this condition has a close connection. This statement is based on the moment that they realized the high incidence of the disease in underdeveloped countries in contrast to the low incidence in developed countries.

Following this same analysis, the inefficiency in intimate hygiene, low education, smoking, sexually transmitted diseases (such as HPV), are the risk factors related to the clinical and epidemiological profile of these patients.[27] Early diagnosis is the fundamental tool for avoid further damage to the patient, because if not detected at an early stage it can result in amputation of the organ. Amputation is a type of resource that brings consequences not only physical, sexual, but above all psychological orders.[28]

The age range of men with the presence of urological disorders was made up of men aged sixty and over, with 114 (71.25%) of the cases, followed by men aged 31 to 59 years (26.875%). Previous research indicates that aging is one of the main predisposing factors for prostate cancer, followed by genetic predisposition and bad lifestyle habits (obesity, physical inactivity, smoking and alcohol consumption) .[29] And that the highest percentage of prostate cancer is diagnosed in men over 65, with a low percentage diagnosed under 50. However, with the increase in life expectancy worldwide, it is expected that there will be an increase in the number of this pathology.[30] These results should promote significant advances in the perspective of better qualification of health professionals who work in promoting the health of men.

When analyzing the marital status of men with urological problems, it was identified that they were married, with 106 (66.25%) of the cases, followed by single men (21.875%) of the cases, and of race / brown color, with 78 (48.75%),

followed by blacks, with 42 (26.25%) of cases and 133 (83.125%) schooling, uninformed and underreported, followed by complete elementary school 8 (5%), of cases.

Factors such as ethnicity and skin color are related to prostate cancer, where this pathology is 1.6% more common in men with black skin color compared to white men. It is possible that this predominance is related to lifestyle and factors related to the detection of the disease.[31]

It is important to emphasize that the school environment is a place where the construction of critical and autonomous subjects occurs, thus the school is a place of great importance for the promotion of health, since through it we can ensure that the subjects will make choices that are relevant to health, seeking to improve quality of life.[32] In this context, studies show that the higher the level of education of men, the lower the incidence of the disease.[33]

As for the location where these men lived, the urban area with the highest prevalence was found, with 122 (76.25%) of the cases, followed by the rural area 38 (23.75%), of the cases, with a situation of work, retired, with 57 (35.625%), followed by rural workers, with 32 (20%), of cases, data not evidenced in studies on the subject in the scientific literature.

The description of lifestyle habits, regarding smoking and drinking, presented data underreporting, with 127 (79.375%), not informed, followed by 14 (8.75%) for smoking and 10 (6.25%), for alcoholism.

Thus, with the underreporting of data on lifestyle habits, it is impossible to correlate the presence of bad lifestyle habits with the presence of urological disorders, although previous research reveals that the habit of smoking is related to the development of various diseases. (cardiovascular, pulmonary, oral, neoplasms, and others) and that alcoholism is responsible for 200 diseases and injuries exposed in the ICD-10, which is also responsible for mental disorders, behavior and some neoplasms, Brazil being a prominent country in deaths as a basic cause associated with alcohol use.[34] These data generate concerns and many expenses for health managers who promote campaigns and develop actions to combat these substances.[35]

Regarding the pathological history, there was also inconsistency in the data, with 133 (83.125%) of the cases not reported, along with the identification of the medical records, followed by 13 (8.125%) cases of hypertension and 8 (5%) for other cases. associated pathologies. The association of urological problems and hypertension in the same patient should be carefully analyzed, since some chemotherapy drugs, corticosteroids, NSAIDs can also raise blood pressure, making it difficult or even preventing success in the prognosis.[36]

Hypertension is a condition that causes a great impact on Brazilian morbidity and mortality. Predisposing factors are low quality of life (physical inactivity, smoking, drinking and others) and have an intense link to some diseases of the circulatory system and some types of cancer.

Another relevant fact is that hypertension is the most prevalent comorbidity associated with cancer, as studies have shown that the use of angiotensin receptor blocking drugs (ARB), which is widely used by hypertensive patients, increases the chance of developing tumors, including prostate cancer. , as these have a strong connection with tumor angiogenesis.[37]

Regarding how men discovered the existence of urological problems, the study identified that the highest prevalence of cases was not identified, 139

(86.875%), followed by 14 (8.75%), through the appearance of symptoms and 5 (3.125%)), in tracking campaigns, such as the November Blue.

Regarding the performance of exams for diagnosis of cases, laboratory exams prevailed, followed by ultrasound 86 (53.75%), with the most adopted type of treatment, drug and surgical, represented by 149 (93.125%), followed by hormone therapy with 25 (15.625%), after radiotherapy with 23 (14.375%) and chemotherapy with 16 (10%), and with the presence of 4 (2.5%) deaths, which were caused by prostate cancer.

A similar study carried out in a urology outpatient clinic between 2002 and 2006 in the city of Barbacena in the state of Minas Gerais with 2,299 patients (female and male) showed that 755 men presented urological disorders (prostatitis, prostate hyperplasia, infertility , balanoposthitis and varicocele) and that they only sought care at the health service after the appearance of signs and symptoms.[38]

In the state of São Paulo, another research in 2012 involving 21 men aged 51 to 77 years aimed to describe the understanding of the subjects when carrying out prostate cancer prevention exams where they underwent rectal examination associated with the exam of PSA (Prostatic Specific Antigen), where it was evidenced that these two tests are the main ones to confirm the diagnosis of the disease.[39] These data strengthen the results found in the present study that points out laboratory tests, followed by the PSA test with the highest percentages . In this regard, most of the use of the health service by men is in situations of illness or health emergencies, however this public tends to postpone going to that service. What justifies the smallest part of the patients to have discovered in screening campaigns like the one of the blue November.

Conclusion

Of the 160 men seen at the referral unit, aged ≥ 60 years, married, mixed race, uneducated education, urban area and retirees. Of the urological disorders identified, 12 types of disorders were identified, the most frequent being: prostate cancer and prostatic hyperplasia. The clinical characteristics were: life habits had a significant amount of information not provided. However, of those informed, they highlighted: being a smoker and alcoholic. The underlying diseases were not reported. Of those pointed out, they highlighted Hypertension. The mode of identification of the disease, most did not report, but the presentation of symptoms stood out. The tests performed were laboratory tests and PSA. Regarding treatments, medication and surgery were the most frequent. Four users died.

The profile of visits by men with urological conditions at the referral service, predominated the elderly, blacks (blacks and browns) and prostate cancer as the main urological condition.

We understand that recognizing the predisposing factors for a particular disease is of fundamental importance for planning health actions that contribute to minimizing its incidence. In this sense, a more careful conduct by the health team with regard to the admission of a patient is necessary, adopting the regular practice of a more detailed anamnesis and future research to collect new data.

In this context, it is also interesting that health professionals in their different fields of work, follow the results of research in their area of activity, in

order to realize the weaknesses prevalent in the protocols and conduct adopted by the team involved in the provision of care and this way to improve your assistance.

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Correspondent Author
Anderson Reis de Sousa
Nursing School of Universidade Federal da Bahia.
241 Basílio da Gama St.ZIP: 40110-
907. Canela. Salvador, Bahia, Brasil.
son.reis@hotmail.com

Gender, Masculinities and Men's Health: development of a curricular discipline in the undergraduate nursing course

Gênero, Masculinidades e Saúde de Homens: desenvolvimento de uma disciplina curricular no curso de graduação em Enfermagem

Género, masculinidades y salud del hombre: desarrollo de una disciplina curricular en la carrera de enfermería

Anderson Reis de Sousa[1], Michelle Teixeira Oliveira[2], Jamille Campos Oliveira[3], Maria Carolina Oliveira Reis[4], Misael Silva Ferreira Costa[5], Daniella Carvalho Gomes de Cerqueira[6], Minéia Araujo Carneiro Bastos[7]

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1. Universidade Federal da Bahia, Nursing School. Salvador, Bahia, Brazil. https://orcid.org/0000-0001-8534-1960

2. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-3333-955

3. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/000000207467848

4. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-2366-7310

5. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0001-8042-2489

6. Faculdade de Tecnologia e Ciências. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-4807-4917

7. Faculdade Nobre de Feira de Santana. Feira de Santana, Bahia, Brazil. https://orcid.org/0000-0003-3600-8904

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RESUMO

Objetivo: descrever o desenvolvimento de uma disciplina curricular no curso de graduação em Enfermagem na área de gênero, masculinidades e saúde de homens. **Método:** Estudo descritivo, qualitativo, oriundo de atividade curricular docente no curso de graduação em Enfermagem de uma Instituição de Ensino Superior de um município da Bahia, Brasil, entre os anos de 2014 a 2020. Foram consultadas fontes de dados institucionais, registros imagéticos, atividades de ensino-aprendizagem produzidos no componente e relatos de docentes. Os dados apreendidos foram tematizados a partir da análise de conteúdo proposta por e interpretada à luz do referencial de masculinidade na perspectiva de Raewyn Connell. **Resultados:** O desenvolvimento do componente curricular foi advindo de diálogos acadêmicos em consonância com a instituição de ensino, sob a convergência com as demandas e necessidades discentes e para a formação em Enfermagem. Buscou-se atender as iniciativas de fortalecimento da implementação da Política Nacional de Atenção Integral à Saúde do Homem do Ministério da Saúde brasileiro, tais quais dos indicadores epidemiológicos e da formação em Enfermagem sob a ótica relacional de gênero e das masculinidades na produção do cuidado à saúde direcionado ao público masculino. **Conclusão:** O desenvolvimento do componente curricular oportunizou a ampliação e o fortalecimento da formação qualificada de Enfermagem, a contribuição para a superação da invisibilidade do público masculino nas ações e na atenção em saúde, promoveu a integração ensino e serviço a partir da extensão acadêmica e fomentou a produção científica direcionada para a Enfermagem na saúde de homens.

Descritores: Homens; Saúde do Homem; Gênero e Saúde; Masculinidades; Enfermagem.

ABSTRACT

Objective: to describe the development of a curricular discipline in the undergraduate nursing course in the area of gender, masculinities and men's health. **Method:** A descriptive, qualitative study, originating from teaching curricular activity in the undergraduate nursing course of a Higher Education Institution in a municipality in Bahia, Brazil, between the years 2014 to 2020. Sources of institutional data, imagery records, teaching-learning activities produced in the component and teachers' reports. The apprehended data were themed from the content analysis proposed by and interpreted in the light of the masculinity framework from the perspective of Raewyn Connell. **Results:** The development of the curricular component came from academic dialogues in line with the educational institution, under the convergence with the demands and needs of students and for nursing education. We sought to meet the initiatives to strengthen the implementation of the National Policy for Integral Attention to Men's Health of the Brazilian Ministry of Health, such as the epidemiological indicators and nursing education under the relational perspective of gender and masculinities in the production of health care. health directed at the male audience. **Conclusion:** The development of the curricular component provided an opportunity for the expansion and strengthening of qualified nursing training, the contribution to overcoming the invisibility of the male audience in actions and in health care, promoted the integration of teaching and service from the academic extension and fostered scientific production directed to Nursing in men's health.

Descriptors: Men; Men's Health; Gender and Health; Masculinities; Nursing.

RESUMEN

Objetivo: describir el desarrollo de una disciplina curricular en la carrera de enfermería en el área de género, masculinidades y salud del hombre. **Método:** Estudio descriptivo, cualitativo, proveniente de la actividad curricular docente en el curso de pregrado en enfermería de una Institución de Educación Superior en un municipio de Bahía, Brasil, entre los años 2014 a 2020. Fuentes de datos institucionales, registros de imágenes, actividades de enseñanza-aprendizaje producidas en el componente e informes docentes. Los datos capturados fueron temáticos del análisis de contenido propuesto e interpretado a la luz del marco de masculinidad desde la perspectiva de Raewyn Connell. **Resultados:** El desarrollo del componente curricular provino de diálogos académicos en línea con la institución educativa, bajo la convergencia con las demandas y necesidades de los estudiantes y para la formación en enfermería. Buscamos atender las iniciativas para fortalecer la implementación de la Política Nacional de Atención Integral a la Salud del Hombre del Ministerio de Salud de Brasil, tales como los indicadores epidemiológicos y la educación de enfermería bajo la perspectiva relacional de género y masculinidades en la producción de atención de salud. salud dirigida al público masculino. **Conclusión:** El desarrollo del componente curricular brindó una oportunidad para la expansión y fortalecimiento de la formación calificada de enfermería, el aporte para superar la invisibilidad del público masculino en las acciones y en la atención de la salud, promovió la integración de la enseñanza y el servicio desde la extensión académica y fomentó producción científica dirigida a la Enfermería en Salud del Hombre.

Descriptores: Hombres; Salud de los hombres; Género y salud; Masculinidades; Enfermería.

ORIGINAL

Introduction

In Brazil and in most countries in the world, men have assumed the centrality of indicators in health and disease related to morbidity and mortality.[1-2] Epidemiological data indicate an increasing between the causes of illness and premature death of men, especially for causes that could be avoided, such as external causes - traffic accidents, violence. Furthermore, life expectancy has been lower than that of women, which also represents the worst health conditions in the old age stage.[3]

In some countries in the world, health care for men has become an area of importance. In Brazil, a National Policy for Integral Attention to Men's Health (PNAISH) was implemented in 2009 by the Ministry of Health, and constitutes the first focal health policy for the male public in Latin America.[4]

Recent actions and investigations have been carried out in the institutional field - governmental, [5-6] academic / scientific[7] and arising from popular mobilization - activism, support / therapeutic groups, in favor of visibility for male health. Both have emphasized the need to prioritize this theme in the most diverse social, political, cultural, religious, educational, labor and other contexts, so that more favorable scenarios can be achieved.[8-9]

Within the scope of professional training in health, some initiatives have already been carried out, such as the creation of virtual training courses, the formulation of technical and instructional documents[10] - booklets[11-12], protocols, however gaps are still identified in the literature. Especially in the field of work in Nursing, nursing care for men's health is fragile and barely visible, which significantly impacts the advancement of care and the production of care directed to the health specificities of this key population.[13-15]

In an unstructured consultation to the E-mec website, we found that few nursing courses have a component and / or discipline in their curriculum that has male health as the central focus. In view of this scenario, exponential losses may be caused to the clinical evaluation of specific conditions of cisgender men, such as, for example, urological health demands, sexuality and sexual practices, reproduction and paternity, of specific diseases and conditions of the population masculine, as well as trans men and transmasculine people, and also the use of specific interventions that guarantee the recognition of the social constructions of masculinities, [16] of intersectionality[17] and masculine singularities.

Given the context presented, this study was guided by the research question: how to develop a curricular discipline in the undergraduate nursing course in the area of gender, masculinities and men's health? This article aims to describe the development of a curricular discipline in the undergraduate nursing course in the area of gender, masculinities and men's health.

Method

Descriptive, qualitative study, originating from teaching curricular activity in the undergraduate nursing course of a Higher Education Institution in a municipality in Bahia, Brazil, between the years 2014 to 2020. Institutional

data sources, imagery records, research activities were consulted. teaching-learning produced in the component and teachers' reports.

The reported experience deals specifically with the development of a curricular component in the undergraduate nursing course entitled: gender, masculinities and men's health.

The structural configuration of the reported experience is composed of data of an institutional nature, extracted from documents of the regulation of the component in the curriculum of the undergraduate course of the linked institution and other sources from the records filed by teachers, blogs and digital social networks, such as pages themes linked to the undergraduate course on Facebook - Men's Health Extension Project - FAN/@SAUDEDOHOMEM.PE and on Instagram - Enfermagemfan / @ Enfermagemfan. Furthermore, the theoretical assumptions of subsidizing the construction of the component was based on the normative reference of PNAISH and masculinities in the perspective of Raewyn Connell.[18-20]

As for the ethical constraints of the research, we emphasize that they have been met with all the bioethical and ethical requirements in research involving human beings. To this end, the project was approved by the Research Ethics Committee, under the opinion number: CAAE: 47814815.4.0000.5654, n.1.208.304.

Results

The data sources that make up this study are the curriculum model plan; Research project structure model; Characterization model of the Study, Research and Extension Group in Gender, Masculinities and Men's Health; Academic extension project structure model; presentation of technical products - cordel, booklet, blog and scientific - symposium, seminar and debate, generated from the activities of the component.

The empirical findings comprise the institutional configuration and the teaching and student activities carried out in the curricular discipline and in conjunction with the complementary activities fostered by the component in the undergraduate nursing course. It is known that the discipline had its development created from academic dialogues in line with the educational institution, from the understanding of the need and justification on the part of the coordinating body and the HEI directive bodies, added to the convergence with the demands and needs students, presented in the classroom and in carrying out practices with the community and users / patients in the context of nursing education.

It was based on this scenario that planning meetings were held in order to outline a scope of discipline, definition of the theoretical and practical workload, methodology to be used, content to be taught and the configuration of integration with the research and extension activities a be given opportunities with the institution in the Nursing undergraduate course. It is important to highlight that in its first moment, in the middle of 2014, the component is launched with the nomenclature: “Nursing in men's health”. However, based on advances in the understanding of the need to carry out studies and the development of a professional nursing practice based on gender, and in the understanding of the

relevance of dealing with masculinities, the discipline is subjected to adjustments and institutional appreciation in collegiate body, which authorizes changes in the scope of the discipline, which is now called: "gender, masculinities and men's health", which includes a 40-hour workload, allocated in the seventh semester of the course, offered in the afternoon and night time provided by the institution.

We also sought to meet initiatives to strengthen the implementation of the National Policy for Integral Attention to Men's Health of the Brazilian Ministry of Health, such as the epidemiological indicators and nursing education under the relational perspective of gender and masculinities in the production of health care aimed at the male audience. To this end, the model of the discipline plan was developed in convergence with the profile of the graduate of the Nursing undergraduate course, under the premise of training for the Unified Health System (UHS), and through a curriculum menu that sought to recognize the essentiality of nursing work in male health.

In joint assessment actions between students, teachers and academic coordination, we seek to propose teaching-learning approaches that lead to comprehensive male health care. Thus, reflecting and problematizing aspects such as: which man are we dealing with? What is the place of importance of the relational aspects of gender and masculinities? What social responses have been offered to the population based on the teaching and practice strategies employed in men's health?

The discipline plan was organized to fulfill specific competencies and skills for the nurse in the health care of men, justified by the PNAISH, which contained a programmatic content converging with the network organization, from levels of attention and complexity. The contexts became highlights in the discipline: 01 - Primary Health Care; 02 - men's health on the national scene; 03 - gender identities and masculinity diversities; 04 - focus on specific and specialized care for men's health; -05 - gestational process and exercise of paternity; 06 - the processes of illness, with emphasis on the diseases and conditions that most affect men; 07 - heart, vascular and hypertensive diseases in men; 08 - the context of hospitalization and male presence in outpatient services; 09 - vulnerabilities and 10 - aging processes.

Table 1 – Curricular discipline plan template. Feira de Santana, Bahia, Brazil. 2020.

CURRICULAR DISCIPLINE PLAN MODEL **Component: Gender, Masculinities and Men's Health**
Menu:
Study of actions to promote the integral health of men, such as the focus on the Family Health Strategy, which is configured as a gateway to the comprehensive health system for men, epidemiological indicators of morbidity and mortality, historical social and political process, socio-cultural barriers and institutional, access to health service, qualification of health professionals and managers for the care of men, nursing care practice aimed at the male population and their specificities, injuries and complexities, at different levels of care, health actions that contribute for the understanding of male uniqueness in its diverse contexts, gender relations that permeate male experiences, population deprived of liberty, violence, challenges and advances that are evident in the implementation of the National Policy for Integral Attention to Men's Health.
Objectives
Main Goal: *Understand the need to implement health actions within the scope of the nurse's work process aimed at men's health care in the context of UHS.*

Specific Objectives:

- *To develop in students the skills to develop an understanding of political trajectories and advances in the area of male health, in the field of public health and Nursing;*
- *Discuss the importance of gender and masculinity constructions in the way of doing health and producing care;*
- *Allow the student to understand the nurse's duties in the elaboration of actions that contemplate the integral health of men, as well as the creation of models and strategies of Nursing;*
- *Develop in the student, the skills for the use of care technologies in the development of care, management and educational plans with a view to male health.*

Justifications

Understanding the health conditions of men provides nursing students with an expanded knowledge that precedes the conduct of a critical and transformative practice, as a way to contribute to the reduction of male morbidity and mortality, by promoting health, preventing disease, recovering and rehabilitating at the most varied levels of attention and complexity.

The implementation of health care actions for men aimed at the prevention of diseases, diagnosis, treatment, rehabilitation, maintenance, promotion and protection of health, which, according to Ordinance No. 648-GM / 2006, characterizes acts of primary care, has represented a challenge for health professionals National and international discussions have been developed to promote primary health care focused on the specificities of the male population.

The low accessibility of the male population to primary care services points to a vulnerability of these individuals. The search for health services, when it exists, is linked to a clinical picture of morbidity already chronic with biopsychosocial repercussions for their quality of life, in addition to significantly burdening HUS. Thus, based on the National Policy for Integral Attention to Men's Health (PNAISH), the present project aims to unveil the actions of integral attention to the health of males, adults, through the promotion of information to the said population. , health education and communication aiming to spread the policy. Using effective communication as a priority education tool, the project will allow for reflection, leading to awareness and raising the level of self-knowledge.

Skills and abilities

To be able to diagnose and design solutions for coping with health problems that hinder access to services for men;

Enable the student to develop the ability to communicate, to make decisions, to intervene situations, seeking to modify reality;

Recognize the health needs and vulnerabilities in the field of men's health, as a way to implement transformative actions;

Identify the individual and collective health needs of the population, their conditions and determinants;

Recognize the role of the nurse (o) and propagate the actions of this professional area, as a way to increase its social recognition.

Establish new relationships with the social context, recognizing the structure and forms of social organization, its transformations and expressions;

Understand health policy in the context of social policies, recognizing the epidemiological profiles of the male population;

Recognize health as a right and dignified living conditions and act in order to guarantee comprehensive care, understood as a joint and continuous joint of preventive and curative actions and services, individual and collective, required for each case at all levels of complexity of the system.

Program content

1. Nursing care and care for men in the scope of Primary Health Care

1.1 Men's health in the context of nursing practice;

1.2 Approach to strategies for the promotion of male health in health services in Primary Care;

1.3 Men's access to the Family Health Strategy;

1.4 The nurse's work with Community Health Agents on men's health.

2. ***Men's health on the national scene***

2.1 Knowledge and discussion of the axes of action of the National Policy for Integral Attention to Men's Health;

2.2 National Plan for Attention to Men's Health;

2.3 Discussion of the inclusion of men in health services;

2.4 Medicalization of the male body; Self-medication.

3. Gender identities and masculinity diversities

3.1 Male sexuality;

3.2 National Policy for Integral Health for Lesbians, Gays, Bisexuals, Transvestites and Transsexuals;

3.3 Sexual and reproductive rights of men. ***4. Health care for men*** *4.1 Nursing consultation in the scope of men's health;* *4.2 Notions of Anatomy and Physiology of the male genital system;* *4.3 Physical examination of man;* *4.4 Systematization of Nursing Care: guidelines for male health;* *4.5 Requesting exams and check-up.* ***5. Men and the gestational process and exercise of paternity*** *5.1 Prenatal care and men's insertion and participation strategies;* *5.2 Male prenatal care;* *5.3 Companion Law. Dad is not visiting! Paternity Leave and Actions of the PAPAI Institute;* *5.4 Male participation in Family Planning;* *5.5 Sexual and Reproductive Rights;* *5.6 Male contraceptive methods (Male contraceptive pill, Vasectomy).* ***6. Thematic Seminars (community activity).*** ***7. Men and the illness process*** *7.1 Diseases of the male genital system: Perionye disease; Hydrocele; Premature Ejaculation;* *7.2 Erectile dysfunction, Priaprism; varicocele, Fournier's syndrome.* *7.3 Sexually Transmitted Diseases in men;* *7.4 Masculinities and HIV / AIDS prevention;* *7.5 Men and the use of condoms.* ***8. Nursing care and attention to heart, vascular and hypertensive diseases in men*** *8.1 Acute Myocardial Infarction, Stroke and Hypertension;* *8.2 Nursing care and care for men with Diabetes Mellitus.* ***9. Men in the hospital and outpatient context: nursing care and care*** *9.1 Nursing care and care for men with breast cancer;* *9.2 Nursing care and care for men with prostate cancer, prostatitis, prostatectomy surgery, and implantation of penile prosthesis;* *9.3 Carrying out the PSA exam and directing the digital rectal exam;* *9.4 Nursing care and care for men with penile cancer, guidelines and referrals;* *9.5 Nursing care and care for men with testicular cancer;* *9.6 Performing self-examination of the breasts, penis and testicles.* ***10. Men in the context of vulnerabilities*** *10.1 Nursing care and care for men in situations of alcoholism and drug addiction;* *10.2 Nursing care and care for men with mental illness and suicidal potential;* *10.3 Nursing care and care for homeless men;* *10.4 Nursing care and care for men in the workplace;* *10.5 Nursing care and attention in the prevention of accidents at work - Policy;* *10. 6 Nursing care and care for men from the countryside and the forest - National Policy for Comprehensive Health of the populations of the countryside and the forest;* 10.7 Nursing care and care for the black population - National Policy for the Comprehensive Health of the Black Population; *10.8 Nursing care and care for the Roma population - National Policy for Comprehensive Health of the Roma population;* *10.9 Nursing prevention and care for violence;* *10.10 Prevention and Nursing actions in the face of traffic accidents;* *10.11 Nursing care and care for men in prison;* *10.12 Nursing care and attention to men with disabilities.* ***11. Men and the aging process*** *11.1 The elderly man and HIV / AIDS;* *11.2 Male sexuality in the aging process;* *11.3 Nursing care for andropause.*
Applied methodologies
Expository-participatory classes, community activities, discussions based on scientific texts and articles, practical group and individual exercises, thematic seminars and technical visit to the hospital.
Didactic resources
Data-show, Board, Pilot, Eraser, Material for group work.

Source: Noble Faculty of Feira de Santana.

The design of the curricular discipline integrated the research and academic extension actions. To this end, a matrix research project entitled: "ATTENTION TO MEN'S HEALTH IN A NORTHEAST BRAZILIAN SCENARIO" was developed, approved by the Research Ethics Committee of the linked institution. The research and academic extension model and the characterization of the "Group of Studies, Research and Extension in Gender, Masculinities and Men's Health", part of the component, are presented below.

Table 2 – Research project structure model. Feira de Santana, Bahia, Brazil. 2020.

RESEARCH PROJECT STRUCTURE MODEL **Research project: Attention to men's health in a scenario in northeastern Brazil**
Title: *Attention to men's health in a scenario in northeastern Brazil.* **Objective:** *Primary Objective: To develop the actions of integral attention to the health of the man, through the promotion with the referred population in a scenario of the northeast of Brazil.* *Secondary Objective: To characterize the male population and the professionals who work and attend the Basic Health Unit, Specialized Service and Hospital Unit under study in the municipality of Feira de Santana, Bahia; Discuss the strategies carried out by* *teams from the Family Health Strategy, Specialized Service and Hospital Unit with a view to resolving men's health care; Understand how PNAISH favors the entry of men to the health services in question; Describe the functioning of care programs for men in the Family Health Strategy, Specialized Service and Hospital Unit; To know the articulation / disarticulation of the Family Health Strategy with the Specialized Service in line with the PNAISH regarding health promotion; Analyze the perception of the health team in the Family Health Strategy, Specialized Service and Hospital Unit about the care and attention to men's health in the municipality; To know the facilities and difficulties of access to health services reported by the male population.* *The field constituted the study scenario as three levels of health care, being a Basic Health Unit (UBS), the Municipal Center for Cancer Prevention and the Urology, Nephrology and Transplant Unit of Hospital Dom Pedro de Alcântara, both located in the municipality of Feira de Santana, Bahia.* **Research participants:** *The participants were configured in two groups of representation, selected intentionally, being Group I: Health Team - (nurses, doctors, dentists, nursing technicians, community health agents) - subjects who practice the Health Strategy of the Family and are responsible for assistance and management services, which denotes the way it solves the problems demanded by users; Group II: USF users - as they are actors in the health action process, they can define their impressions about the assistance and management services in Family Health.* **Data collection techniques:** *For the fieldwork, 05 data collection techniques will be used: questionnaire to characterize participants, interview to obtain empirical data, observation to analyze the organization of the service and conduct the assistance provided, focus group to obtain empirical data and document analysis to analyze the health status of men.* **Data analysis methods:** *The research data treatments were guided by the theoretical-philosophical current of Thematic Content Analysis and Collective Subject Discourse.* **Ethical aspects:** *Project approval by the Research Ethics Committee - project title: "ATTENTION TO MEN'S HEALTH IN A NORTHEAST BRAZILIAN SCENERY", under the opinion: CAAE: 47814815.4.0000.5654, n.1.208.304, in compliance with Resolution 466 / 2012 of the National Health Council, application of the Free and Informed Consent Term, with the consent of the Municipal Health Secretariat (SMS) and other researched institutions.*

Table 3 – Characterization model of the Study, Research and Extension Group on Gender, Masculinities and Men's Health. Feira de Santana, Bahia, Brazil. 2020.

MODEL OF CHARACTERIZATION OF THE STUDY GROUP, RESEARCH AND EXTENSION IN GENDER, MALE AND MEN'S HEALTH
General characteristics of the Study, Research and Extension Group on Gender, Masculinities and Men's Health: *This group is interested in expanding the understanding of the health-disease process for men, as well as the social construction of masculinities in Brazilian society, as a way to contribute to the improvement of Health Care at the regional level and with repercussions for the country, through the development of social technology and innovative actions that seek to recognize the specificities and demands of this public, in addition to propagating and strengthening the National Policy for Integral Attention to Men's Health and contributing to the growth of this area in the field of Nursing.* **Logo of the Study, Research and Extension Group on Gender, Masculinities and Men's Health:**

Source: Noble Faculty of Feira de Santana.

In addition to the research dimension, the discipline integrated real actions with the community, be it the academic community or the key population of interest in the discipline, residing in the territory. To this end, an academic extension project was structured that aimed to promote the integration of teaching with the service, with the perspective of problematizing and making more critical and reflective the formation and practice in Nursing with a focus on the male population.

The structure of the extension project formulated was based on the search for answers that were necessary for training with the male population. The interests of the extension were based on the possibility of bringing improvements to the male health situation in the territory, such as strengthening the practices and visibility of the performance in Nursing in the health of men. Thus, agreements were made with health units of the three levels of care, in which actions were carried out with a focus on health education - popular health education.

The actions involved men, whether they are users of institutional health services, network health professionals and the academic community of the linked institution. All activities respected ethical aspects, with the products returned to participants, whether in the form of light technologies - seminars, conversation circles, debates, or through the production of light-hard technologies - brochures, booklets, guides for support, protocols, service flowcharts, scientific articles. The structure model of the extension project and the products generated from the development of the discipline are presented below.

Table 4 – Academic extension project structure model. Feira de Santana, Bahia, Brazil. 2020.

STRUCTURE MODEL OF ACADEMIC EXTENSION PROJECT **Extension project: Education for men's health: nursing actions at three levels of health care in Bahia, Brazil**
Extension problem: *understanding how to configure attention to men's health in a Basic Health Unit and in a Specialized Service in the municipality of Feira de Santana, Bahia?*
Extension interests: *The interest in researching this topic is highlighted by the creation of the Extension Project in Men's Health Faculdade Nobre de Feira de Santana, Bahia, and by the concern to notice how incipient, fragile and invisible is the production of care and attention to man's health. The relevance of this research is related to the potential to contribute to the definition of new strategies and actions, as well as the expansion of services to men in the perspective of the ESF and the Specialized Service, for the promotion and articulation of teaching with the service, and research and extension, also because it is an innovative theme in the field of Public Health in our country.*
Objectives of the extension: *General objective: Unveil the actions of integral attention to the health of men, through the promotion to the referred population, of actions of information, education and communication for health aiming to spread the National Policy of Integral Attention to the Health of the Man in the municipality from Feira de Santana, Bahia.* *Specific objectives: 01 - To characterize the male population served at the Basic Health Unit and the Specialized Service under study, in the municipality of Feira de Santana, Bahia; 02 - Discuss the strategies carried out by the teams of the Family Health Program with a view to resolving men's health care; 03 - Understand how PNAISH favors the entry of men into the health service; 04 Describe the functioning of assistance programs for men in the Family Health Strategy and the Specialized Service; 05 - Investigate the actions developed by the teams focused, within the scope of Primary Care Specialized Service, aimed at men's health; 06 - Assess the existence of educational themes focusing on the category of analysis of masculinity, gender and integrality of care; 07 - To know the articulation / disarticulation of the Family Health Strategy with the Specialized Service in line with the PNAISH regarding the promotion of actions to prevent / confront conjugal violence; 08 - Analyze the perception of the health team in the Family Health Strategy and the Specialized Service on the care and attention to men's health; 09 - To know the facilities and difficulties of access to services by the male population in the basic and specialized model of care, under study.*
Methodology: *Academic extension activity.* **Extension fields:** *Family Health Unit (FHU); Municipal Cancer Prevention Center, both located in the city of Feira de Santana, Bahia; Urology, Nephrology and Transplantation Unit - Hospital Dom Pedro de Alcântara.* **Extension participants:** *Group I: FHU users - as they are actors in the health action process, they can define their impressions about the assistance and management services in Family Health.* **Ethical aspects:** *Consent from the Municipal Health Secretariat (SMS) and other researched institutions***.**

Source: Noble Faculty of Feira de Santana.

The discipline has been updated every academic semester in order to meet regional needs, namely: technical visits to services with expressive attendance by the male public, such as the Psychosocial Support Center, street clinic, specialized urology service, access to Nursing consultation in Primary Care. In addition, educational materials have been produced, including in digital form, given the advent of the COVID-19 pandemic.

Figure 1– Generated technical products (cordel, primer and blog). Bahia Brazil. 2014 to 2020.

Source: Noble Faculty of Feira de Santana.

Figure 2 - Products generated (symposium, seminar and debate). Bahia Brazil. 2014 to 2020.

Source: Noble Faculty of Feira de Santana.

Figure 3 - Technical products generated (thematic banners). Bahia Brazil. 2014 to 2020.

Source: Noble Faculty of Feira de Santana.

Discussion

This study was able to present the process of developing a discipline aimed at men's health in the undergraduate nursing course based on its primary intentions, justifications, organizational and pedagogical structures for teaching and learning. Furthermore, the findings made it possible to recognize the actions used for academic training in nursing in view of the guarantee of male health specificities from the relational perspectives of gender and masculinity. Furthermore, the integration between teaching and service through research and extension actions.

The limitations of this study are concentrated on the impossibility of carrying out empirical research with students in

order to apprehend perceptions about the component in academic nursing education.

Advancing nursing science and practice in men's health has been identified as a priority in contexts outside Brazil, and draws attention to the high mortality and male vulnerability, as a highlight for men from Western countries. Special attention should be paid to the aspect of access and the male demand for health care, especially in Primary Health Care (PHC) services. Furthermore, it has highlighted the need to pay attention to normative gender standards and the relationship of plurality of masculinities in nursing professional practice.[21]

The search for advances in the resources used to promote male health through community actions and integrated with health services, such as the focus on proactively directing the performance of nursing professionals who provide assistance to the male public.[21]

This study presents significant contributions to the scope of academic and professional nursing education for men's health. With the development of specific disciplines and / or curricular components for male health, it gives an important step towards the advancement of nursing science and practice, with relevant reflexes for the improvement of male health indicators and structured health care in the networks, either it formal but also informal health.[23-24]

Nursing professionals when trained in an expanded and satisfactory manner can confer an important progress in the production of care, in the expanded clinic, in community and home care, in the control and coping with diseases and conditions, in health monitoring and surveillance, as well as in advancing of the protagonism of men.[25] Furthermore, specifically for the field of male health, the qualified performance of nursing professionals can contribute in a unique way in improving male adherence to therapies, in exercising a culture of care, in minimizing vulnerabilities and risks , in the self-management of complex situations of health and disease, as well as in the improvement of quality of life, well-being and good living, which justifies and reiterates the importance of academic and extension training in the area.[27]

In addition to the care dimension, it is relevant to emphasize that nurses with specialized training have satisfactory competence to be in charge of decision-making processes in the context of health management, being able to assume the position of technical references, technical support, municipal coordination, state and central level of the Brazilian Ministry of Health.

Conclusion

The development of the curricular component provided the opportunity to expand and strengthen qualified nursing training, the contribution to overcoming the invisibility of the male audience

in health actions and care, promoted the integration of teaching and service from the academic extension to the male population. user of the public health service, the community and the professional health category that provides assistance to men in institutional health spaces and fostered scientific production directed to Nursing in men's health through the realization of research projects, preparation of materials technical, educational, seminars and scientific articles.

It is worth noting that such an initiative proved to be unique in the implemented territory, as it was the first undergraduate nursing course to develop a thematic discipline in the mandatory curricular component for the training of nurses. Furthermore, based on the findings, it was possible to observe the magnitude of the actions developed and the capacity for integration between the academic institution together with the extramural dimension, which further strengthened the formative character of the discipline.

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Correspondence Author
Anderson Reis de Sousa
Nursing School of Universidade Federal da Bahia.
241 Basílio da Gama St. ZIP: 40110-907. Canela. Salvador, Bahia, Brazil.
son.reis@hotmail.com

Experience of multiprofessional residents in first aid guidance and accident prevention in schools

Experiência de residentes multiprofissionais na orientação de primeiros socorros e prevenção de acidentes nas escolas

Experiencia de residentes multiprofesionales en orientación en primeros auxilios y prevención de accidentes en escuelas

Mykaella Cristina Araújo Margarida[1], Laisa dos Santos Nogueira[2], Ketlin Monteiro Felipe de Oliveira[3], Marina Rodrigues Novais[4], Geovana Sôffa Rézio[5], Lorena Morena Rosa Melchior[6]

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REVISA

1. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0002-4951-5246

2. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0001-5437-9480

3. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0001-7159-8300

4. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0002-6577-191X

5. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0002-2647-2669

6. Escola de Saúde de Goiás, Programa de Residência Multiprofissional. Goiânia, Goias, Brazil.
https://orcid.org/0000-0002-8644-1784

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RESUMO

Objetivo: relatar a experiência de residentes multiprofissionais em saúde na execução de ações de educação em saúde nas escolas, visando orientações de primeiros socorros e prevenção de acidentes. **Método:** Estudo descritivo e transversal realizado a partir da vivência de residentes multiprofissionais em um programa de educação em saúde nas escolas. **Resultados:** A ação objetivou capacitar e orientar escolares quanto a primeiros socorros e os cuidados emergenciais em casos de engasgamento, lesões perfurocortantes e queimaduras, orientar quanto à identificação e às ações a serem empregadas em caso de evidências de alterações do nível de consciência, desmaios, convulsões, bem como, na presença de uma parada cardiorrespiratória. A experiência adquirida complementa o aprendizado e permite conhecer uma pequena parcela da atuação na atenção básica. A experiência e conhecimento adquiridos na iniciativa perpassam o ambiente hospitalar e o contexto de urgência e trauma, por ser realizada dentro das escolas, favorecendo a construção da residência multiprofissional de maneira interdisciplinar e colaborativa, fortalecendo as ações de educação em saúde e desenvolvendo nos residentes competências e práticas coletivas. **Conclusão:** A iniciativa HUGOL nas Escolas tem alcançado os objetivos de treinar o público-alvo sobre primeiros socorros e conscientizar quanto a prevenção de acidentes, buscando minimizar as lesões não-intencionais e evitar abordagens pré-hospitalares errôneas.
Descritores: Promoção da saúde; Saúde Escolar; Equipe multiprofissional.

ABSTRACT

Objective: report the experience of multiprofessional health residents in carrying out health education actions in schools, first aid training and accident prevention. **Method:** Descriptive and cross-sectional study, based on the experience of multiprofessional residents in a health education program in schools. **Results:** The action aimed to train and guide students on first aid and emergency care in cases of choking, sharp injuries and burns, to provide guidance on the identification and actions to be taken in case of evidence of changes in the level of consciousness, fainting, seizures, as well as in the presence of a cardiorespiratory arrest. The acquired experience complements the learning and allows to know a small part of the performance in primary care. The experience and knowledge acquired in the initiative permeate the hospital environment and the context of urgency and trauma, as it is carried out within schools, favoring the construction of multiprofessional residency in an interdisciplinary and collaborative way, strengthening health education actions and developing skills in residents and collective practices. **Conclusion:** The HUGOL in Schools initiative has achieved the objectives of training the target audience on first aid and raising awareness about accident prevention, seeking to minimize unintentional injuries and avoid erroneous prehospital approaches.
Descriptors: Health Promotion; School Health; Multiprofessional Team.

RESUMEN

Objetivo: relatar la experiencia de los residentes de salud multiprofesionales en la realización de acciones de educación sanitaria en escuelas, formación en primeros auxilios y prevención de accidentes. **Método:** Estudio descriptivo e transversal basado en la experiencia de residentes multiprofesionales en un programa de educación para la salud en escuelas. **Resultados:** La acción tuvo como objetivo capacitar y orientar a los estudiantes en primeros auxilios y atención de emergencia en casos de atragantamiento, heridas cortantes y quemaduras, para asesorar en la identificación y acciones a tomar en caso de evidencia de cambios en el nivel de conciencia, desmayos, convulsiones, así como en presencia de un paro cardiorrespiratorio. La experiencia adquirida complementa el aprendizaje y permite conocer una pequeña parte del desempeño en atención primaria. La experiencia y los conocimientos adquiridos en la iniciativa permean el ámbito hospitalario y el contexto de urgencia y trauma, ya que se lleva a cabo dentro de las escuelas, favoreciendo la construcción de la residencia multidisciplinaria de manera interdisciplinar y colaborativa, fortaleciendo las acciones de educación en salud y desarrollando habilidades en los residentes y prácticas colectivas. **Conclusión**: La iniciativa HUGOL en las escuelas ha logrado los objetivos de capacitar al público objetivo en primeros auxilios y sensibilizar sobre la prevención de accidentes, buscando minimizar las lesiones no intencionales y evitar abordajes prehospitalarios erróneos.
Descriptores: Promoción de la Salud; Salud escolar; Equipo multiprofesional.

ORIGINAL

Introduction

Health is a central element for human, social and economic development, being an important dimension of quality of life.[1] Political, economic, social, cultural, environmental, behavioral and biological factors can both favor and harm an individual's health.[1]

The current existence of a social gradient, has an impact on the health and disease levels of populations, as a result of socioeconomic inequities.[2] Achieving equity is one of the main focuses of health promotion, which is a process of empowering the community to act to improve their quality of life and health, including greater participation in controlling this process.[1]

Health is a central element for human, social and economic development, representing an important dimension of quality of life.[6-7] In this context, developing health promotion and prevention activities, permanent education and training of education professionals, young people and children at school, constitutes practices recommended in the principles and guidelines of the Unified Health System (SUS) reinforced by the Health in Schools Program (PSE) .1 Thus, among the multiple health promotion and prevention activities that can be performed in the school environment, first aid training and accident prevention stand out.[3-6]

In the prehospital environment, the first approach performed with the victim is commonly conducted by lay people, but it is possible that the procedure is conducted safely, provided that the individual knows the correct way to apply the techniques and how to behave in situations of emergency.[5-6]

The school environment, at the same time as a favorable scenario for accident risks, also presents itself as an ideal place for the construction of knowledge in this perspective.[6-7] Thus, there is a need for actions focusing on the theme of first aid and the prevention of domestic accidents, taking into account that the emergency services may benefit from the reduction of possible misleading entries and the reduction of errors and bad interventions. carried out.[3,7-8]

For greater success in health promotion actions, the performance of a multiprofessional team is necessary and fundamental.[9] Thus, the multiprofessional team is composed of professionals from different areas of health, including: psychologists, physiotherapists, nurses, dentists, doctors, nutritionists, pharmacists, among others, working on a particular problem following a specific methodology inherent to their area of training, preserving and highlighting the professional identities involved, so as to include different approaches to health promotion, allowing the exchange of experiences and knowledge and developing skills for self-care of health and risk prevention.[9-10]

In this context, health promotion actions in schools are usually performed by professionals from programs linked to primary health care and family health strategy teams.[11-12] Initiatives undertaken by medium and high complexity institutions are not usually described in scientific literature, which points to the innovative character of the proposal of this experience report.

The purpose of this article is to report the experience of multiprofessional health residents in carrying out health education actions in schools, aiming at first aid guidelines and accident prevention.

Method

This is a descriptive and cross-sectional study, carried out from the experience of multiprofessional residents in a health education program in schools.

The institutional program developed by the Hospital de Urgências of the Northwest Region of Goiânia Governador Otávio Lage de Siqueira (HUGOL), entitled "HUGOL in Schools" in partnership with the Secretary of State for Education, Culture and Sport (SEDUCE), started in September 2016, and from 2018 the activities will be conducted in partnership with the multiprofessional residency program in health, in the area of concentration in urgency and trauma.

This program aims to raise the awareness of children and adolescents in state schools located in the northwest region of Goiânia, enabling them to recognize risks, and thus, act preventively in emergency situations, avoiding accidents. The program is carried out in monthly editions during the academic period, carried out in a multidisciplinary manner, by residents of the areas of nursing, physiotherapy and psychology.

As this is an experience report, the present study was submitted and approved by the board of the State Hospital of Urgencies of the Northwest Region of Goiânia Governador Otávio Lage de Siqueira on August 3, 2020 under opinion no. 099-00 to consent to the dissemination of the results of this experience, being guided by the guidelines and regulatory norms obeying all the determinations of Resolution 466/2012, of the National Health Council, for this type of research.

Results

The institutional program "HUGOL nas Escolas" started in September 2016 and, until March 2020, managed to reach 6,690 students from 14 schools in the state education network[13], in the northwest region of Goiânia, during its 31 editions.

The northwestern region of Goiânia is known for its occupation resulting from the struggle for the right to housing, as well as for the irregular growth of the neighborhoods that constitute it, being chosen in 1980 by the government to receive subdivisions directed to low-income populations[14], so that made a region with few formal workers, children with low education and high crime rate.[15-16]

In the last census published in 2010, the region had 164,203 inhabitants[17], but over the years it has undergone an urbanization process with an increase in commercial, educational and health areas[16,18], despite being still considered a region marked by violence.[19]

HUGOL was inaugurated in 2015 with the mission of offering humanized and referral assistance in urgency and emergency to SUS users, based on teaching and research, aiming to be nationally recognized in urgent and emergency care of medium and high complexity, integrating the values humanization, transparency, responsibility, ethics, innovation and quality.[20]

After the inauguration of the hospital, it began to evaluate and create ways to reach the population in the pre-hospital environment, understanding that such an action would result in a reduction of preventable accidents, thus being born, among other institutional initiatives, "HUGOL in Schools".

The purpose of the action was to train and advise students on first aid and emergency care in cases of choking, sharp injuries and burns, to advise on the identification and actions to be taken in case of evidence of changes in the level of consciousness, fainting, seizures, as well as, in the presence of a cardiorespiratory arrest. It also addresses the potential risks present in the domestic environment, on the street and in leisure activities with the respective developments and care.

In 2018, the HUGOL hospital in partnership with the Secretary of State for Goiás (SES / GO), started the multiprofessional health residency program at the institution, and since then, the multiprofessional residents of HUGOL, nurses, psychologists and physiotherapists have participated in the initiative.

The acquired experience complements the learning and allows to know a small part of the performance in primary care[21-23], when dealing with the unpredictability of the questions asked by the students, keeping the students attentive during an explanation, resuming the reasoning after countless interruptions, when achieving respond in a clear, correct and understandable manner to this population in question and by allowing the improvement of teaching and learning.

The articulation between education and health is essential24, since schools are privileged spaces for health promotion, prevention and education activities aimed at children, adolescents and young adults, playing a fundamental role in the formation of critical citizens, promoting autonomy, independence, exercise rights and duties, as well as monitoring health conditions and quality of life, encouraging healthy habits.[3,6,8,21,25] And, one of the relevant points for this articulation is the interdisciplinary contribution during the process of training students26, a condition explored by the initiative of the present study.

Residents' participation in the students' training process is usually expressed as gratifying, but complex.[23] At the end of the lectures, students often seek clarifications about the residents' professions, about other professions working in the hospital, request to repeat the cardiopulmonary resuscitation maneuver and usually show interest in the work and activities developed in the hospital environment.

It is also usual for teachers and coordinators present at the lecture to address residents to make considerations about the action taken, clear doubts, reinforce the work done and even propose new actions, so that such situations strengthen the objectives of the initiative and encourage residents to look at their personal and professional growth.

The presence of professionals with different specialties makes up the multiprofessional approach in the school environment and stands out as a differential, in view of the development of activities focused on multidisciplinarity, based on the different look that each professional builds from the developed activities perspective, thus allowing planning and performance of action based on the union of knowledge.[23-26]

Discussion

The "HUGOL in Schools" initiative indirectly contributes to the Health at School Program (PSE)[27], since this program assumes the articulation between the actions of the public network of basic education and SUS, focusing on basic health units, the in order to expand the reach and repercussions on the health conditions of students and their families, with the purpose of addressing vulnerabilities in order to avoid damage to the development of children and adolescents.[11-12,21,28]

The questions, interactions and contributions of children, adolescents and young adults are clearly different in relation to the levels of complexity, requiring professional expertise during responses or demonstrations of techniques.[22-23] It is necessary to demystify knowledge that is based on common sense, for example, to clarify that one cannot run when the burns reach the clothes, as oxygen fuels the fire, being ideal to protect the eyes, lie down and roll on the floor.[29]

The experience and knowledge acquired in the initiative permeate the hospital environment and the context of urgency and trauma, as it is carried out within schools, favoring the construction of multiprofessional residency in an interdisciplinary and collaborative way, strengthening health education actions and developing skills in residents and collective practices.[7-9]

Emergency and trauma residency focuses on in-hospital performance, focusing on the traumatic post-event, providing theoretical and practical challenges for residents due to the complexity of serious and unstable patients, emergency care, quick decision making, discussion of clinical cases and seminar presentations.[30] However, the initiative to insert multidisciplinary emergency and trauma residents in health promotion and prevention approaches stands out as unprecedented, allowing the transmission of knowledge and care in the pre-event from the perspective of preventable traumatic events.

Conclusion

The HUGOL in Schools initiative has achieved the objectives of training the target audience on first aid and raising awareness about accident prevention, seeking to minimize unintentional injuries and avoid erroneous prehospital approaches. Residents of the multiprofessional health program have contributed to the practical application of these activities, training students, but also improving their own learning about collective approaches at the level of primary care, reflecting on humanized and quality assistance to the population in high complexity care.

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Correspondent Author
Mykaella Cristina Araújo Margarida.
Itacaré Av. Sq. 9 Lt 12, Residencial Tempo Novo. ZIP: 74.496-025. Goiânia, Goiaás, Brazil.
mykaella.pucgoias@gmail.com

Precipitating Factors of Delirium in Elderly Hospitalized Patients

Fatores Precipitantes de Delirium em Pacientes Idosos Hospitalizados

Factores precipitantes del delirio en pacientes ancianos hospitalizados

Mateus de Carvalho Maciel[1], Luciana Mitsue Sakano Niwa[2], Suely Itsuko Ciosak[3], Myrian Spinola Najas[4]

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1. Universidade de São Paulo, Escola de Enfermagem. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0003-0356-463X

2. Universidade de São Paulo, Escola de Enfermagem. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0002-9342-7454

3. Universidade de São Paulo, Escola de Enfermagem. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0001-5885-2524

4. Universidade Federal de São Paulo. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0002-5546-6970

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RESUMO

Objetivo: Caracterizar os fatores precipitantes e modificáveis de delirium em idosos internados acompanhados pela equipe móvel de Geriatria e Gerontologia. **Método:** estudo transversal, descritivo, exploratório e prospectivo realizado em um hospital de alta complexidade de São Paulo, com idosos hospitalizados. Os dados foram analisados por estatística descritiva. **Resultados:** foram avaliados 12 idosos, sendo 91,7% do sexo feminino, internados predominantemente em enfermarias cirúrgicas 83,3%. Os fatores precipitantes observados foram os ambientais presentes em 100% dos sujeitos do estudo, sendo possível realizar alguma intervenção em 83,3% dos casos, seguida pela categoria das doenças intercorrentes onde 45,4% dos casos foram passíveis de intervenção. **Conclusão:** no presente estudo, ao caracterizar os fatores precipitantes e modificáveis de delirium em idosos hospitalizados, espera-se evidenciar a possibilidade da implementação de prevenção e tratamento do quadro apontado, visando despertar os profissionais que atuam na prestação dos cuidados para a relevância do problema. **Descritores:** Delirium; Assistência Hospitalar; idoso; idoso hospitalizado; Enfermagem Geriátrica.

ABSTRACT

ObjectiveTo characterize the precipitating and modifiable factors of delirium in hospitalized elderly accompanied by the mobile team of Geriatrics and Gerontology. **Method:** cross-sectional, descriptive, exploratory and prospective study conducted in a highly complex hospital in São Paulo, with hospitalized elderly. The data were analyzed using descriptive statistics. **Results**: 12 elderly people were assessed, 91.7% of whom were female, predominantly hospitalized in surgical wards 83.3%. The precipitating factors observed were the environmental factors present in 100% of the study subjects, and it is possible to perform some intervention in 83.3% of the cases, followed by the category of intercurrent diseases where 45.4% of the cases were subject to intervention. **Conclusion**: in the present study, by characterizing the precipitating and modifiable factors of delirium in hospitalized elderly people, it is expected to highlight the possibility of implementing prevention and treatment of the mentioned condition, aiming to awaken the professionals who work in the provision of care for the relevance of the problem.
Descriptors: Delirium; Hospital Assistance; elderly; hospitalized elderly; Geriatric Nursing.

RESUMEN

Objetivo: Caracterizar los factores desencadenantes y modificables del delirio en ancianos hospitalizados acompañados del equipo móvil de Geriatría y Gerontología. **Método:** estudio transversal, descriptivo, exploratorio y prospectivo realizado en un hospital de alta complejidad en São Paulo, con ancianos hospitalizados. Los datos se analizaron mediante estadística descriptiva. **Resultados:** se evaluaron 12 ancianos, 91,7% de sexo femenino, predominantemente hospitalizados en quirófano 83,3%. Los factores precipitantes observados fueron los factores ambientales presentes en el 100% de los sujetos de estudio, siendo posible realizar alguna intervención en el 83,3% de los casos, seguido de la categoría de enfermedades intercurrentes donde el 45,4% de los casos fueron sometidos a intervención. **Conclusión:** en el presente estudio, al caracterizar los factores precipitantes y modificables del delirio en ancianos hospitalizados, se espera resaltar la posibilidad de implementar la prevención y el tratamiento de la condición mencionada, con el objetivo de despertar a los profesionales que laboran en la prestación de cuidados para la relevancia del problema.
Descriptores: Delirio; Asistencia hospitalaria; anciano; ancianos hospitalizados; Enfermería Geriátrica.

ORIGINAL

Introduction

Delirium is a transient and fluctuating neuropsychological organic syndrome frequent in hospitalized elderly and can be considered as the seventh vital sign.[1] According to Inouye[2], it is characterized with an acute onset; with floating course; attention disorder; disorganization of thought; change in the level of consciousness; cognitive deficits; perception and psychomotor disorders. They can be: hyperactive, characterized by agitation and wakefulness, hypoactive characterized by lethargy, with decreased level of motor and mixed activity; alteration of the sleep cycle; emotional disorders, manifested by intermittent and unstable symptoms of fear, paranoia, anxiety, depression, irritability, apathy, anger or euphoria.

Delirium recurs during hospitalizations and its prevalence on admission is between 14 and 24%. On the other hand, the incidence, during the hospitalization period, is highly variable, ranging from 7 to 52%.[3] Despite the high frequency, delirium is not always noticed due to the variability of its presentation, with up to 70% of the cases being underdiagnosed, leading to longer hospitalizations.[4]

It is considered a multifactorial condition, in some cases, it can be triggered by an isolated factor, although the interrelation of associated factors is more frequent. It is known that the cause for the occurrence of delirium involves a complex interaction between a vulnerable variable (predisposing) and exposure to harmful factors (precipitating).[2-3]

Predisposing factors can be linked to risk factors present at hospital admission, thus significantly increasing the chances of delirium occurrence. Predisposing factors are considered: being male; have cognitive deficit; having a history of previous delirium; depression; immobility; the low level of physical activities; have a history of falls; dehydration; malnutrition; polypharmacy; multiple comorbidities; serious illnesses; renal failure; liver diseases; diseases: terminal, neurological, psychiatric and metabolic; fractures or traumas, HIV infections and, especially the age of over 65, the presence of dementia, sensory deficits and functional dependence.[1,3-4]

As for the precipitating factors, we can mention the use of medications, mainly those with psychoactive action, primary neurological disease; complications, especially infections, fever, hypothermia, anemia, dehydration and malnutrition; surgeries; and environmental factors such as physical restriction, the use of bladder and integral tubes, multiple procedures, pain, constipation with fecaloma formation, sensory deficits and sleep deprivation.[5-6]

Thus, it becomes essential to identify the factors involved in the occurrence of delirium, so that the health professional can design interventions aimed at its prevention and control, since the action on one or more of these factors is sufficient to minimize the severity from the board.[7]

In this sense, the objective of the study was to identify the precipitating and modifiable factors of delirium in elderly patients followed up by the Interconsultation Team of the Discipline of Geriatrics and Gerontology in a highly complex hospital.

Method

Cross-sectional, descriptive, prospective and exploratory study, carried out in the clinical, surgical and intensive care units of a University Hospital of high complexity and large in the city of São Paulo.

The study population consisted of elderly people aged 60 years or over, accompanied by the Interconsultation Team of the Discipline of Geriatrics and Gerontology, during the month of October 2015, who were attended, upon request, during the period of hospitalization.

For data collection, a questionnaire with open and closed questions was used, divided into: characterization of the patient to outline the profile and identification of the potential precipitating factors of delirium such as the use of medications, drugs, the presence of diseases, surgeries, environmental factors and complications.

The questionnaire was applied within 24 hours after the geriatrician's assessment, in a single moment, the data were obtained through interview and physical evaluation of the patient and consultation of the medical record, when necessary, the patient's companion was requested as an informant.

In the analysis of the results, descriptive statistics were presented, presented in the form of frequency tables.

In order to comply with the ethical precepts of research with human beings, according to Resolution CNS / MS 466 of December 12, 2012, it was submitted and approved by the Ethics and Research Committee with human beings of the Federal University of São Paulo, under opinion nº 1.325. 856/15. Participants were instructed on the study procedure, read, agreed and signed the Free and Informed Consent Form.

Results

Twelve hospitalized elderly patients attended by the Geriatric and Gerontology Interconsultation Team participated in the study during the proposed period.

Among hospitalized elderly, there was a predominance of females (91.7%), aged 80 years or over (41.7%), widowed (50%), living with children or grandchildren (58.3%) and most were hospitalized in surgical wards (83.3%), as shown in Table 1.

Table 1- Distribution of study participants according to their characterization. Sao Paulo - SP, 2015

Identification Data	N	%
Age Range		
60 – 69 years	3	25
70 – 79 years	4	33,3
80 years or more	5	41,7
Sex		
Female	11	91,7
Male	1	8,3

Marital Status		
Widower	6	50
Married	5	41,7
Divorced	1	8,3
Who you live with?		
Spouse	5	41,7
Children / Grandchildren	7	58,3
Type of infirmary		
Clinic	1	8,3
Surgical	10	83,3
ICU	1	8,3

The most frequent previous diagnoses among the elderly were diseases of the circulatory system, endocrine, nutritional and metabolic diseases, which were present in 91.7%. In current diagnoses, the category of mental and behavioral disorders was the most prevalent with 41.7%.

As for the categories of precipitating factors, we observed that environmental factors were present in all study subjects, being possible to carry out some intervention in 83.3% of the cases, followed by the category of intercurrent diseases, of which 91.7% of the cases, 45, 4% were amenable to intervention (Table 2). On the other hand, primary neurological diseases and surgeries are non-modifiable factors.

Tabela 2- Distribuição dos participantes do estudo de acordo com as categorias dos fatores precipitantes de delirium e possibilidade de serem modificados. São Paulo - SP, 2015

	Frequency		**Modifiable**	
Categories	**n**	**%**	**n**	**%**
Environmental Factors	12	100	10	83,3
Complications	11	91,7	5	45,4
Medication / Drugs	11	91,7	2	18,2
Surgeries	6	50	0	0
Primary Neurological Disease	2	16,7	0	0

Among the environmental factors, pain is the most frequent precipitating factor (83.3%) and subject to some type of intervention to be modified (80%), followed by sleep deprivation (50%), where modification of the condition, also, had a high occurrence (83.3%) (Table 3).

As for medications, polypharmacy was the most frequent factor identified (75%), however, with a low percentage of intervention (11.1%) (Table 3). Constipation/fecaloma (25%), urinary retention (16.7%) and fever (8.3%) are the most susceptible to change among the intercurrent diseases (Table 3).

Orthopedic surgeries (41.7%) were the most frequent, but they are not subject to changes, as well as primary neurological diseases (16.7%) (Table 3).

Table 3- Distribution of study participants according to the precipitating factors of delirium and the possibility of being modified. Sao Paulo - SP, 2015

Category	Frequency		Modifiable	
Environmental Factors	n	%	n	%
Pain	10	83,3	8	80
Sleep deprivation	6	50	5	83,3
Prolonged Immobilization	5	41,7	0	0
Enteral Probe	4	33,3	0	0
Decreased Visual Acuity	4	33,3	1	25
Bladder Probe Delay	3	25	0	0
Multiple Procedures	3	25	0	0
Decreased Hearing Acuity	2	16,7	0	0
Physical Restriction	1	8,3	0	0
Medication / Drugs				
Polypharmacy	9	75	1	11,1
Narcotics	5	41,7	1	20
Hypnotics	1	8,3	0	0
Anticholinergics	1	8,3	0	0
Intercurrent Disease				
Severe Acute Disease	7	58,3	1	14,3
Anemia	7	58,3	0	0
Malnutrition	7	58,3	0	0
Infections	3	25	0	0
Constipation / fecaloma	3	25	3	100
Urinary retention	2	16,7	2	100
Dehydration	2	16,7	1	50
Fever	1	8,3	1	100
Surgeries				
Orthopedic	5	41,7	0	0
Other surgeries (non-cardiac)	3	25	0	0
Primary Neurological Disease				
Primary neurological disease (stroke, intracranial hemorrhage, meningitis, encephalitis)	2	16,7	0	0

Discussion

In order to identify the precipitating and modifiable factors of delirium in elderly patients, it is observed that the longer I live the greater the chance of developing delirium.[8-9]

There is a predominance of females, corroborating with the study conducted in Rio de Janeiro, where of the 767 elderly people evaluated, 60.5% (n = 464) were female.[10] According to DSM-IV, 11 the proportion of women to men increases with advancing age. The high male mortality rates related to violence and traffic accidents, added to the greater female demand for health services, can help to justify this difference,[12-13] however, it is worth mentioning that, in the case of delirium, the male gender is considered as a predisposing factor, although in our study it was not possible to verify it, due to the small sample size.

In the present study, it was observed that half of the elderly were widowed, however, none of the subjects lived alone, with 41.7% (n = 5) living with their spouse and 58.3% (n = 7), with others relatives.

The fact that in Brazil the elderly person has the right to remain accompanied during the hospitalized period, 14 the companion can play a reassuring role, and be an important ally during hospitalization, and should be encouraged to encourage the elderly, keeping him or her oriented about the time and space, this being a collaborative factor for the prevention of delirium.

Regarding diagnoses, delirium and femur fracture were the most recurrent, being present in 33.3% (n = 4) of the cases. A review15 pointed out that in-hospital mortality due to fractures of the proximal femur in the elderly is 5.52% in one month, reaching 24.94% in two years.

When analyzing the categories of precipitating factors, we observed that environmental factors were present in all the elderly evaluated, it is important to note that, of these, 83.3% were subject to some intervention, demonstrating the importance of health professionals being able to identify them and propose some type of intervention.

Pain was the most frequent and modifiable environmental factor. A review[16] on the measurement of pain in the elderly, concluded that there is a tendency for professionals to despise or devalue the pain report and that, in addition, there are still interferences of cultural values where patients demonstrate that they do not want to raise concerns, assuming that pain is normal part of old age. The professional must be open to listening to the patient, paying attention to the nonverbal of the patient, because through facial expressions and changes in behavior, possible pain complaints cannot be raised spontaneously.

Another aspect that should be raised is that in the hospital, the nursing team is responsible for deciding when to administer the medications previously prescribed by the doctor in case of "if necessary",[17] therefore, professionals should pay attention to the moments that require greater manipulation of the elderly, such as bathing, exams in other sectors, dressings and diaper changes, as well as in physiotherapy sessions, where pain complaints are commonly intensified and can be minimized with previous administration of analgesia.

Sleep deprivation of the elderly in the hospital environment is another factor pointed out in the study. Environmental factors associated with hospitalization stress must be constantly evaluated, as they contribute to sleep problems in old age.[18] The health team must provide the patient with a calm environment, reducing noise, adopting strategies such as the adequacy of the night medication schedules and the performance of procedures during this period. In addition, the elderly must remain awake during the day and avoid caffeine intake to sleep at night.[1,18-19]

Prolonged immobility during hospitalization is another factor that must be avoided. Devices such as catheters and probes contribute to limiting movement, as well as physical restraint in the bed, which in addition to increasing the occurrence of delirium, worsens agitation and is a potential cause of trauma. In situations where rest is prescribed, or the patient is unable to move, the team must be concerned with the correct positioning of the patient in the bed, aiming at the prevention of pressure injury and patient comfort.[20] Physiotherapy and early passive mobilization are also factors that must be implemented.[1,19]

Sensory deficits deserve attention from health professionals due to their impact on the life of the elderly. In the present study, one third of the patients had a decrease in visual acuity in addition to a decrease in hearing acuity, a result similar to the study[21] carried out in Belo Horizonte, demonstrating the frequency of these deficits in this population. There are potential interventions that can be implemented to minimize these deficits, and consequently, minimize the chances of delirium, such as the use of adequate lighting, adaptation of utensils, use larger letters, encourage the use of glasses, when already in use, to minimize visual deficits, and for hearing deficits, professionals must speak clearly, maintaining eye contact with the patient and encourage the use of hearing aids, when indicated.[1,5] It is noteworthy that family members often forget deficit correction devices at home, the team being able to advise on their importance and request that they be used by the patient during the hospital stay.

Regarding medications, it is known that its management becomes even more difficult in the elderly population, several medications are associated with the development of delirium, we can mention opioid analgesics, benzodiazepine sedatives, anticholinergics, reuptake inhibitor antidepressants serotonin and tricyclic drugs, among others.1 It is important to note that none of these medications is totally contraindicated, as there are situations where the benefits to the patient are greater than the risks they offer, however, they must be used with caution, avoiding or reducing their use whenever possible.

As for intercurrent diseases, health professionals should devise strategies for their control, whenever possible. In our study, although infrequent, constipation / fecaloma, urinary retention and fever were totally modifiable conditions. The professional must be attentive when carrying out the physical examination and always question about the patient's eliminations, as he often does not value changes in his intestinal and urinary habit, requiring some type of intervention, such as the use of laxatives, suppository, intestinal lavage or relief bladder catheter to improve the condition. Although not all intercurrent diseases can be stopped immediately, it is important that their detection is done as early as possible. The prevention and correct treatment of intercurrent diseases are configured as a preventive factor for the delirium.

There are also other aspects that, although they constitute precipitating factors, are not subject to direct interventions, such as surgeries and primary neurological diseases, however, it is important that the professional is aware of this relationship, considering that orthopedic surgeries have an incidence which can reach 50%,[22] and professionals should be attentive to all aspects already discussed, especially regarding mobilization and pain, for the prevention of delirium.

Conclusion

As we have seen, delirium is a recurrent clinical disorder during hospitalizations of the elderly population, however, often underdiagnosed, and consequently undertreated.

For its management and prevention, it was evidenced in the present study that environmental factors had a high prevalence, with pain and sleep deprivation being subject to intervention in a short period of time. Intercurrent diseases such as constipation / fecaloma, urinary retention, fever and dehydration, although not very prevalent, are also factors with a high possibility of modification, and deserving special attention when it comes to the hospitalized elderly population, therefore, health professionals must be prepared to identify the precipitating factors of delirium, which favor its development.

Multiprofessional action is extremely important for the management of elderly patients in the hospital, since non-pharmacological actions and treatments are an important preventive factor for delirium.

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Correspondent Author
Mateus de Carvalho Maciel
419 Dr. Enéas Carvalho de Aguiar Av.
ZIP: 05403-000. Cerqueira César. Sao Paulo, Sao Paulo, Brazil.
mateusmaciel@usp.br

Inquérito Brasileiro Sobre Terapia de Nutrição Domiciliar: panorama atual

Brazilian Survey on Home Nutrition Therapy: current overview

Encuesta brasileña sobre terapia nutricional domiciliaria: panorama actual

Denise Philomene Joseph van Aanholt[1], Luciana Mitsue Sakano Niwa[2], Mariana Borges Dias[3], Diogo Toleto[4], Suely Itsuko Ciosak[5]

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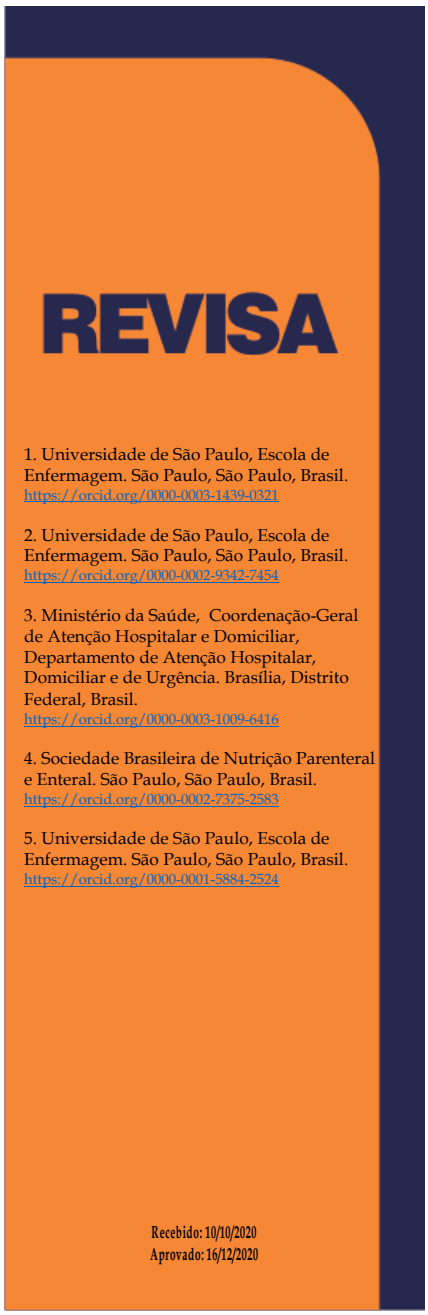


RESUMO

Objetivo: descrever como a terapêutica nutricional domiciliar é realizada no Programa Melhor em casa do Ministério da Saúde e na Saúde suplementar. **Método:** Estudo transversal, com dados secundários, onde foram selecionados os perfis de profissionais atuantes em atenção domiciliaria no Brasil. A coleta de dados ocorreu de março a junho de 2018, depois de submetido e aprovado pelo Comitê de Ética e Pesquisa. **Resultados:** Dos 289 brasileiros, 74% eram profissionais atuantes na Assistência domiciliaria. O tipo de Terapia Nutricional realizada foi 67% enteral exclusiva seguida de 33% terapia mista. A prescrição realizada de dieta exclusiva artesanal foi de 9% e de dieta enteral mista 55%. A maioria recebe dieta por gravidade intermitente, seguida de administração em "bolus", gravitacional contínua e controle do gotejamento através da bomba de infusão. **Conclusão:** Os achados nos dão uma visão panorâmica da terapia nutricional enteral domiciliar no Brasil. A aumento da terapia nutricional domiciliaria se faz necessária especialmente pelo aumento da população idosa e consequentemente de maior presença das doenças crônicas que podem levar a incapacidade, dependência, maior tempo de hospitalização e custos para o sistema de saúde. É fundamental a presença da equipe interdisciplinar, de boas práticas e do acompanhamento das famílias nos domicílios.

Descritores: Terapia nutricional; Nutrição enteral; Nutrição parenteral; Serviços de assistência domiciliar.

ABSTRACT

Objective: To learn how home nutritional therapy is carried out in the Ministry of Health's Better Home Program and in Supplementary Health. **Method:** Cross-sectional study, with secondary data, in which the profiles of professionals working in home care in Brazil were selected. Data collection took place from March to June 2018, after being submitted and approved by the Ethics and Research Committee. **Results:** Of the 289 Brazilians, 74% were professionals working in home care. The type of nutritional therapy performed was 67% exclusive enteral followed by 33% mixed therapy. The prescription of an exclusive handmade diet was 9% and a mixed enteral diet 55%. Most receive intermittent gravity diet, followed by bolus administration, continuous gravitational and drip control through the infusion pump. **Conclusion:** The findings give us a panoramic view of home enteral nutritional therapy in Brazil. The increase in home nutritional therapy is necessary especially because of the increase in the elderly population and, consequently, the greater presence of chronic diseases that can lead to disability, dependence, longer hospitalization and costs for the health system. The presence of an interdisciplinary team, good practices and monitoring of families at home is essential.

Descriptors: Nutrition therapy; Enteral nutrition; Home parenteral nutrition; Home care service.

RESUMEN

Objetivo: Conocer cómo se lleva a cabo la terapia nutricional domiciliaria en el Programa Mejor Hogar del Ministerio de Salud y en Salud Complementaria. **Método:** Estudio transversal, con datos secundarios, en el que se seleccionaron los perfiles de los profesionales que trabajan en la atención domiciliaria en Brasil. La recolección de datos tuvo lugar de marzo a junio de 2018, luego de ser presentados y aprobados por el Comité de Ética e Investigación. **Resultados:** De los 289 brasileños, el 74% eran profesionales que trabajaban en la atención domiciliaria. El tipo de terapia nutricional realizada fue 67% enteral exclusiva seguida de 33% terapia mixta. La prescripción de una dieta exclusiva artesanal fue del 9% y una dieta enteral mixta del 55%. La mayoría recibe una dieta de gravedad intermitente, seguida de administración de bolo, control gravitacional continuo y de goteo a través de la bomba de infusión. **Conclusión:** Los hallazgos nos brindan una visión panorámica de la terapia nutricional enteral domiciliaria en Brasil. El aumento de la terapia nutricional domiciliaria es necesario sobre todo por el aumento de la población anciana y, en consecuencia, la mayor presencia de enfermedades crónicas que pueden derivar en discapacidad, dependencia, mayor internación y costos para el sistema de salud. La presencia de un equipo interdisciplinario, buenas prácticas y seguimiento de las familias en el hogar es fundamental.

Descriptores: Terapia nutricional; Nutrición enteral; Nutrición parenteral; Servicios de atención a la salud domiciliário

ORIGINAL

Introduction

Home nutritional therapy (HNT) has become an integrated modality in home care (HC) with increasing expansion today. HNT can be defined as nutritional and clinical assistance to the patient at home, with the objective of recovering or maintaining the maximum level of health, functionality and convenience. It comprises from oral nutritional therapy, through the use of nutritional supplements and supplements, enteral nutritional therapy (ENT) and parenteral nutritional therapy (PNT).[1–2]

Considering the guidelines and objectives of the National Food and Nutrition Policy (NFNP) and the National Food and Nutrition Security System (NFNSS), it is possible to say that HNT contributes to guaranteeing the right to adequate and healthy food for those with special needs. , although it is not yet a reality for individuals in household enteral nutrition therapy (HENT) with low purchasing power.[3-4]

The practice of an adequate and safe diet must be performed by a multidisciplinary team of nutritional therapy (MTNT), following its standardization. The MTNT must prescribe an individualized Nutritional Therapy (TN), with the inclusion of education and nutritional counseling of the oral route or, of diets considered as high complexity, the PNT and TNP4-5, therapies that are contemplated in the NFNP among the Needs Special Food Products (NSFP)[3]:

"The dietary needs, whether restrictive or supplementary, of individuals with metabolic or physiological changes that cause changes, temporary or permanent, related to the biological use of nutrients or the route of food consumption (enteral or parenteral)".

Therefore, individuals with NSFP, considering the human rights to adequate food (HRAF), which involves, among different situations, the guarantee of access to food for special purposes, respect for individual and family habits and comprehensive health care, should be included.[5]

Scientific publications have focused more on the tertiary health sector, with reports that inadequate nutrition associated with malnutrition are public health problems that affect both social and economic performances, prompting health demands to improve the final clinical outcomes. Complication rates in malnourished individuals are high and have a high financial cost in the health sector, related to adjuvant therapies, greater use of medication and days of hospitalization and readmissions, among others. The high incidence of in-hospital malnutrition remains high, even after almost 20 years of the Brazilian Hospital Nutritional Assessment Survey-IBRANUTRI.[6-7]

Research on nutritional status in patients cared for at home is scarce in our literature, mainly with Brazilian data. Some studies with HENT, mainly in the elderly, reflect the high incidence of malnutrition and improvement of the condition, when they receive the ENT with nutritional guidance and multiprofessional monitoring.[8-9]

Thus, the performance of appropriate nutritional interventions, practiced by a trained multidisciplinary team, through good therapeutic plans for NT, can reverse unfavorable situations, improving clinical and nutritional outcomes, as well as the quality of life of individuals, in addition to cost reduction with health.[10]

In this context, NSFP-related actions have been guided by the Food and Nutrition Security (FNS) agenda, which is structured in an intersectoral manner and with broad social participation. Their demands are established by the National Food and Nutritional Security Plans (NFNSP), which from 2014, after the review of the interministerial Chamber of food and nutritional security, inserted a new goal directing care in the Health Care Networks (HCN), especially at home.

Thus, individuals in NT can be accompanied by several points of the HCN, depending on their clinical status and the resolving capacity of the points of attention. Their care must be inserted in the lines of comprehensive care based on the needs of individuals, reducing the fragmentation of care, maintaining adequate nutritional care, according to what is recommended by NFNP.[5]

Among public policies, it is important to note that NSFP, meets the principle of equity, one of the three principles of SUS and also one of the principles of NFNP, although we still find many challenges to be faced to operationalize the care for these individuals by HCN, specifically in HC.[5]

HC is a modality of health care, substitutive or complementary to hospital care, which involves actions to promote health, prevention and treatment of diseases, as well as the rehabilitation of individuals in the home environment, with guaranteed continuity of care and integrated with health care networks. health care. In this way, it allows dehospitalization for chronic patients, clinically stable and who need to maintain a multidisciplinary follow-up in a humanized way. For this practice to occur with humanization, a good hospital discharge strategy is necessary.[11-13]

Hospital discharge can occur even when there is no complete recovery of nutritional status or full capacity to eat normally orally and have an adequate absorption of all nutrients. Thus, the promotion of a better quality of life for individuals with special dietary needs after hospital discharge, must consider aspects that involve not only food, but also consider the clinical, nutritional, social, cultural and affective aspects related to health status. of the individual, involving the family and the entire multidisciplinary health team.[14]

Within the scope of SUS, HC was effective as of Decree 2029, of 2011, which came to promote the institution of the Best at Home program in November 2011 and has undergone successive adjustments to the current regulations, inserted in Consolidation Ordinance 1, 5 and 6, of September 28, 2017. According to data from the coordination of the Melhor em Casa do MS program, in April 2020 this program had Services in 583 Brazilian municipalities in 26 states potentially covering 37% of the Brazilian population, through performance of 1458 multiprofessional teams.[5,15]

Considering this scenario that involves HNT, the right to adequate food supported by public policies and chronic diseases, which increase with population aging, NSFP and the lack of publications referring to HNT, mainly in SUS, was the objective of the Research Committee. Home Nutritional Assistance (HNA) of the Brazilian Society of Enteral and Parenteral Nutrition (BRASPEN-SBNPE), conduct a second HNT survey to learn how this practice is carried out in the Best at Home Program in MS and also in supplementary health.

In this sense, the objective of the study was to describe how home nutritional therapy is carried out in the Better Home Program of the Ministry of Health and in Supplementary Health.

Method

Epidemiological, observational and cross-sectional study, carried out in Brazil with secondary data from the BRASPEN database, contained in the Latin American HNT survey, conducted with member countries of the Latin American Federation of Parenteral and Enteral Nutritional Therapy (LAFPENT), through application of a questionnaire prepared by HNA composed of 15 multiple-choice questions, through the Survey Monkey tool (http://www.surveymonkey.com/), sent to parenteral and enteral nutrition societies in LAFPENT member countries. The collection period took place from March to June 2018, including 17 countries in Latin America plus Spain.

From this database, information from Brazilian data was selected, considering only professionals working in home care, both from the Better at Home program of the Ministry of Health, representing the public and private sectors, the profiles of professionals working in home care , including the coordination of the Best at Home program at the Ministry of Health, as well as HC companies with the help of the National center for Home Care Services companies (NHCS) and the pharmaceutical nutrition industries.

In compliance with Resolution 466 of 2012, the project was submitted to and approved by the Research Ethics Committee of the University of São Paulo School of Nursing, under No. 3,995,405.

Results

From the total of 289 Brazilian respondents, 74% (214) were professionals working in the HC and of these, 84% (180) were from the public sector, along with the Best at Home program of the Ministry of Health. 34% of nurses, 8% of doctors and 17% of other health professionals.

All Brazilian regions were included in the survey, with a greater participation of the Southeast region (52%) followed by the Northeast region (23%) as shown in Figure 1.

Figure 1- Percentage distribution of responses to the HNT survey received from different Brazilian regions

North – 4%
Northeast – 23%
Midwest – 14%
Southeast – 52%
South – 16%

Source: LAFPENT 2018 home nutrition therapy survey.

We observed that the majority (79.0%) of the patients seen in the HC are elderly, in all clinical conditions observed and 82.7% of the illnesses fall on neurological disease, with the elderly having 67.8% (Table 1).

Table 1 - Distribution of age group and type of clinical condition of patients seen at home, according to a HNT survey. Brazil, 2018

Type of clinical condition	Age Range (years)			Total N(%)
	< 18 N.(%)	18 a 60 N.(%)	> 60 N.(%)	
Neurological	9(4,2)	23(10,7)	145(67,8)	177(82,7)
Oncology	0 (0)	7(3,3)	12(5,6)	19(8,9)
Surgical	0(0)	0(0)	2(0,9)	2(0,9)
Others	1(0,5)	5(2,3)	10(4,7)	16(7,5)
Total	10(4,7)	35(16,3)	168(79)	214(100)

Source: LAFPENT home nutritional therapy survey.

Analyzing the type of TN performed, most companies providing home care (DC) serve patients, mainly in exclusive ENT (67%), followed by 33% mixed TN, besides being able to have PNT and use of supplements by orally.

Regarding TNPD, this has been gaining space among the DC, being reported by 50% of the professionals who responded to the survey and the percentage in the last 12 months, varies from 10% to more than 30% of the patients seen. This practice has been adopted both in public and private services, but with more followers in the first group, which also serve a higher percentage of patients (Table 2).

Table 2- Patients percentage in NPTT attended in the last 12 months. Brazil, 2018.

NPTT patients	Type of service		Total %
	Public Service%	Private Service%	
< 10%	12,1	6,1	18,2
10 to 30%	18,7	1,4	20,1
> 30%	10,3	1,4	11,7
None	43,0	7,0	50,0
Total	**84,1**	**15,9**	**100**

Source: LAFPENT 2018 nutritional therapy survey.

In this survey, when analyzing the HENT, considering the type of prescription performed by health professionals, there was a low practice in the use of exclusive handmade diet (9%) and the highest frequency was in the use of mixed enteral diet (55%), mainly in the public service, the industrialized diet, despite representing 36% of the prescribed diets, was more frequent in the private sector (Table 3). The same table also shows that the frequency of using artisanal diets is the same in both the public and private sectors.

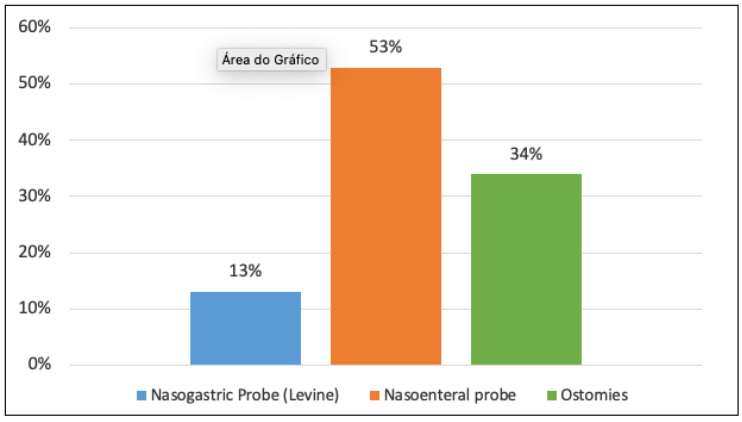
Table 3- Type of enteral nutrition diet prescribed by Brazilian health professionals, working in HC. Brazil, 2018.

NE prescription	Type of service		Total n. (%)
	Public Service n(%)	Private Service n (%)	
Industrialized diet	57(32)	17(50)	74(36)
Craft diet	16(9)	3(9)	19(9)
Mixed Diet	107(59)	14(41)	121(55)
Total	**180(100)**	**34(100)**	**214(100)**

Source: LAFPENT 2018 nutritional therapy survey.

The most widely used access route for administering HENT is the nasoenteral tube (53%.), Although most patients are neurological, gastrostomy was less used (34%). Levine's nasogastric tube is unfortunately a reality in the public sector and was referred to as the access route in 13% of cases, as shown in Figure 2.

Figure 2 - Distribution of the type of access roads used in HENT. Brasil, 2018.



Source: LAFPENT nutritional therapy survey.

Considering the form of administration of HENT, it was observed that the majority (61.7%) received NE by intermittent severity, mainly in the public service (64%), but it is also adopted by 50% of the private services. Bolus administration is the second most used form (24.7%), with greater use in the private sector (38.2% vs. 22.1%). It was found that only 3.9% of patients receive the diet by infusion pump, being more frequent in private services (8.8%). Continuous dripping without the use of an infusion pump, although it is still a new practice in our country, with greater adherence to the public service (11% X 3%) (Table 4).

Table 4- Form of administration of enteral nutrition used by HENT. Brazil, 2018.

Way of NE Administration	Type of Service		Total
	Public n(%)	Private n (%)	n (%)
Infusion bomb	5(2,9)	3(8,8)	8(3,9)
Intermittent drip	110(64)	17(50)	127(61,7)
Continuous Drip	19(11)	1(3)	20(9,7)
Bolus	38(22,1)	13(38,2)	51(24,7)
Total	**172(100)**	**34(100)**	**206(100)**

Source: LAFPENT nutritional therapy survey.

The data found also reveal that HNT needs greater adherence and investment in services, whether public or private, as well as the health professionals involved.

Discussion

The results obtained in this survey are important for us to understand how HENT is carried out in our country, mainly in the HC with the Better at Home program of the Ministry of Health and to guide new searches in HENT, in addition to reflecting on this practice in relation to public food policies. and the HRAF, which will allow us to analyze how the HNT guidelines are assisting health professionals in HC to carry out an appropriate practice for individuals with indication for HNT.

The reports of Brazilian literature regarding DA are still shy, especially the practice of HNT, which can be justified by the lack of criteria to record its implementation, monitoring and evaluation in a single system, to facilitate a systematic and permanent analysis, as they exist in other countries. Spain is an example in this sense, in which the sociodemographic data of home patients are updated frequently, facilitated by presenting regulated HC.[16]

It is a fact that we are changing our demographic pyramid, with a gradual increase in the number of elderly people and, consequently, a greater presence of chronic diseases and, despite the more incentive to promote and prevent health with a focus on healthy and active aging, it was found that in HC the elderly represented most of the inquiries in this survey, accompanied by neurological diseases, as indicated by both Brazilian and international literature.[17-19]

Considering that the objective of HNT is to maintain or recover the nutritional status of patients in the home environment, the prescription of PNT is important, but seen as an enhancing component among home care, being a common practice, the request by managers to use diets handmade. Contrary to this information, our study revealed a low indication of prescribing an exclusive artisanal diet, even though most respondents were from the public sector.

The use of more than a third of industrialized diets that added to the use of mixed diets, as shown in this survey, correspond to almost all indications, which suggests a concern in maintaining a controlled supply of nutrients by the prescribers. Perhaps this is the tendency of our services, as demonstrated in a recent survey, in all patients of a public service, receiving industrialized or mixed diet.[20]

The mixed diet has a high indication in this study, both in the public sector and in supplementary health, a reality also found in the international literature, especially in pediatrics and in individuals with food intolerance, however the criteria for indicating this prescription are well reported. , which are: the patient's clinical stability, having probes with a caliber greater than 14 Fr for at least six months and making the diet transition slowly for better adaptation.[21]

In Brazil, a classic economic study considering HENT, was carried out by Baxter et al (2005), which strengthened the formation of the HC of the Hospital das Clinicas of the Faculty of Medicine of the University of São Paulo, where through a controlled study, of integrated hospital model compared to an exclusively hospital model, it was concluded that there was a reduction in costs, nutritional benefits, with shorter hospital stay in the HC group, in addition to promoting greater turnover between the hospital's surgical beds.[22]

Several authors have shown that the guidance of HENT is essential and must consider nutritional and economic aspects, being important that each service has eligibility criteria for selecting the type of guidance to be prescribed, maintaining a balance between cost-effectiveness, as well as prevention of weight loss and malnutrition, the improvement in the quality of life of users, whether oncological or elderly[23], also considering the presence of the trained health team and monitoring, which are part of the efficiency of care for patients in HENT.[8,20]

In Brazil, there is this concern for the public sector, since the Ministry of Health's "Best at Home" program has made great strides in recent years and many publications referring to home care and a specific one that addresses HNT's shared care, from assessment initial, nutritional recommendations, indication, prescription, care in handling enteral formulas care in the administration and monitoring of patients in HNT, assisting HC professionals in the elaboration of their care protocols and DC.[17,24]

NPT is a therapeutic alternative when the individual cannot or cannot use the gastrointestinal tract as a route of food. It can be in exclusive or complementary form depending on the clinical and nutritional situation of the patient.[13] In Brazil, despite the TNPD, having been the first form of HNT adopted25, it is still little accomplished, in part, because it depends on a team trained to accompany patients of this complexity and also, because it is a more expensive therapy and following the legislation in force in our country, with the need to have a specialized nursing team at home, during the entire period in which NPT is administered.

However, in this survey it was observed that 50% of the participating professionals had patients with NPTD in the last 12 months and it is interesting to note that in the public sector there were more patients with this nutritional therapy compared to the private sector, making it clear that there was an adaptation in health team to attend this type of nutrition, greater than that seen in the first Brazilian HNT survey, in which the incidence of TNPD was reported in only 1% of the total respondents.[13,17]

We realized that, in other countries as well, there has been a progressive increase in the care of patients with NPTD. The Home and Outpatient Artificial Nutrition group of the Spanish Society of Clinical Nutrition and Metabolism saw an increase of more than 400% in 17 years of registration (2000 to 2017) with an increase, especially in the last years of the TNPD in cancer patients under palliative care.[16]

This survey showed an important representation of elderly, neurological and in use of enteral tubes, although the recommendations for these cases indicate the use of stomata.[17] This fact is often due to the lack of access to this device, as shown by a recent study by Domingues (2019) in our country, with a similar population.[20]

European studies show that the use of ostomies is also not necessarily a reality in HC, with the use of nasoenteral tubes being indicated in up to 73%, mainly in very old elderly (80 years and over), even with an average of 174 days for HENT.[26-27]

This survey also showed that the use of the Levine probe, which has an indication for drainage, is a national reality, perhaps because the universe of patients belongs to the public network, where the acquisition of supplies is not always facilitated and that, necessarily, not corresponding to a general practice in HC.

We also shown that the most frequent form of administration was intermittent gravitational dripping, a practice consecrated by the nursing team, in all situations, considered the most physiological, especially when they do not have infusion pumps and when the diet is using the Levine probe, situations present in the sample.[28-29]

Still regarding the type of administration, in some studies, a greater tendency was observed in the use of bolus administration, especially when the prescribed diet is the so-called blenderized diet, similar to our mixed diet, in which the viscosity is higher and hardly adequate for gravitational drip. The greater indication of ostomies also favors the administration in "bolus", although it has been described that it has a higher incidence of gastrointestinal complications. Thus, it can be suggested that in this investigation the lesser indication of this type of administration may be related to less use of artisanal diet and less presence of ostomies for HENT.[30]

This survey showed advances in relation to the previous one, since the majority of respondents (74%) work directly at HC and brought data mainly from the public sector, with more than 80% of professionals working in the Best at Casa do MS program, in which has seen a trend in the last three years, of monitoring patients of greater complexity and need for TNPD, little reported in the first HNT survey, where most participants worked in supplementary health. These findings indicate an organization of primary health care, strengthening the performance of the health team in HC. Still, comparing the two surveys, less indication of artisanal diet was observed in this study, suggesting an evolution

in dietary prescriptions, with greater concern in offering known amounts of nutrients to combat malnutrition.

Conclusion

There are still few Brazilian studies related to HC, mainly with consistent epidemiological data and few longitudinal studies to understand how the evolution of home care is, mainly related to HNT. This is the second Brazilian survey on the subject, closer to reality, as it presents data from professionals working in HC and shows how these patients in need of HNT are. It also reveals the importance of the Better at Home Program, which expanded the use of HNT, especially to the most needed populations. It brought important data to be observed by professionals working in the area, when implementing HNT, for greater benefits for users and the System (which). However, further research is still needed in this context and that includes other important data, such as time of HNT, evolution, complications and outcomes regarding the use of HNT.

These results reveal a promising future, where we can glimpse the growing concern with the nutrition of outpatients, either early or not, considering that the nutritional status is reflected in a better therapeutic response, better quality of life and, consequently, greater survival and lower rate of readmissions, leading to a reduction in health costs.

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Autor de Correspondência
Denise Philomene Joseph van Aanholt
Av. Dr. Enéas Carvalho de Aguiar, 419.
CEP: 05403-000. Cerqueira César. São Paulo, São Paulo, Brasil.
lucianamsn@usp.br

Hemophiliacs profile provided of a patient association

Perfil dos hemofílicos provenientes de uma associação de pacientes

Perfil de hemofílicos de una asociación de pacientes

Denise Rodrigues Holsbach[1], Andrea Pecce Bento[2], João Vitor de Lorenzi Jardim[3], Matheus Assis Ribeiro da Silva[4], Leonardo Costa Pereira[5]

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1. Euro American University Center. Brasília, Federal District, Brazil.
https://orcid.org/0000-0003-2546-2378,

2. Euro American University Center, Department of Physiotherapy. Brasília, Federal District, Brazil.
https://orcid.org/0000-0001-5776-2864

3. Graduate Program in Health Technologies, University of Brasília. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-8871-3341

4. Graduate Program in Health Technologies, University of Brasília. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-5370-4488

5. Euro American University Center, Department of Physical Education. Brasília, Federal District, Brazil.
https://orcid.org/0000-0003-3319-5679

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RESUMO

Objetivo: traçar o perfil epidemiológico de hemofílicos vinculados a uma associação de pacientes do estado de Goiás, Brasil. **Método:** pesquisa transversal realizada com indivíduos do gênero masculino acima dos 18 anos de idade. Catorze participantes foram submetidos a uma ficha de avaliação contendo questões sociodemográficas e clínicas. O presente estudo utilizou análises de frequências para descrição da amostra. Para as variáveis quantitativas rodou-se o teste de normalidade de Shapiro Wilk. **Resultados:** a média de idade encontrada foi de 32,64 anos ± 9,32. A maior parte dos indivíduos residia a menos de 30 km do centro de tratamento e apresentaram a forma grave da doença. Em relação às comorbidades, um indivíduo apresentou inibidor do fator de coagulação e as infecções virais estiveram ausentes em 71,4% dos participantes, em um período que não havia controle antiviral. As hemorragias articulares predominantes foram observadas no cotovelo e joelho e o hematoma muscular esteve presente em 50% da amostra. O tratamento mais utilizado pelos participantes foi a profilaxia secundária. **Conclusão**: a partir da caracterização dos pacientes hemofílicos cadastrados em uma associação é possível compreender mais sobre a patologia em estudo, demonstrando que as infecções virais se constituem em importantes comorbidades adquiridas por hemofílicos adultos.
Descritores: Hemofilia A; Hemofilia B; Adulto; Perfil de Saúde.

ABSTRACT

Objective: to trace the epidemiological profile of hemophiliacs linked to a patient association in the state of Goiás, Brazil. **Method:** cross-sectional research conducted with male individuals over 18 years old. Fourteen participants were submitted to an evaluation form containing sociodemographic and clinical questions. The present study used frequency analysis to describe the sample. For quantitative variables, the Shapiro Wilk normality test was run. **Results:** the average age found was 32.64 years ± 9.32. Most individuals lived less than 30 km from the treatment center and had a severe form of the disease. Regarding comorbidities, one individual had a coagulation factor inhibitor and viral infections were absent in 71.4% of the participants, in a period when there was no antiviral control. The predominant joint hemorrhages were observed in the elbow and knee and muscle hematoma was present in 50% of the sample. The most used treatment by the participants was secondary prophylaxis. **Conclusion:** from the characterization of hemophiliac patients registered in an association, it is possible to understand more about the pathology under study, demonstrating that viral infections are important comorbidities acquired by adult hemophiliacs.
Descriptors: Hemophilia A; Hemophilia B; Adult; Health Profile.

RESUMEN

Objetivo: rastrear el perfil epidemiológico de hemofílicos vinculados a una asociación de pacientes en el estado de Goiás, Brasil. **Método:** investigación transversal realizada con varones mayores de 18 años. Se enviaron catorce participantes a un formulario de evaluación conteniendo preguntas sociodemográficas y clínicas. El estudio utilizó análisis de frecuencia describiendo la muestra. Para las variables cuantitativas se ejecutó la prueba de normalidad de Shapiro Wilk. **Resultados**: la edad promedio fue de 32,64 años ± 9,32. La mayoría de las personas vivían a menos de 30 km del centro de tratamiento y tenían una forma grave de la enfermedad. En cuanto a las comorbilidades, un individuo tenía un inhibidor del factor de coagulación y las infecciones virales estaban ausentes en el 71,4% de los participantes, en un período en el que no hubo control antiviral. Las hemorragias articulares predominantes se observaron en el codo y la rodilla y el hematoma muscular estuvo presente en el 50% de la muestra. El tratamiento más utilizado por los participantes fue la profilaxis secundaria. **Conclusión:** a partir de la caracterización de los pacientes hemofílicos, es posible conocer más sobre la patología en estudio, demostrando que las infecciones virales son importantes comorbilidades adquiridas por hemofílicos adultos.
Descriptores: Hemofilia A; Hemofilia B; Adulto; Perfil de salud.

ORIGINAL

Introduction

Hemophilia is characterized as a male-linked hereditary coagulopathy. Its transmission is made by the X chromosome, manifesting itself in most cases in males. The term hemophilia is used to indicate the levels of deficiency of coagulation factor VIII (hemophilia A) or factor IX (hemophilia B), being observed in the first one frequency and 85% of cases and in the second with 15%.[1]

The incidence of hemophilia A is approximately 1:10,000 to 1:30,000 births, while hemophilia B is 1:30,000 to 1:50,000. Both course with the same clinical presentation, making it indispensable to diagnose the activity of specific coagulation factors, factor VIII and factor IX, for differentiation between them.[2]

Comorbidity can be classified as mild, moderate or severe as mild, moderate or severe according to symptoms and the degree of deficiency of factors VIII or IX. In severe or severe deficiency, hemorrhagic intake is higher and has a concentration of factors below 1%. It is manifested by spontaneous bleeding in the joints or muscles. When the deficiency is moderate, the concentration of the factor is 1% to 5%, generating occasional spontaneous bleeding, prolonged bleeding with less trauma.[3] When factor levels are between 5% and less than 40%, it is characterized by mild hemophilia. There is usually no presence of hemarthrosis and other spontaneous bleeding, although problematic bleeding may arise in cases of surgery or injury.[3]

Hemorrhages occur mainly on the form of hematomas and hemarthrosis, the second being repeated and when left untreated is associated with joint destruction, called hemophilic arthropathy, resulting in chronic pain, joint deformities and severe functional impotence.[4] Hemarthrosis consists of the extraleakage of blood into the joint or into the synovial cavity.[5] Other forms of bleeding may occur on the form of hematuria, epistaxis, melena/hemathemesis intracranial hemorrhage and retroperitol bleeding.[4]

Despite changes in the locomotor system in patients with hemophilia, the disease is usually not life-threatening. However, the sequelae resulting from this process may generate disabilities.[6]

The treatment of hemophilia is carried out under different modalities, demand and prophylactic. Demand treatment refers to that which occurs after an episode of bleeding. The intensity and duration of treatment will depend on the location and severity of bleeding. This treatment was the only one available in Brazil until December 2011. Prophylactic treatment refers to that which occurs prior to the development of the bleeding episode, and may be primary, when initiated before the second hemarthrosis or before the first 2 years of age, or secondary, when it does not meet the criteria for primary prophylaxis and the patient already shows signs of joint sequelae. Prophylactic treatment is indicated in severe haemophilia and has as main objective to prevent repeat hemarthrosis, which can cause target joints and permanent functional deformities.[4]

The transmission of infectious agents, especially hepatitis agents, was due to the transfusion of blood components and blood products not submitted to an adequate process of viral inactivation. The emergence of acquired immunodeficiency syndrome (AIDS) in 1981, caused by HIV, directly affected the hemophilic population due to its treatment.[7]

One of the most fearsome complications of hemophilia patients refers to the development of inhibitors, which are antibodies directed against factors VIII or

IX infused. In this case, affected patients do not respond to deficient factor infusion and present hemorrhagic episodes of difficult control.[4]

Knowing that hemophilia has no ethnic or geographical limits and that Brazil is classified as the third country with the highest hemophiliac rate, and India is first, followed by the United States.[8]

In this context, this study aims to describe sociodemographically and clinically the profile of adult hemophiliac patients from an association of patients from the state of Goiás, Brazil.

Method

This is a cross-sectional research. Data collection was performed at the Hemophiliacs Association of the State of Goiás (AHEG). The sample was for convenience and data were collected in November and December 2015.

Hemophiliac individuals linked to AHEG, male, literate, over 18 years old, were invited to participate in the research. The Informed Consent Form (TCLE) was given, which all participants formally signed. Hemophiliacs with cognitive and indigenous impairment were excluded.

For the sociodemographic collection, an evaluation form was used prepared by the research team. In the form there were questions for sociodemographic and clinical characterization of patients. The sociodemographic variables were: age, race/color, marital status, education, private health plan, employment status, receipt of government benefit/financial aid, practice of physical activity and distance between residence/place of treatment. The clinical variables were: types of hemophilias, clinical severity, inhibitors, viral infections, types of treatments, use of joint prosthesis, site of more frequent hemorrhages.

The present study used frequency analyses to describe the sample. For the quantitative variables, the Shapiro Wilk normality test was rotated. All statistical analyses were performed by the Statistical Package SPSS 20.0.

The project was approved by the Ethics Committee on Research with Human Beings of the Federal University of Mato Grosso do Sul (UFMS), through plataforma Brasil, in accordance with Resolution No. 466 of 2012, of the National Health Council, and being approved under opinion no. 1,300,316.

Results

Sociodemographic and clinical characterization of the study sample was performed, according to tables 1, 2 and 3.

Table 1. Sociodemographic information of hemophiliacs evaluated in this study. Federal District, 2015.

Variable	%
Age range (years)	**% (n=14)**
20-29	50,0
30-39	28,6
40-49	7,1
50-59	14,3
Mean age	32,64±9,32

Marital Status	**% (n=14)**
Married	50
Single	50
Color/Race	**% (n=14)**
Branco	28,6
Pardo	64,3
Negro	7,1
Education level	**% (n=14)**
1st Degree Incomplete	7,1
1st Degree Complete	14,3
2nd Degree Incomplete	14,3
2nd Grade Complete	35,7
3rd Degree Incomplete	14,3
3rd Degree Complete	14,3
Health Plan	**% (n=14)**
Yes	42,9
No	57,1
Government Benefit/ Financial Aid	**% (n=14)**
Yes	42,9
No	57,1
Distance from residence to place of treatment	**% (n=14)**
Less than 30Km	71,4
More than 30Km	28,6

Table 2. Profile of Work Activity and Physical Activity of Hemophiliacs. Federal District, 2015.

Work Activity	**% (n=14)**
Yes	42,9
No	57,1
Physical Activity	**% (n=14)**
Yes	42,9
No	57,1

Table 3. Characterization of hemophilia, its probable symptoms and treatments.

Type of Hemophilia	**% (n=14)**
A	92,9
B	7,1
Gravity	**% (n=14)**
Take	14,3
Moderate	21,4
Serious	64,3
Inhibitor	**% (n=14)**
Yes	7,1
No	92,9

Virus Infection	% (n=14)
No	71,4
Hepatitis C	14,3
Hepatitis B and C	7,1
Hepatitis C and HIV	7,1
Joint Prosthesis	**% (n=14)**
Yes	14,3
No	85,7
Type of Treatment	**% (n=14)**
P1	21,4
P2	57,1
DEM	14,3
FEIBA*	7,1

*Tratamento para inibidores dos fatores de coagulação.

Discussion

The mean age of the individuals was 32.64 ± 9.32. The age group from 20 to 29 years had a higher prevalence, representing 50% of the sample. Similar results were found by Silva9 with 175 adult hemophiliacs (18 to 64 years), with a mean age of 31.44 years. According to the Profile of Hereditary Coagulopathies8, the highest prevalence of hemophilias occurs in the age group 20 to 29 years, corroborating the results found in the present study.

Regarding marital status, the sample was divided into 50% married individuals and 50% single individuals. In the study by Garbin et al., 60% of the individuals were single.10 Such data can be explained by the difficulties in facing the disease and its consequences, such as the physical limitations resulting from bleeding and the impossibility of working. In addition, patients describe the difficulty in being accepted when they claim to be hemophiliacs and, especially, when they reveal that they have some infectious disease. On the other hand, Caio et al., in their sample, observed that 83% of the individuals were married or ameded and that the constitution of a family represents an important point of support for hemophiliacs.[11]

In this sample, 64.3% of the individuals were brown, 28.6% white and 7.1% black. Garbin et al. found divergent results, in which most individuals were white and a small portion were mulattos and blacks.[10] However, it should be noted that according to Manno, there is no ethnic distinction for the disease.[12]

Regarding the level of education, there was a predominance of individuals with complete high school (35.7%). According to Santos and Ferraz, 35.3% of hemophiliacs had completed high school, and it is important to highlight that this sample has an age group of 23.6 years.[13] In the study by Caio et al., the age distribution and access to a better level of education do not differ between patients with hemophilia and their siblings who do not have the disease.[11]

In 2013, 15,000 patients with the disease were assisted by the public health network (they received medicines through the SUS, including those who had health insurance and insurance or who went to the private health system). Of this total of patients, 10,464,000 were registered as hemophiliacs A and B.[4] Nevertheless, the results of the present study show that 57.1% of hemophiliacs

did not have health insurance. Still, 57.1% did not receive any kind of benefit. However, unlike the data from this research, Almeida et al. reported that 72.7% of patients received some kind of government benefit.[14]

Regarding the distance from the Treatment Center and the residence, it was found that most individuals (71.4%) resided less than 30 km from their place of treatment, which would facilitate emergency care in case of bleeding. It is easy to conclude that the individual with hemophilia may require, at any time, an urgent replacement of coagulation factor, high operational cost therapy and generally available in few specialized centers. This fact creates a peculiar psychosocial situation for the patient with hemophilia, with the constant threat of unexpected bleeding and dependence, in terms of geographical distance and availability, of a specialized treatment center.[11]

In the present study, we found an index of 42.9% of individuals who performed physical activity and 42.9% performed work activity. Divergent results were presented by Nunes et al. in their research with 23 patients, of whom 69% did not perform physical activity and 82.6% did not work.[15]

For Santos and Ferraz, in an epidemiological survey with 17 hemophiliac individuals, only one performed walks as physical exercise and eight did not work.[13] Andery et al. showed that the practice of physical activity helps in the treatment of hemophilia, since physical exercises improve the balance of the musculature, stabilization of the joint, preventing possible bleeding and offering a better social interaction.[16] However, it is necessary to avoid intense contact activities.

According to the study by Nunes et al., the most frequent type of hemophiliacs type A, with 91.3% and 8.7% hemophiliacs of type B.15 Tavares et al., found 97.1% of cases of hemophilia A, in a population of 102 participants.[17] The present study corroborates the literature, which highlights hemophilia A as more prevalent than hemophilia B, with 92.9% and 7.1% respectively.[1]

Regarding severity, it was observed in this study that most cases were severe (64.3 %), followed by 21.4% moderate and 14.3% mild cases. Divergent results were found by Santos et al., where they verified the predominance of the moderate type with 22%, severe (21%) and mild (16%). However, there were 41% (63 medical records) with indetermination of clinical characterization.[18]

In the present study, of the 14 patients questioned, 92.9% (n=13) did not present inhibitors. Affected patients with the development of 12 inhibitors are generally those affected by severe hemophilia A, manifesting poor response to the usual treatment or increased frequency and/or severity of bleeding.2 The incidence of inhibitor development is about 5-15% of patients with hemophilia A and about 3% in patients with hemophilia B, with the results of this study below these rates.[19]

Among the patients, 28.6% had some type of viral infection by the use of contaminated blood products, with 14.3% acquiring Hepatitis C, 7.1% hepatitis B and C and the others, 7.1% hepatitis C and HIV. In the 1980s hemophiliac patients were much more susceptible to Hepatitis B, Hepatitis C and HIV viruses, as criteria for evaluating contaminated blood components were not met.[20]

In this study, we found a higher rate of bleeding in the elbow (64.3%), followed by knee (57.1%), muscle hematoma (50%), ankle (42.9%) and nasal (35.7%). In line with the study by Wisniewshi and Kluthcovsky[21], conducted in 2008, shows that the most frequent complication was elbow hemarthrosis with 27.6%. According to Rodriguez Merchan, joints such as knees, elbows and ankles

account for 80% of hermartroses in patients with severe hemophilia A.[22] Since hemophilia is a chronic disease characterized by the involvement of the musculoskeletal system, it generates the restriction of joint mobility and the development of muscle deformities, thus limiting the functionality of these individuals.[22]

Of the 14 individuals, 14.3% (n=2) used joint prosthesis, one with severe hemophilia A and the other moderate hemophiliac B. In the study by Almeida et al., however, they found that of 33 individuals, three had prostheses and all presented the severe form of the disease.[14]

In this study, it was observed that 57.1% use the treatment of secondary prophylaxis, in which according to Srivastava et al. consists of regular and continuous replacement (minimum of 45 weeks per year) of the coagulation factor, where treatment begins after two or more joint bleeding.[3] Corroborating the Profile of Hereditary Coagulopathies, in the state of Góias, between the years 2013 to 2015, 150 individuals used secondary prophylaxis, that is, the treatment most used in the present study.[8]

Conclusion

The research showed that the sample of adult patients was born in a period of great contagion due to infectious diseases, through blood products, however, the vast majority (71.4%) was not contaminated, which would increase the morbidity and mortality of patients. Another point to be highlighted is that the majority of participants (71.4%) lies close to its place of treatment, facilitating access and care in emergency cases.

The present study had limitations due to the small number of hemophiliac participants, however it was possible to draw a profile of adult patients linked to the HemophiliacS Association of the State of Goiás (AHEG), a profile similar to that present in the current literature in aspects such as the regions of the body where hemorrhages are more common, demonstrated in the study by Wisniewshi and Kluthcovsky and in the research of Rodriguez Merchan , but divergent in other topics, such as the proportion, presented by Nunes et al, of patients with the disease who practice physical activity and perform work activity.

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Correspondent Author
Denise Rodrigues Holsbach
Square 204, lot 5, Fênix Residential, Block B, apartament 702. ZIP 71939-540. Águas Claras, Brasilia, Brasil.
denisesartorelo@hotmail.com

Dietary changes and life habits of patients with cystic fibrosis in the COVID-19 pandemic

Alterações alimentares e hábitos de vida de pacientes com fibrose cística na pandemia de COVID-19

Cambios en la dieta y hábitos de vida de pacientes con fibrosis quística en la pandemia COVID-19

Lenycia de Cassya Lopes Neri[1], Rafaela Rodrigues Vieira[2], Camila Pugliese[3]

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1. University of São Paulo, Children's and Adolescent's Institute. Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0002-4162-3664

2. University of São Paulo, Children's and Adolescent's Institute. Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0003-4641-5394

3. University of São Paulo, Children's and Adolescent's Institute. Sao Paulo, Sao Paulo, Brazil. https://orcid.org/0000-0001-7324-2447

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RESUMO

Objetivo: verificar alterações no consumo alimentar e hábitos de vida em pacientes com fibrose cística brasileiros durante o período de isolamento social devido a pandemia de COVID-19. **Método:** pesquisa transversal com levantamento de dados por meio de questionário elaborado pela equipe de nutricionistas especialistas no tratamento de pacientes com fibrose cística, com questões referentes às manifestações respiratórias recentes de pacientes ou familiares, alterações nos hábitos de aquisição e compras de alimentos e alterações quanto ao consumo de grupos alimentares e suplementos. Os dados foram tabulados e foi realizada uma análise descritiva. **Resultados:** 40,34% das famílias de pacientes com fibrose cística mudaram os hábitos de compras de alimentos, cerca de 40% dos pacientes diminuíram a prática de atividade física e aumentaram o tempo de uso de telas em mais de 50% durante o período da pandemia de COVID-19. **Conclusão:** Apesar de algumas dificuldades relacionadas à aquisição dos alimentos e alterações em hábitos de vida, houve manutenção do consumo alimentar da maioria dos grupos alimentares e suplementos pelos pacientes pediátricos com fibrose cística brasileiros durante o isolamento social devido a pandemia de COVID-19.
Descritores: Fibrose cística; COVID-19; Estado nutricional; Estilo de vida saudável

ABSTRACT

Objective: to verify changes in food consumption and lifestyle in Brazilian cystic fibrosis patients during the period of social isolation due to the COVID-19 pandemic. **Method:** cross-sectional survey with data collection through a questionnaire prepared by the team of nutritionists specialized in the treatment of patients with cystic fibrosis, with questions regarding the recent respiratory manifestations of patients or family members, changes in the habits of purchasing food and changes regarding the consumption of food groups and supplements. The data were tabulated and a descriptive analysis was performed. **Results:** 40.34% of the families of patients with cystic fibrosis changed their food shopping habits, about 40% of the patients decreased their physical activity and increased the time spent using screens by more than 50% during the pandemic COVID-19. **Conclusion:** despite some difficulties related to the acquisition of food and changes in lifestyle, there was maintenance of the food consumption of most food groups and supplements by Brazilian pediatric patients with cystic fibrosis during social isolation due to the COVID-19 pandemic.
Descriptors: Cystic fibrosis; COVID-19; Nutritional status; Healthy lifestyle.

RESUMEN

Objetivo: verificar cambios en el consumo de alimentos y estilo de vida en pacientes brasileños con fibrosis quística durante el período de aislamiento social por la pandemia de COVID-19. **Método:** encuesta transversal con recolección de datos por medio de un cuestionario elaborado por un equipo de nutricionistas especializados en el tratamiento de pacientes con fibrosis quística, con preguntas sobre las manifestaciones respiratorias recientes de pacientes o familiares, cambios en los hábitos de compra de alimentos y cambios en el consumo de grupos de alimentos y suplementos. Los datos se tabularon y se realizó un análisis descriptivo. **Resultados:** el 40,34% de los familiares de pacientes con fibrosis quística cambiaron sus hábitos de compra de alimentos, alrededor del 40% de los pacientes disminuyó la práctica de actividad física y aumentó el tiempo de uso de pantallas en más del 50% durante el período pandémico. COVID-19. **Conclusión:** A pesar de algunas dificultades relacionadas con la adquisición de alimentos y cambios en el estilo de vida, hubo mantenimiento del consumo de alimentos de la mayoría de los grupos de alimentos y suplementos por parte de pacientes pediátricos brasileños con fibrosis quística durante el aislamiento social debido a la pandemia COVID-19.
Descriptores: Fibrosis quística; COVID-19; Estado nutricional; Estilo de vida saludable.

ORIGINAL

Introduction

Cystic fibrosis (CF) is an autosomal recessive genetic disease that manifests itself in a multi-systemic way. Due to cell membrane protein dysfunction called cystic fibrosis transmembrane conductance regulator (CFTR) the patient has repercussions mainly in the respiratory and digestive tracts.[1] There is a strong association between nutritional status and pulmonary function, and multiprofessional treatment of cf patients is essential to ensure a good prognosis of the disease. Due to the increased need for energy, protein and fats, oral supplementation is often required to ensure adequate nutritional intake.[1]

On March 11, 2020, the World Health Organization declared a pandemic covid-19, a disease caused by the new Coronavirus SARS-CoV-2, which emerged from China, with subsequent spread worldwide. In Brazil, measures are taken to reduce exposure to the virus, especially of patients considered at risk, including those with chronic diseases. Italian researchers published an editorial highlighting concerns about cystic fibrosis patients amid the spread of the pandemic, and social isolation is reinforced, as measures such as wearing masks and hand hygiene are already part of the cystic fibrosis patient's routine.[2-4]

The Brazilian Society of Pulmonology and Tisiology (BSPT) in partnership with the Brazilian Cystic Fibrosis Studies Group (BCFSG) was positioned stating that the patient with cystic fibrosis should be considered as part of the risk group for complications related to infection by the new coronavirus due to manifestations of the disease, including relevant impairment of pulmonary function. However, the positioning clarifies that there are no reports of cystic fibrosis patients who have been affected, therefore, it is difficult to establish the real impact of SARS-CoV-2 infection in these patients. The patients described in studies published so far are chronic lung diseases (COPD) and asthma, in addition, the most severe relationship is clear in patients over 60 years of age, an infrequent age group in cystic fibrosis.[5]

BSPT and BCFSG also state that prescribed regular treatments should be maintained during quarantine, such as inalations, oral medications, bronchial hygiene maneuvers, physiotherapy, physical activity and adequate nutrition.[5] A food strategy consulting firm released results of its research on food and well-being of Brazilians during the period of social isolation in combating the SARS-CoV-2 virus responsible for COVID-19. Data from 494 Brazilians from all regions of the country showed a worsening in the dietary pattern, with higher consumption of items for snacks, soft drinks and artificial juices, and worsening in sleep quality. On the other hand, they indicate an increase in the practice of exercises to maintain the well-being.[6]

No studies were found to verify changes in feeding in patients with cystic fibrosis in quarantine, where the decrease in food quality and nutritional status can lead to worsening of health in the medium and long term.

In this sense, the aim of the study was to verify changes in food intake and life habits in patients with Brazilian cystic fibrosis during the period of social isolation due to the COVID-19 pandemic.

Method

This is a cross-sectional study, with a self-administered questionnaire in an electronic way (dissemination by Brazil) or in person at the Children's and

Adolescents' Institute at Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo (ICr- HCFMUSP) from April 18 to June 8, 2020.

The sample was obtained through e-mail recruitment, electronic messages on mobile phones, dissemination of the questionnaire on social networks and obtaining answers in person from those responsible for cystic fibrosis patients followed at ICr- HCFMUSP, when they were taking medication or supplements.

To calculate the sample number, the calculation formula was used: n=N.Z2.p.(1-p) / Z2.p.(1-p) + e2. N-1 (n: calculated sample, N: population, Z: normal várіable, p: real probability of the event, and: sampling error). Considering the population with Brazilian cystic fibrosis of about 3,000 patients, with a margin of error of 10% and reliability of 90%, a sample number of 67 questionnaires was estimated.[7]

Patients using exclusive enteral therapy, exclusively breastfed or hospitalized during the study period were excluded from the sample. Patients from 6 months to 19 years of age with a previous diagnosis of cystic fibrosis were selected.

The questionnaire (Chart 1) was prepared by the team of nutritionists specialized in the treatment of patients with cystic fibrosis and addressed questions regarding recent respiratory manifestations of patients or family members, changes in eating habits and purchases of food and changes in the consumption of food groups and supplements. The possible answers to the different food groups questioned were: (1) did not change consumption, (2) increased consumption or (3) decreased consumption. The data were tabulated in Excel and described according to the distribution of data performed by means of percentages and medians.

Chart 1 - Questionnaire on changes in food consumption and lifestyle habits in Cystic Fibrosis in quarantine. São Paulo, 2020.

Sample characterization	Questionary
State	Have you had any unusual respiratory symptoms recently?
Date of Birth	Have any family members had any respiratory symptoms recently?
Patient name	Who does food purchases these days?
Name of the person in charge	Has anyone been diagnosed with COVID-19 in the family?
	Have food purchases been modified due to quarantine?
	If you answered "Yes" in the previous question, what changed?
	Did you lose or gain weight in that period?
	Has there been a change in your screen time?
	Was there a change in the amount of physical activity?
	Have you changed fruit consumption recently?
	Have you changed the consumption of vegetables recently?
	Have you changed vegetable consumption recently?

	Have you changed meat consumption recently?
	Have you changed the consumption of milk and dairy products recently?
	Have you changed the consumption of beans recently?
	Have you changed the consumption of soft drinks or artificial juices recently?
	Have you changed the consumption of sweets, chocolates or sugary products recently?
	Have you modified the consumption of cystic fibrosis supplements recently?
	Have you changed the number of daily meals recently?
	In general, have you changed the amount of food consumption recently?

All were invited to participate with clarification that it is a research project and participation is voluntary, without any burden in case of acceptance or not in participation. If accepted, a click on "accepted" was given in the electronic questionnaire or signed the informed consent form. The present study was approved by the Research Ethics Committee (CEP) of the Faculty of Medicine of the University of São Paulo, with Certificate of Presentation for Ethical Appreciation (CAAE) 31751220.6.0000.0068 and opinion no. 4,032,472.

Results

Responses were obtained from 70 patients to the questionnaire, 45.71% in the face-to-face form. Thus, the vast majority of the data obtained were from the state of São Paulo (64.18% of the sample), followed by Sergipe (with 22.39% participation). Other Brazilian states (Goiás, Minas Gerais, Paraíba, Paraná, Santa Catarina and Rio Grande do Sul) jointly had a 13.43% share in the research.

The median age of the participating patients was 10.2 years. The vast majority (92.86%) of the patients presented stable respiratory condition during the period of social distancing, as assured by the guardian at the time of data collection. Although six patients reported that relatives had respiratory symptoms or cough or fever recently, only two patients had confirmed cases of COVID-19 among family members, and these reported performing complete isolation of contact of the family member with the patient with cystic fibrosis.

Large portion (40.34%) of the families of patients with cystic fibrosis changed the habits of food purchases during the COVID-19 pandemic period. Some of the changes mentioned were: not shopping for hortifruti at free fairs (n=6), buying more frozen or ready-to-eat products (n=3) and only 1 patient reported not finding usual food products for sale. The ones responsible for the purchase of products, in most households (53.13%), were grandparents in the period of social distancing.

Figure 1 shows data regarding changes in weight, time spent on screens (television, tablet, computer, mobile phone, among other sedentary activities) and time spent on physical activities in patients with cystic fibrosis during the period of social distancing.

Figure 1- Distribution of patients with cystic fibrosis according to changes in weight pattern, screen time (television, tablet, mobile phone, computer) and physical activities during the period of social distancing due to the COVID-19 pandemic. São Paulo, 2020.

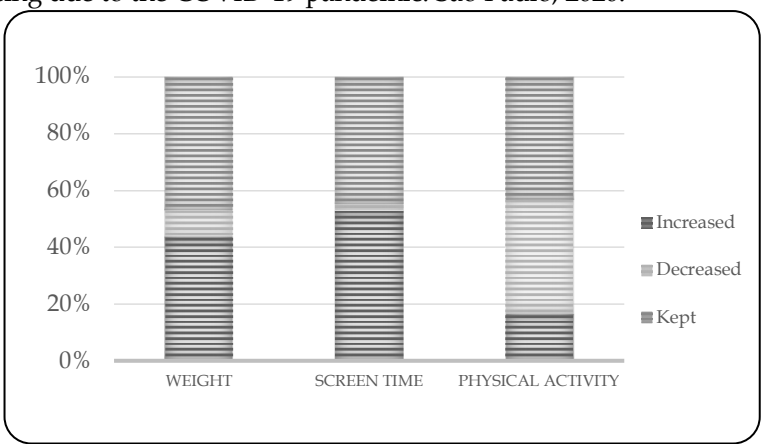
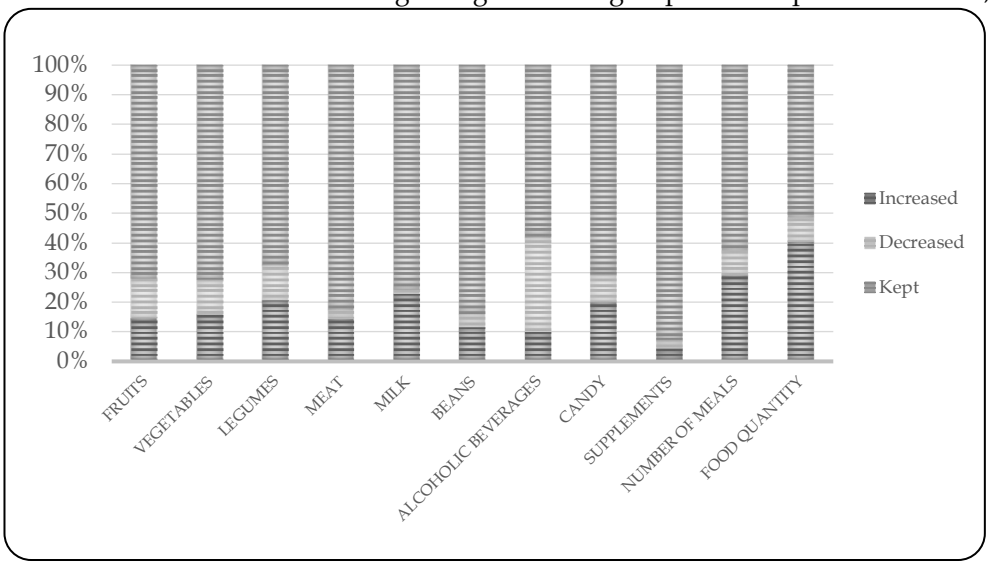


Figure 2 lists the consumption of food groups according to changes in the frequency of consumption during the COVID-19 pandemic period. It is noteworthy that 40% of patients reported an increase in the consumption of the amount ingested during the period considered and more than 90% of the patients maintained the consumption of oral supplements indicated for the treatment of cystic fibrosis.

Figure 2- Patients distribution according changes in food groups consumption. São Paulo, 2020.



Discussion

This unprecedented study showed that, in general, patients with cystic fibrosis maintained the eating habit during the period of social isolation, despite presenting some difficulties related to the acquisition of food. The main changes occurred in relation to life habits, such as decreased physical activity and increased time of screen use.

Most patients maintained or increased weight during the quarantine period, which is a very important finding, especially when dealing with CF patients.[1] Most of them reported that the amount of food consumed throughout the day increased, a result consistent with the increase in weight gain, although they did not significantly alter the food groups consumed. These findings are compatible with the literature, in other studies conducted at the pandemic.[8-9]

The way food was purchased changed during social distancing for most participating families, with changes such as: not buying fruits and vegetables at free fairs, increasing the purchase of frozen and ready-to-eat products or not finding food usually consumed to buy. Studies have shown that quarantine can affect the food supply chain and generate a situation of food and nutritional insecurity, related to the higher consumption of processed foods of greater durability, access and easier use.[10-11] Additionally, limited access to fresh food can negatively affect mental and physical health.[8]

In our study, the food groups mentioned with the highest rates of increased consumption were dairy and sweet. On the other hand, the groups that presented the most decrease in intake were sugary drinks, and to a lesser extent, fruits and vegetables. The vegetable food group, curiously, suffered a reduction in consumption by the participants, on the other hand, another portion of the patients reported an increase in consumption. Another interesting fact is that the consumption of supplements has been maintained for most patients, suggesting that patients consider the use of the supplement as part of the treatment of the disease.

Although no nutrient has been scientifically proven to be beneficial for the prevention or treatment of COVID-19, a diverse diet is important for maintaining an adequate immune system.[9] Many patients reported that they decreased the intake of sugary drinks, as they replaced them with natural juices, in an attempt to improve immunity. A study conducted during social isolation in China also found that many people began, on their own, consuming vitamin C, probiotics and other nutritional supplements during the pandemic.[9]

More than half of the sample reported that the time of use of computer, tablet, mobile phone and/or television during quarantine increased, while most reported decreased physical activity. Many children and young people have their main physical activities related to sports and school activities. With the COVID-19 pandemic, it is known that these shareholdings have greatly decreased.[8] Ammar et al.[12] identified that the use of technologies increased significantly after the onset of social isolation. These restrictions may be associated with health burden, potentially compromising physical fitness, which consequently may decrease the ability to respond to infections and with immunological and cardiopulmonary complications.[8] On the other hand, it seems interesting to promote social communication and physical and mental well-being through the use of internet and other technologies.[12]

Ammar et al. through an online survey of adults from various countries, they found that the number of days of weekly physical activity decreased by 24% during quarantine, and the number of daily hours in which they remained seated increased by 28.6%. The percentage of people reporting eating out of control most of the time or always was higher during home confinement than before it, as well as the number of snacks between main meals or overnight.[8] As CF patients have increased nutritional needs, by about 110 to 200% compared to their healthy peers, higher dietary intake is a habit that is typically encouraged by health

professionals.[1] Perhaps social isolation may have allowed families to be able to give greater attention to the feeding of individuals with CF, due to the increase in family life. In any case, physical activity is also an important part of treatment, and its decrease is harmful.[1]

Regarding respiratory symptoms, most patients reported that there was no change during the period of social isolation. This may have occurred due to the fact that the research was done between March and May, before winter, when pulmonary infections occur more frequently, due to predisposing factors.[13] Few patients had cases of COVID-19 confirmed in the family.

Among the limitations of the study, we highlight the low rate of responses to the electronic questionnaire, which decreased the sample size and the diversity of patients from other Brazilian states. The solution found was to apply the questionnaire with caregivers who came to withdraw medication or supplements in the referral service, which may have skewed the maintenance data of the use of cystic fibrosis supplements. Regarding the strengths, this study showed a potential to prevent nutritional status deficit through the maintenance of a healthy diet and nutritional supplementation, even with social distancing. Thus, we highlight the importance of multiprofessional action with CF patients and studies on the impacts of the most diverse situations in this population.

Conclusion

Despite some difficulties related to the acquisition of food and changes in life habits such as decreased physical activity and increased screen time, with this study it was possible to conclude that there was maintenance of food consumption of most food groups and supplements by pediatric patients with Brazilian cystic fibrosis during social isolation due to the COVID-19 pandemic.

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Correspondent Author
Lenycia de Cassya Lopes Neri
Children's and Adolescent's Institute- Hospital das Clínicas
647 Dr. Enéas Carvalho de Aguiar Av. ZIP: 05403-000.
Cerqueira César. Sao Paulo, Sao Paulo, Brazil.
lenycia.neri@hc.fm.usp.br

Pilot project of implementation of a keto-kitchen for the treatment of refractory epilepsy

Projeto piloto de implantação de uma cozinha cetogênica para tratamento de epilepsia refratária

Proyecto piloto para implementar una cocina cetogénica para el tratamiento de la epilepsia refractaria

Lenycia de Cassya Lopes Neri[1], Rafaela Rodrigues Vieira[2], Sabrina Moura Mercham de Santana[3], Letícia Pereira de Brito Sampaio[4]

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REVISA

1. University of Sao Paulo, Children's and Adolescents' Institute, Nutrition and Dietetic service. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0002-4162-3664

2. University of Sao Paulo, Children's and Adolescents' Institute, Nutrition and Dietetic service. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0003-4641-5394

3. University of Sao Paulo, Public Health School. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0003-2059-980X

4. University of Sao Paulo, Children's and Adolescents Institute, Department of Neurology. Sao Paulo, Sao Paulo, Brazil.
https://orcid.org/0000-0001-6385-5012

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RESUMO

Objetivo: Este estudo descreve a criação da primeira cozinha cetogênica para ensino de dieta cetogênica em um centro de referência no Brasil, com o objetivo de desenvolver receitas cetogênicas e realizar oficinas culinárias com cuidadores. **Método:** Nesse estudo prospectivo, 26 receitas foram testadas e avaliadas por painel sensorial. Dezoito receitas foram selecionadas para serem preparadas em oficinas de culinária com pais ou responsáveis legais de crianças com epilepsia refratária recebendo dieta cetogênica ambulatorialmente. Todas as receitas foram selecionadas, calculadas e aprovadas por nutricionistas. **Resultados:** Oito pais ou responsáveis participaram de quatro oficinas culinárias. As atividades foram extremamente satisfatórias: os participantes puderam tirar suas dúvidas, aprender, praticar receitas e desenvolver novas habilidades. Em geral, todos os participantes gostaram das receitas preparadas e elogiaram o workshop de culinária. **Conclusão:** A cozinha cetogênica de ensino possibilitou o desenvolvimento de receitas cetogênicas adaptadas aos hábitos alimentares brasileiros. Fornecer refeições alternativas para as crianças é essencial para melhorar a adesão à dieta cetogênica, pois elas contribuem para expandir o repertório alimentar desses pacientes. Estudos futuros com alta qualidade metodológica devem testar a eficácia da cozinha cetogênica no aumento da adesão à dieta cetogênica a longo prazo.
Descritores: Dieta cetogênica; Epilepsia; Educação alimentar e nutricional.

ABSTRACT

Objective: This study describes the creation of the first ketogenic diet-teaching kitchen at a ketogenic reference center in Brazil aimed at developing ketogenic recipes and holding keto-culinary workshops with caregivers. **Method:** In this prospective study, 26 recipes were tested and assessed by sensory panel testing. Eighteen recipes were selected to be prepared in culinary workshops with parents or legal guardians of children with refractory epilepsy receiving the ketogenic diet as outpatients. All recipes were selected, calculated, and approved by registered dietitians. **Results:** Eight parents or legal guardians participated in four culinary workshops. The activities were extremely satisfactory: participants were able to clear out their doubts, learn, practice recipes, and develop new skills. In general, all participants enjoyed the prepared recipes and praised the culinary workshop. **Conclusion:** The ketogenic teaching kitchen enabled the development of ketogenic recipes adapted to Brazilian eating habits. Providing alternative meals to children is essential for enhancing compliance with the ketogenic diet because they contribute to expand the dietary repertoire of these patients. Future studies with high methodological quality should test the efficacy of the ketogenic kitchen in increasing compliance with the ketogenic diet in the long term.
Descriptors: Dieta cetogénica; Epilepsia; Educación alimentaria y nutricional.

RESUMEN

Objetivo: Este estudio describe la creación de la primera cocina cetogénica para enseñar dieta cetogénica en un centro de referencia en Brasil, con el objetivo de desarrollar recetas cetogénicas y realizar talleres culinarios con los cuidadores. **Método:** En este estudio prospectivo, un panel sensorial probó y evaluó 26 recetas. Se seleccionaron dieciocho recetas para ser elaboradas en talleres de cocina con padres o tutores legales de niños con epilepsia refractaria que reciben una dieta cetogénica ambulatoria. Todas las recetas fueron seleccionadas, calculadas y aprobadas por nutricionistas. **Resultados:** Ocho padres o tutores participaron en cuatro talleres culinarios. Las actividades fueron sumamente satisfactorias: los participantes pudieron despejar sus dudas, aprender, practicar recetas y desarrollar nuevas habilidades. En general, a todos los participantes les gustaron las recetas elaboradas y elogiaron el taller de cocina. **Conclusión:** La cocina de enseñanza cetogénica permitió el desarrollo de recetas cetogénicas adaptadas a los hábitos alimentarios brasileños. Proporcionar comidas alternativas a los niños es fundamental para mejorar la adherencia a la dieta cetogénica, ya que contribuyen a ampliar el repertorio dietético de estos pacientes. Los estudios futuros con alta calidad metodológica deberían probar la efectividad de la cocina cetogénica para aumentar la adherencia a la dieta cetogénica a largo plazo.
Descriptores: Dieta cetogénica; Epilepsia; Educación alimentaria y nutricional.

ORIGINAL

Introduction

The ketogenic diet (KD) is a high-fat, adequate-protein, low-carbohydrate diet that has been used in the treatment of patients with refractory epilepsy, especially children.[1-3] The objective of KD is to reduce the frequency of epileptic seizures or control it by inducing ketosis, which is induced by a high intake of fat.[1,4,5] The first randomized controlled trial of the efficacy of KD was conducted in 2008 and clearly showed the benefits of the KD compared to no other changes to treatment. After three months of receiving KD, 38% of patients achieved greater than 50% reduction in their epileptic seizures and 7% had greater than 90% seizure reduction. Responder rates were similar to those seen in randomized controlled trials of newer antiepileptic drugs versus placebo.[6] For some epilepsy syndromes and conditions KD has been consistently reported as more beneficial (>70%) than the average 50% KD response (defined as >50% seizure reduction). Anti-epileptic medications may be reduced after 1 month if KD is successful. KD has also been used in the treatment of metabolic disorders such as glucose transporter type 1 (GLUT-1) deficiency and pyruvate dehydrogenase deficiency, which require that the patient to follow the diet throughout his or her entire life.[2,4,6-11]

The classic KD is generally performed on a 4:1 ratio (4 parts of fat for every 1 part of carbohydrate + protein), with as much as 90% of the calories coming from fats, or a 3:1 ratio (3 parts of fat for 1 part of carbohydrate + protein), with roughly 87% of calories coming from fats.[1,2,12] Many patients do not adhere to treatment because of the diet's low palatability and severe carbohydrate restrictions, despite its positive effects in epileptic seizure control.[4] To date, no studies that show alternatives or interventions to improve adherence to KD have been conducted in Brazil.

In children that achieve significant seizure control, KD can be continued for 2 to 3 years or more depending on the clinical response.[13] Thus, it is important to propose strategies that increase treatment compliance, avoid diet monotony, and improve the quality of life of patients and their families. A ketogenic kitchen is an important tool to provide practical education for families with children in KD, and its goal is to improve the learning experience and make these families more confident in preparing meals.[14] In addition, it allows dietitians to test and improve the sensory aspects of low-carbohydrate and high-fat recipes.

We aimed to describe the creation of the first ketogenic diet-teaching kitchen at a ketogenic reference center in Brazil aimed at developing ketogenic recipes and holding keto-culinary workshops with caregivers.

Method

This prospective study was conducted at the KD outpatient clinic of the Children and Adolescent's Institute at the Clinics Hospital, University of São Paulo Medical School (HCFMUSP), São Paulo, Brazil. The project was approved by the HCFMUSP Research Ethics Committee under number 3,735,637. When invited to participate in the culinary workshops, the parents or legal guardians of children with KD signed informed consent forms.

In the Children and Adolescent's Institute at the Clinics Hospital we have already one experimental kitchen to support teaching culinary classes for patients and help to develop recipes for some restricted diets (such as allergies,

kidneys diseases etc). The ketogenic diet team adapted the use of this place to improve Care of ketogenic diet patients. This is a pilot project to creation of a "ketogenic kitchen" first initiative in Brazil to improve compliance to KD.

Based on the demand at the outpatient nutrition clinic, recipes currently in use by national and international KD groups were adapted and subsequently tested in four phases to assess their organoleptic characteristics. Twenty-six recipes were chosen and recalculated to meet a 4:1 ratio of fat to carbohydrate and protein.

Of the 26 recipes selected for testing, 10 were taken from the "Collection of Classical Recipes — Matthew's Friends" cooking book by Maureen Benn[15] and adapted for ingredients readily found in Brazil. Because of these changes, macronutrient quantities were recalculated based on composition tables developed for national foods.[16] Sixteen recipes based on traditional Brazilian dishes were adapted to the KD and had a few changes to meet the nutritional needs of a 4:1 KD.

The adapted 4:1 recipes were tested and assessed by sensory panel testing (Figure 1). Each recipe was evaluated by two to six registered dietitians. Some recipes needed adapting because their sensory properties were not satisfactory, and further testing was conducted on the modified recipes by the sensory panel. Each recipe was prepared twice on average, totaling 12 tests in the ketogenic kitchen.

Figure 1- Form used for the sensory panel test. São Paulo, 2020.

Evaluation form

Name: _____ Date: ___/__/_____

Recipe: _____

Please rate the recipe for each of the attributes: **APPEARANCE, AROMA, FLAVOR, TEXTURE AND OVERALL GRADE**. Rate it from 1 to 9, saying how much you liked it or disliked, according to the scale.

SCALE:
1 - I really disliked it
2 - I disliked it a lot
3 - I disliked it moderately
4- I slightly disliked it
5 - I neither liked nor disliked it
6 - I liked it slightly
7 - I liked it moderately
8 - I liked it a lot; and
9 - I liked it very much

ATTRIBUTES:
Appearence: _____
Aroma: _____
Flavor: _____
Texture: _____
Overall grade: _____

Comments:_____

In addition to routine outpatient care, cooking workshops were hosted for caregivers, without patients to ensure attention in class. In each workshop, caregivers prepared the recipes to achieve the exact number of calories and ratio of the patient's diet as if they were cooking at home. To accomplish this, participants had a hands-on cooking class: they did everything themselves, from weighing the ingredients and cooking to the final presentation of the recipes. Before the workshops, the ingredients were pre-prepared, including cutting

perishable foods and separating the ingredients, to facilitate the process and reduce the workshop time.

After preparing and tasting the recipes, a sub-sample of the participants was invited to complete a socioeconomic questionnaire and the same sensory analysis form completed by the registered dietitians, and describe their experience with the ketogenic kitchen.

Results

The present study systematized the use of a space within the hospital to promote cooking classes for caregivers of KD patients. This space was called ketogenic kitchen and made possible an innovation in the treatment of ketogenic diet in Brazil.

In the KD, heavy cream is commonly used as a fat source because of its higher concentration of fat compared to other commercial forms. However, heavy cream is a high-cost food that is difficult for some caregivers to access. Thus, an adaptation of the canned milk cream for equivalence in terms of fat content was also created.

The 18 most readily accessible recipes approved by the nutrition team at the KD outpatient clinic with the best sensory properties were compiled into four booklets to be presented to the patients' guardians in outpatient consultations and distributed at four culinary workshops throughout 2019 (Table 1).

Table 1- List of recipes and adapted ingredients developed in the ketogenic kitchen. São Paulo, 2020.

Recipes	Sweet recipes	Adapted ingredients
Cheese biscuit Zucchini spaghetti Beef stroganoff Salted farofa Ketogenic mayonnaise Colorful omelet Ketogenic bread Vegetable tart Tomato soup	Coconut candy Ketogenic banana cake Ketogenic cocoa cake Sweet farofa Eggnog ("gemada") Strawberry milk shake Lemon mousse Avocado ice cream	Adapted sour cream (35% fat)

Over the four cooking workshops, eight patients' guardians (from seven patients) participated in the KD kitchen protocol. On average, three persons participated in each class, with some caregivers participating in more than one workshop and others attending only one meeting.

Results of the questionnaire revealed that most caregivers who participated in the cooking workshops were mothers (others were father and grandmother and/or people responsible for taking care of the patients) and had completed high school education. The average number of residents in the household was two persons. Most caregivers (67%) preferentially used vegetable fat sources to prepare the ketogenic diet.

In the sub-sample of preparations that were evaluated by caregivers, most recipes in (except for Sweet farofa) achieved positive ratings sensory properties as shown in Table 2.

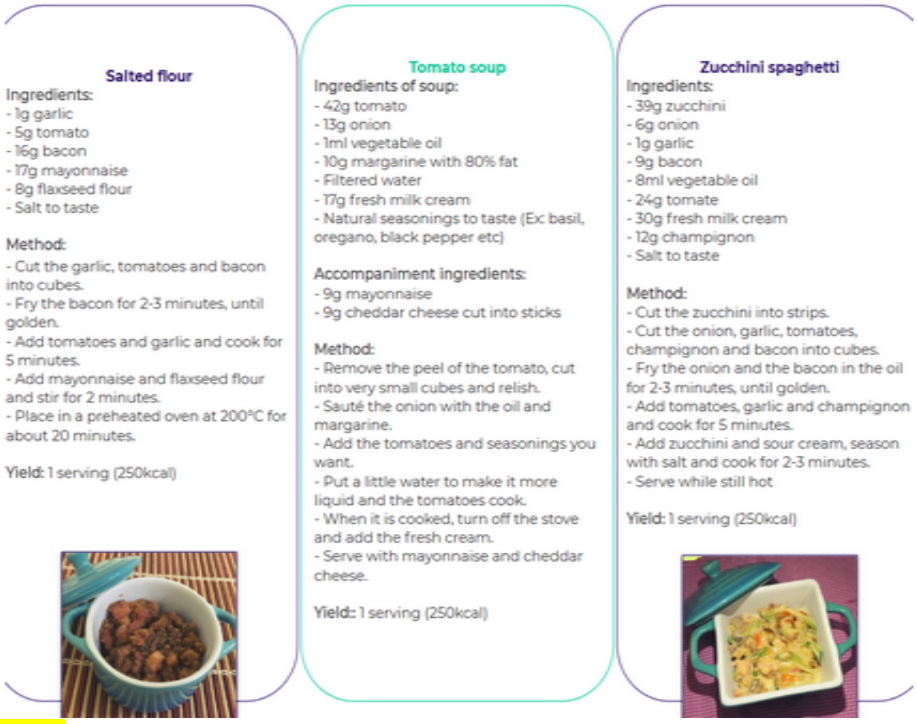
Table 2- Sensory analysis of ketogenic recipes applied to a sub-sample of the caregivers in the cooking workshops. São Paulo, 2020.

Reviewer (n)	Recipe	Sensory property (mean ± SD)				
		Appearance	Aroma	Flavor	Texture	Overall grade
3	Ketogenic banana cake	8.3 (0.6)	8.7 (0.6)	9.0 (0.0)	8.7 (0.6)	9.0 (0.0)
3	Ketogenic cocoa cake	8.3 (1.2)	8.0 (0.0)	8.0 (1.0)	8.7 (0.6)	8.3 (0.6)
3	Cheese biscuit	5.7 (1.5)	8.3 (0.6)	8.3 (1.2)	7.3 (2.1)	8.3 (1.2)
3	Zucchini spaghetti	9.0 (0.0)	9.0 (0.0)	9.0 (0.0)	9.0 (0.0)	9.0 (0.0)
3	Sweet farofa	2.3 (1.5)	4.0 (1.7)	2.3 (1.5)	3.7 (3.8)	3.0 (1.7)
3	Salted flour	7.7 (1.5)	6.7 (1.2)	8.0 (1.7)	8.0 (1.7)	7.7 (1.5)
3	Ketogenic bread	7.0 (3.5)	5.7 (3.1)	6.0 (3.0)	6.7 (3.2)	6.3 (3.1)
3	Tomato soup	8.0 (1.7)	8.7 (0.6)	8.0 (1.7)	9.0 (0.0)	8.3 (1.2)
3	Avocado ice cream	8.3 (0.6)	6.3 (1.5)	7.3 (0.6)	8.0 (0.0)	8.0 (1.7)

Caption- 1: I really disliked it; 2: I disliked it a lot; 3: I disliked it moderately; 4: I slightly disliked it; 5: I neither liked nor disliked it; 6: I liked it slightly; 7: I liked it moderately; 8: I liked it a lot; and 9: I liked it very much.

Servings of different sizes (150, 200, 250, 300, 350, 400, 450, and 500 kcal), all at a 4:1 ratio, were calculated for each recipe. The recipes were made available to the other outpatient KD patients on a 4:1 diet as alternatives to the regular daily meals, and individualized to their caloric needs. Figure 2 shows some of the recipes created, calculated to offer 250 kcal per serving.

Figure 2- Examples of recipes created in the ketogenic kitchen. São Paulo, 2020.



Source:

Discussion

This study describes the creation of the first ketogenic kitchen in Brazil, where ketogenic recipes were prepared and culinary workshops were held for the legal guardians of children receiving the KD. The ketogenic kitchen is an extremely important achievement that can help increase adherence to the KD by patients and their guardians. The activities were satisfactory: participants were able to clear out their doubts, learn, practice recipes, and develop new skills. In general, all participants enjoyed the prepared recipes and praised the culinary workshop.

KD has been shown to be effective in the treatment of epilepsy refractory to drug therapy.[17-18] Freitas *et al.* [17] compiled data from 54 pediatric patients with drug-resistant epilepsy treated at the Children and Adolescent's Institute of the University of São Paulo who were initiated on a 4:1 KD protocol. After 24 months of receiving the KD, 62.1% of patients achieved > 75% seizure reduction. At Children's Hospital of Pittsburgh[18], 71% of patients (n = 48) had ≥ 50% reduction in seizure episodes 45 days after they were started on a ketogenic diet. Other studies showed results beyond decrease of seizures: quality of life, interpersonal/social, psychological/emotional, cognition, behavior.[19-20]

Despite its promising results, long-term compliance with KD remains a major challenge because of its dietary restrictions.[21-23] A meta-analysis of 11 studies on KD in adults showed that low patient compliance with a KD (~45%) was caused mainly by an association of psychosocial factors with the restrictive nature of the diet, in addition to intolerability caused by its side effects.[24] A randomized clinical trial conducted at the Johns Hopkins Adult Epilepsy Diet Center[25] with adults using the modified Atkins diet (MAD), a variant of the ketogenic diet, found that supplementing MAD with a commercially available ketogenic formula increased patient compliance, demonstrating the importance of providing more practical alternatives to the KD for encouraging compliance.

A recent study conducted at Children's Hospital of Philadelphia[14] showed that a ketogenic teaching kitchen in the hospital has greatly improved the dietary treatment by better preparing families and making them more confident to implement the KD. In addition, the continuous development of new recipes has contributed to expanding the patients' taste preferences.

There are some limitations in the current study. First of all, the lack of control group to compare the results of Ketogenic Kitchen. Another big issue was the small sample size. Few caregivers attended the workshops because they were unable to leave patients in other people's care to participate in the classes. Moreover, the culinary workshops took place on dates other than appointment dates, making it difficult for caregivers to go to the hospital.

Efforts will be made to incorporate the keto kitchen workshops into the dietary treatment program at the Children and Adolescent's Institute, with routine cooking workshops offered as part of the outpatient treatment. Further studies are required to evaluate the efficacy of this strategy for encouraging compliance with the ketogenic diet in children with refractory epilepsy.

Conclusion

The ketogenic teaching kitchen enabled the development of ketogenic recipes adapted to Brazilian eating habits. Providing alternative meals to children is an essential strategy for enhancing compliance with the KD because they contribute to expand the dietary repertoire of these patients. Moreover, all recipes were carefully selected, calculated, and approved by registered dietitians, which guarantees the safety of their use by patients on a 4:1 KD. Future studies with high methodological quality should test the efficacy of the ketogenic kitchen in increasing compliance with the KD in the long term.

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Correspondent Author
Lenycia de Cassya Lopes Neri
Children Institute of Hospital das Clínicas
647 Dr. Enéas Carvalho de Aguiar Av.ZIP: 05403-000.
Cerqueira César. Sao Paulo, Sao Paulo, Brazil.
lenycia.neri@hc.fm.usp.br

Sociodemographic and socio-political profile of candidate nursing professionals in the 2020 municipal elections

Perfil sociodemográfico e sociopolítico dos profissionais de enfermagem candidatos nas eleições municipais de 2020

Perfil sociodemográfico y sociopolítico de los profesionales de enfermería candidatos a las elecciones municipales de 2020

Linconl Agudo Oliveira Benito[1], Rosana da Cruz Lima[2]

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REVISA

1. Universidade de Brasília, Programa de Pós-Graduação em Ciências e Tecnologias e Saúde. Brasília, Federal District, Brazil.
https://orcid.org/0000-0001-8624-0176

2. Hospital das Plásticas de Brasília. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-2881-1193

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RESUMO

Objetivo: Analisar o perfil socioeconômico e sociopolítico de profissionais de enfermagem que se candidataram nas eleições municiais de 2020. **Método:** Estudo exploratório, descritivo, comparativo e quantitativo, sendo os dados adquiridos no Tribunal Superior Eleitoral (TSE). **Resultados:** Foram identificados 8.605 profissionais de enfermagem, sendo que 54,5% (n=4.688) formada por técnicos e auxiliares de enfermagem e 45,5% (n= 3.917) de enfermeiros, 70,7% (n=6.081) eram de pessoas do sexo feminino, 36,5% (n=3.140) possuíam entre 40 a 49 anos, 48% (n=4.128) eram de cor/raça branca, 45,4% (n=3.906) eram casadas(os), 49,4% (n=4.253) possuíam ensino médio completo (EMC), 99,5% (n=8.566) eram brasileiros natos, 95,6% (n=8.230) concorreram ao cargo de vereador, 97,1% (n=8.356) não estavam concorrendo à reeleição, 97,1% (n=8.356) concorrendo na forma de partido político isolado e 8,9% (n=764) se elegeram pelo Movimento Democrático Brasileiro (MDB). **Considerações finais:** Foi identificada reduzida participação de profissionais de enfermagem no pleito eleitoral desenvolvido no ano de 2020.

Descritores: Política; Enfermeiras e Enfermeiros; Assistentes de Enfermagem; Governo Local.

ABSTRACT

Objective: To analyze the socioeconomic and socio-political profile of nursing professionals who ran in the 2020 municipal elections. **Method:** Exploratory, descriptive, comparative and quantitative study, the data being acquired at the Superior Electoral Court (TSE). **Results**: 8.605 nursing professionals were identified, 54.5% (n=4.688) of nursing technicians and assistants and 45.5% (n=3.917) of nurses, 70.7% (n=6.081) were of female, 36.5% (n=3.140) were between 40 and 49 years old, 48% (n=4.128) were white 45.4% (n=3.906) were married, 49.4% (n=4.253) had completed high school (EMC), 99.5% (n=8.566) were born Brazilians, 95.6% (n=8.230) ran for the position of councilor, 97.1% (n=8.356) were not running for re-election, 97,1% (n=8.356) running as an isolated political party and 8.9% (n=764) were elected by the Brazilian Democratic Movement (MDB). **Final considerations**: A reduced participation of nursing professionals in the electoral election developed in 2020 was identified.

Descriptors: Politics; Nurses and Nurses; Nursing Assistants; Local Government.

RESUMEN

Objetivo: Analizar el perfil socioeconómico y sociopolítico de los profesionales de enfermería que se presentaron a las elecciones municipales de 2020. **Método:** Estudio exploratorio, descriptivo, comparativo y cuantitativo, siendo los datos adquiridos en el Tribunal Superior Electoral (TSE). **Resultados:** Se identificaron 8.605 profesionales de enfermería, 54.5% (n=4.688) de técnicos y auxiliares de enfermería y 45.5% (n=3.917) de enfermeras, 70.7% (n=6.081) fueron de las mujeres, el 36,5% (n=3.140) tenían entre 40 y 49 años, el 48% (n=4.128) eran blancas, 45,4% (n=3.906) estaban casadas, 49,4% (n=4.253) había completado la escuela secundaria (EMC), 99,5% (n=8.566) nacieron brasileños, 95,6% (n=8.230) se postuló para el cargo de concejal, 97,1% (n=8.356) no se postularon para la reelección, el 97,1% (n=8.356) se postuló como partido político aislado y el 8,9% (n=764) fueron elegidos por el Movimiento Democrático Brasileño (BMD). **Consideraciones finales**: Se identificó una reducida participación de los profesionales de enfermería en la elección electoral desarrollada en 2020.

Descriptores: Política; Enfermeras y enfermeras; Auxiliares de enfermería; Gobierno local.

ORIGINAL

Introduction

According to some researchers, interested in the issue of politics and its representation, since ancient and immemorial times, for example, in ancient Greece, democracy can be constituted as a regime or system of government exercise, classified as "imperfect", however , the human being, until now, has not managed to implement a more effective, efficient and effective form of organization and social management.1 In this way, the exercise of citizenship, participation and political representation, is produced and processed with higher quality, through engagement with movements, associations, public bodies, positions and political responsibilities, preceded by participation in disputes with elections.[1-2]

The word election, coming from the Latin verb "*eligere*", that is, "to choose" and, by the noun "*electione*", or by extension, "choice", is constituted, in the different forms and democratic systems of representative government, while the by which legislators are chosen, in the positions of Councilors, Deputies and Senators, the Chief of the Executive Branch, in the positions of Mayors, Governors and President of the Republic and, in some other nations, other authorities of the public power.[3] Thus, it is It is important to remember what is supported by the Federal Constitution of 1988 (CF 1988), when it defends inalienable and incorruptible rights, promulgating in its article number 14 that, "popular sovereignty will be exercised by universal suffrage and by direct and secret, with equal value for all, and, under the terms of the law, by means of I - plebiscite, II - referendum and III - popular initiative.[4]

According to the Superior Electoral Court (TSE), municipal elections are constituted as those, developed for the election process, for the posts of Mayors, Deputy Mayors, Councilors and, where applicable, Judges of Peace.[5] In 2020, Brazilian municipal elections were held, comprising a universe of 557,406 candidacy records with the TSE, of which 96.1% (n = 535,927) were considered eligible to run for the electoral election in question and 3.9% (n = 21,479) were unable.[6]

In this way, it was also identified an evolution in the number of candidates regularly enrolled, with regard to the Electoral Election 2016 and the Election 2020, in the first, the universe of 496,927 candidates was registered and in the second, the amount of 557,406 , pointing to an increase in the number of candidates put up for dispute in the aforementioned electoral processes.[6]

In this sense and, according to the Brazilian Institute of Geography and Statistics (IBGE) in the 5,570 municipalities that make up the Federative Republic of Brazil, there were 5,568 vacancies for the positions of "Mayor", the universe of 19,352 candidates, implementing a proportion of approximately 3 , 48 candidate/ vacancy and, for the positions of "Vice Mayor", the number of 19,725 candidates was generated for the same 5,568 vacancies, producing the proportion of 3.54.[7,8,9]

As for the position of "Councilman", 58,112 vacancies were identified for 518,329 registered candidates, generating a proportion of 8.92 candidates/ vacancies.[8,9] Regarding the electorate, an evolution in their composition was also identified, when compared the last electoral elections, and in 2016, 144,088,912 people qualified for the voting process were counted, against 147,918,483 registered in 2020.[9,10]

The TSE, as the highest legal instance of the Brazilian Electoral Justice, in

order to better organize the actions and methodologies related to the electoral election, constituted several documents guiding this important electoral process, establishing Resolution number 23.609 that "provides for the choice and registration of candidates for the elections", and also Resolution number 23,611, which" provides for the general acts of the electoral process for the Elections 2020".[11-12] In a journalistic article dated 08/10/2012, the following are presented: reflections and analysis by Federal Deputy Nurses Rosane Ferreira from the state of Paraná (PR) and Carmen Zanotto from Santa Catarina (SC), arguing that the category has the need to elect a greater number of deputies, who are committed to the causes and flags nursing.[13]

It was also supported by these important representatives, the need to build a greater political force, to facilitate the conquest of the demands of this category, which at that time, already had a universe of more than 1.8 million professionals Nurses (ENF), Technicians (TEC) and Auxiliary (AUX) .[13] Regarding an issue dated 11/28/2018, it is recalled that it was developed at the 21st Brazilian Congress of Nursing Councils (21st CBCENF), discussions regarding the issue of political representativeness, exercised by professionals in this category who were in their respective cities as City Councilors, Mayors, District and State Deputies.[14]

Among other issues that came to be discussed in the aforementioned scientific professional nursing conclave, the highlight was the reduction of the professional workload from 40 to 30 hours a week, better working conditions, in addition to the increase in professional nurses, along with the representative bodies of the executive powers and legislative throughout Brazil.14 In this sense, it was constituted as objective of the present research, to analyze the socioeconomic and sociopolitical profile of the nursing professionals candidates, who were written to run for political position in the municipal elections, held in the year of 2020.

Method

It is an exploratory, descriptive, comparative study and characterized by a quantitative approach. For the preparation of this work, subsidies were purchased from the Electoral Data Repository (RDE), accessible at the electronic address [https://www.tse.jus.br/eleicoes/estatisticas/repositorio-de-dados-eleitorais-1/repositorio-de-dados-eleitorais], managed by the Superior Electoral Court (TSE) on the website [https://www.tse.jus.br/].

The information in question was extracted systematically in the second half of the month of November of the year 2020, (that is, between 11/15/2020 to 11/30/2020), aiming at making them more reliable , in relation to the instituted universe of candidates registered in the municipal electoral processes in question. As nursing professionals in this research, those governed by the Professional Nursing Practice Law (LEPE) number 7,498/86, regulated by Decree number 94,406 / 87, were constituted, the same being the Nurse (ENF), the Nursing Technician. Nursing (TEC) and Nursing Assistant (AUX).[15-16]

To proceed with the analysis process of the subsidies used in the construction of this research, the Microsoft Excel 2016® software, belonging to the Microsoft Office 2016® package, for Windows® was used. Descriptive statistical analysis was performed, with average (%) and standard deviation (SD) percentage calculations performed, and the results generated were presented in the form of three (03) explanatory tables and one (01) figure.

For the contextualization process of the generated evidence, computerized bibliographic surveys were carried out with electronic type databases, the same being the Virtual Health Library (VHL), Google Scholar (Google Scholar), the Legislative and Legal Information Network (LexML), Minerva-UFRJ, Saber-USP, the Institutional Repository of UnB (RIUnB), the Institutional Repository of the Federal University of São Carlos (RI-UFSCar), the Virtual Network of Libraries (Rede RVBI) and Theses- FIOCRUZ, thus acquiring articles from scientific journals, books, master's dissertations and elements related to Brazilian legislation such as laws, ordinances and government decree.

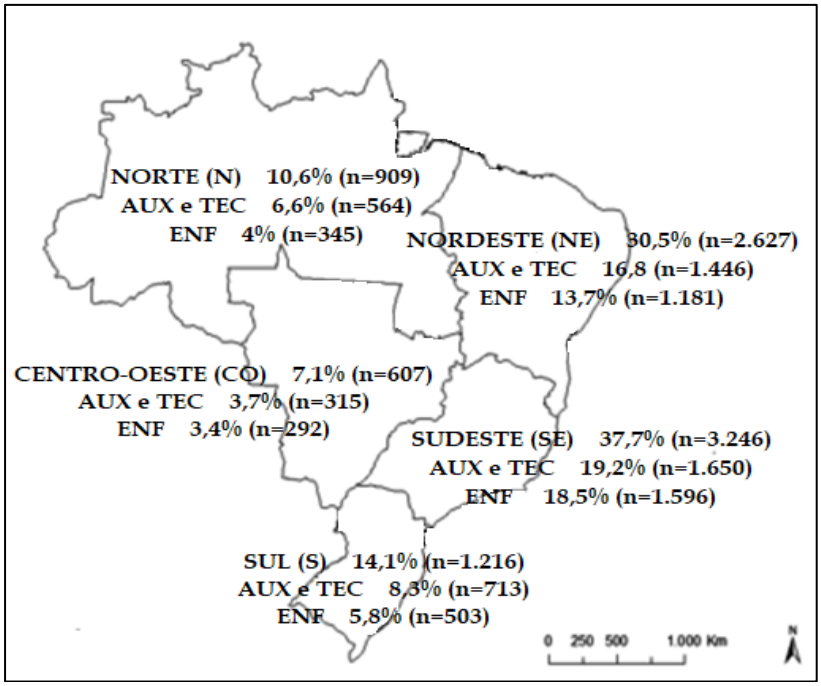
The references chosen for the implementation of this research are constituted as national and international, being the same in the languages "English" and "Portuguese". To facilitate the process of analysis and contextualization of the identified evidence, the research “Nursing Profile in Brazil” was used, which is the responsibility of the Federal Nursing Council (COFEN) in partnership developed with the Oswaldo Cruz Foundation (FIOCRUZ) of the Ministry of Health (MS).[17,18,19]

The present research is constituted as a precise, characterized and detailed diagnosis, about the situation of the universe of professionals constituting the nursing category, working in the Brazilian nation, in addition to the most significant and specific survey of this nature, carried out recently in Latin America. [17,18,19] The authors declare no conflicts of interest.

Results

In the process of organizing and analyzing the acquired data, it was possible to verify that the Southeast (SE) was the Brazilian region that registered the largest preponderance of nursing professionals registered to participate in the 2020 national election, as shown in figure 1. It was it was also verified that the SE region registered the greatest preponderance of AUX, TEC and ENF professionals registered to participate in the 2020 election.

Figure 1 - Distribution of the frequency of professional nursing candidates by category, Brazilian region and percentage, registered with the municipal elections in 2020 (n=8.605):*,**



Source: Adapted from TSE, 2020.
* The extracted data are faithful to the providing institution.
** Due to the political electoral process being constituted as something fast and in constant modification, the author declares the possibility of modification (s), decrease (s) or expansion (s) of the data presented in the present production.

The state of São Paulo (SP) was one of the other federative units, which registered the highest preponderance of professional nursing candidates, registered in the 2020 national election, registering a universe of 16% (n = 1,377), as found next to table 1. When analyzing the professional category, it was identified that Minas Gerais (MG) obtained the highest preponderance of AUX and TEC with 13.5% (n = 634) while, SP obtained the highest concentration of NFE with 19% (n = 744).

Table 1 - Distribution of the frequency of professional nursing candidates by category, federative units and percentage, registered with the municipal elections in 2020 (n = 8,605):*,**

UF	TOTAL f (%)	AUX and TEC f (%)	ENF f (%)
Sao Paulo (SP)	1.377 (16)	633 (13,5)	744 (19)
Minas Gerais (MG)	1.196 (13,9)	634 (13,5)	562 (14,3)
Bahia (BA)	738 (8,6)	443 (9,4)	295 (7,5)
Rio de Janeiro (RJ)	495 (5,8)	281 (6)	214 (5,5)
Parana (PR)	488 (5,7)	232 (4,9)	256 (6,5)
Rio Grande do Sul (RS)	449 (5,2)	311 (6,6)	138 (3,5)
Para (PA)	376 (4,4)	234 (5)	142 (3,6)
Maranhao (MA)	371 (4,3)	176 (3,8)	195 (5)
Pernambuco (PE)	355 (4,1)	181 (3,9)	174 (4,4)
Goias (GO)	311 (3,6)	157 (3,3)	154 (3,9)
Ceara (CE)	304 (3,5)	159 (3,4)	145 (3,7)
Santa Catarina (SC)	279 (3,2)	170 (3,6)	109 (2,8)
Paraiba (PB)	234 (2,7)	123 (2,6)	111 (2,8)

Rio Grande do Norte (RN)	205 (2,4)	133 (2,8)	72 (1,8)
Piaui (PI)	196 (2,3)	98 (2,1)	98 (2,5)
Mato Grosso (MT)	193 (2,2)	103 (2,2)	90 (2,3)
Espirito Santo (ES)	178 (2,1)	102 (2,2)	76 (1,9)
Amazonas (AM)	174 (2)	99 (2,1)	75 (1,9)
Tocantins (TO)	142 (1,7)	91 (1,9)	51 (1,3)
Alagoas (AL)	123 (1,4)	66 (1,4)	57 (1,5)
Mato Grosso do Sul (MS)	103 (1,2)	55 (1,2)	48 (1,2)
Sergipe (SE)	101 (1,2)	67 (1,4)	34 (0,9)
Rondonia (RO)	87 (1)	48 (1)	39 (1)
Amapa (AP)	55 (0,6)	41 (0,9)	14 (0,4)
Acre (AC)	44 (0,5)	32 (0,7)	12 (0,3)
Roraima (RR)	31 (0,4)	19 (0,4)	12 (0,3)
Total	**8.605 (100)**	**4.688 (100)**	**3.917 (100)**

Source: Adapted from TSE, 2020.
* The extracted data are faithful to the providing institution.
** Due to the political electoral process being constituted as something fast and in constant modification, the author declares the possibility of modification (s), decrease (s) or expansion (s) of the data presented in the present production.

The socioeconomic profile of professional nursing candidates in the 2020 elections was 54.5% (n = 4,688) were AUX and TEC, 45.5% (n = 3,917) were NFE, 70.7% (n = 6,081) were female, 36.5% (n = 3,140) were between 40 and 49 years old, 48% (n = 4,128) were white / white, 45.4% (n = 3,906) were married, 49.4% (n = 4,253) had completed high school (EMC), 99.5% (n = 8,566) were native Brazilians, as shown in table 2.

Table 2 - Socio-economic and sociodemographic profile of the professional nursing candidates registered with the municipal electoral processes in the year 2020, Brazil (n = 8,605):*,**

Categories	f	%
Male		
Feminino	6.081	70,7
Masculino	2.524	29,3
Age		
40 a 49	3.140	36,5
30 a 39	2.320	27
50 a 59	2.065	24
18 a 29	519	6
60 a 69	514	6
70 a 79	42	0,5
80 a 89	4	0,0
90 a 99	1	0,0
Color/race		
White	4.128	48
Parda	3.364	39,1
Black	967	11,2
Not informed	89	1
Indigenous	37	0,4
Yellow	20	0,2

Marital Status		
Married	3.906	45,4
Singles	3.402	39,5
Divorced	962	11,2
Widows	218	2,5
Judicially Separated	117	1,4
Schooling		
Complete High School (CHS)	4.253	49,4
Complete Higher Education (CHE)	3.728	43,3
Incomplete Higher Education (IHE)	320	3,7
Complete Elementary School (CES)	159	1,8
Incomplete High School (IHS)	81	0,9
Incomplete Elementary Education (EFI)	36	0,4
Reads and writes	28	0,3
Nursing Categories		
nursing technicians and assistants	4.688	54,5
Nurses	3.917	45,5
Nationality		
Native Brasilian	8.566	99,5
Naturalized Brasilian	39	0,5
Total	**8.605**	**100**

Source: Adapted from TSE, 2020.
* The extracted data are faithful to the providing institution.
** Due to the political electoral process being constituted as something fast and in constant modification, the author declares the possibility of modification (s), decrease (s) or expansion (s) of the data presented in the present production.

Regarding the socio-political profile of the candidates in question, it was possible to verify that he was 95.6% (n = 8,230) ran for the position of councilor, 97.1% (n = 8,356) were not running for reelection, 97 , 1% (n = 8,356) competed as an isolated political party and 8.9% (n = 764) were elected by the Brazilian Democratic Movement (MDB) party, as shown in table 3.

Table 3 – Socio-political profile of nursing professional candidates registered with the municipal electoral processes in 2020, Brazil (n=8.605):*,**

Categories	f	%
Political Position		
City Councilor	8.230	95,6
Vice Mayor	234	2,7
Mayor	141	1,6
Re-election		
No	8.356	97,1
Yes	249	2,9
Isolated party or coalition		
Isolated party	8.356	97,1
Coalition	249	2,9
Political Parties		
Brazilian Democratic Movement (BDM)	764	8,9
Social Democratic Party (SDP)	633	7,4
Progressives Party (PP)	630	7,3

Democrats (DEM)	514	6
Brazilian Social Democracy Party (BSDP)	494	5,7
Democratic Labor Party (DLP)	482	5,6
Liberal Party (PL)	471	5,5
Brazilian Socialist Party (BSP)	453	5,3
Republicans (REPUBLICANS)	446	5,2
Workers' Party (PT)	375	4,4
Brazilian Labor Party (BLP)	347	4
Liberal Social Party (PSL)	331	3,8
We can (CAN)	285	3,3
Christian Social Party (PSC)	276	3,2
Solidarity Party (SOLIDARITY)	272	3,2
Citizenship Party (CITIZENSHIP)	253	2,9
Party Forward (FORWARD)	252	2,9
Republican Social Order Party (RSOP)	219	2,5
Patriots Party (Patriots)	194	2,3
Green Party (GP)	186	2,2
Communist Party of Brazil (CP of B)	167	1,9
Christian Labor Party (CLP)	120	1,4
Brazilian Labor Renew Party (BLRP)	118	1,4
Sustainability Network (SN)	83	1
National Mobilization Party (NMP)	70	0,8
Socialism and Freedom Party (SFP)	64	0,7
Chrisstian Democracy (DC)	63	0,7
Brazilian Women's Party (BWP)	37	0,4
New Party (NEW)	4	0,0
Brazilian Communist Party (BCP)	1	0,0
Socialist Party of Unified Workers (SPUW)	1	0,0
Total	**8.605**	**100**

Source: Adapted from TSE, 2020.
* The extracted data are faithful to the providing institution.
** Due to the political electoral process being constituted as something fast and in constant modification, the author declares the possibility of modification (s), decrease (s) or expansion (s) of the data presented in the present production.

Discussion

With regard to the question of the reduced number of nursing professionals registered to run for a political seat in the 2020 election, a correlation was identified with what is proposed by the scientific literature, when it is defended by some researchers who, characteristics and issues are identified that point out the political fragility of nursing professionals and nurses, when analyzed through socio-historical contexts[20]. In this way and, historically, this finding may be related to nursing being constituted as a professional category perceived as politically recent, being the same classified as "modern nursing", after the mobilizations, social engagement and political militancy implemented by its matriarch, Florence Nightingale .[21,22,23]

In relation to the greater preponderance of nursing professionals enrolled in the 2020 electoral elections belonging to the Southeast (SE), it was identified in the scientific literature that this fact is related to this region being constituted as the most populous, when compared with the others.[24] On the other hand, the aforementioned phenomenon is also related because of this region, having the highest number of professionals in this category, regularly enrolled and enjoying

their labor rights, according to data presented by COFEN, between the months of September and October of the year from 2020.[25.26]

Regarding the federative unit (UF) of São Paulo (SP) to be the one that among the other Brazilian states, registering the greatest preponderance of nursing professionals registered in the electoral elections of 2020, a scientific correlation was identified, when it was proposed that he it is the most populous in relation to the others.[24] This way, and for other researchers, the states of São Paulo (SP), Rio de Janeiro (RJ) and Minas Gerais (MG) respectively, are those that historically and hegemonically registered the higher frequency of training of agents that make up this functional and active category of health.[27,28]

As for the nursing professionals registered in the 2020 election, if they constitute themselves as their greatest preponderance of women, a correlation is found with what is exposed in the scientific literature when it is argued that it is mostly made up of women, accounting for approximately 77% .[27] As for other researchers, it can historically be argued that, with the creation of the School of Nurses of the National Department of Public Health, currently designated as the Anna Nery School of Nursing at the Federal University of Rio de Janeiro. January (EEAN / UFRJ), founded in the early 1920s, male people were being pushed away from nursing more strongly.[27,28,29]

This process was developed, based on the implantation of the Anglo-American educational model in Brazil, which has become a standard for other schools that have been instituted since then.[27,29] It should not be forgotten that the nursing profession in Brazil In the past, it was intended exclusively for female people and, in this sense, this condition remained approximately until the 70s of the last century.[27,28,29]

Regarding the greater preponderance identified of nursing professionals competing for political office, in the electoral election of 2020, aged between 40 and 49 years, a disagreement was identified with the Nursing Profile Survey in Brazil, which pointed out as more frequent professionals with 31 to 35 years old, computing a universe of 20.3% (n = 366,165) .[25,27] As exposed by the important research cited, the age group 41 to 45 years old registered the universe of 13.2% (n = 238,731) nursing professionals and the age group from 46 to 50 years old the amount of 10.7% (n = 193,835), respectively.[18,27,28]

In this context, some researchers argue that nursing is a labor category that is in a process that can be characterized as "rejuvenation", as it is found that in it, 40% of its contingent is aged between 36-50 years , 38% were 26-35 years old, and 2% were over 61 years old.[19,27,28] Another important issue related to the referred labor category is that, 61.7% of the total, registered a universe of 1 million and 100 thousand workers who were up to 40 years old, which points to the conclusion that the referred team of professionals was predominantly young, and that 1/4 was up to 30 years old.[19,27,28]

With regard to the greater preponderance of nursing professionals registered in the electoral election of 2020 declaring to be of white race / color, a correlation with the scientific literature was identified, as shown in the Continuous National Sample Survey (Continuous PNAD) presented in 2016, when it is argued that this contingent represented 44.2% of the total Brazilian population, accounting for the universe of 90.9 million people.30 For some researchers, nursing professionals belonging to the categories of AUX and TEC, who represent 44.5% declare to be brown, 37.6% white and 12.9% race / black.28

In this context, it can also be verified that, if the nursing professionals who

declared to be brown and black are added, it will be counting the amount of 57.4% [28] Regarding the category that analyzed the civil status of the nursing professionals, it was identified correlation with what is supported by the scientific literature, as, according to the same, in the Nursing Profile in Brazil research, implemented in 2013 by COFEN / FIOCRUZ, a universe of 1,804,535 professionals was regularly registered, of which , 40.7% (n = 734,319) declared that they were married and 38% (n = 685,249) were single.[31]

In the census conducted by COFEN / FIOCRUZ in 2010, it was pointed out that the nursing category had a universe of 1,449,583 professionals regularly enrolled and of these, 49.29% (n = 714,487) declared they were single and 34.66% (n = 502,487) were married, which indicates a change in the profile of the labor agents under analysis, between the temporary periods in question.[32] Regarding the educational level, which identified the highest prevalence of nursing professionals , having completed high school (EMC), a correlation was identified with what is defended by the scientific literature when it is exposed that approximately 57.7% have this education, which is required to work in the respective jobs under analysis .[28]

On the other analytical level, the phenomenon that approximately 5.7% of AUX and TEC draws attention, that is, about 79 thousand professionals have less than the education required to exercise these jobs in the scientific praxis in question.[33] In this sense, it is possible that this fact under analysis is directly or indirectly related to what in the past was known as "nursing attendants" or practitioners, who were placed in the position of AUX, without the need for proof.[33]

On the other hand, a very relevant data refers to the question that, more than 34.3%, that is, 1/3 of the AUX and TEC declared that they are attending or have already completed complete higher education (ESC), and in this way, this universe of approximately 470 thousand workers, have the required education, aiming to work with these jobs.[27,28] Another phenomenon that draws attention in the analysis process is that approximately 31.4%, that is, 1/3 of the contingent of professionals ENF took the TEC or AUX course before purchasing the ESC.[27,28]

On the other hand, among more than 130 thousand ENF professionals, who had the possibility of completing the AUX and / or TEC course before completing higher education, that is, approximately 86.1% declared having performed some nursing activity.[28] context, it can be concluded that a significant portion of approximately 31.4% of this workforce (FT) is made up of ex-AUX professionals or ex-TEC who have considerable experience in nursing praxis.[27,28]

In the category that identified that the greater preponderance of nursing professionals registered for participation in the 2020 election, had Brazilian nationality, a correlation was identified with the scientific literature, when it is argued that the absolute majority of the nursing team regularly registered with the Regulatory councils for professional practice is composed of native Brazilians.[27,28] However, for some researchers, it is interesting that approximately 2,000 nursing professionals had the time, a foreign national, since of them who make up the FT, about 14% come from from Uruguay, 12.6% are from Peru, 8.5% are from Portugal, 7.4% are from Guinea Bissau and 7.2% are from France.[27]

On the other hand, it is also interesting to point out that, among the aforementioned nursing professionals naturalized in Brazil, the presence of eighteen (18) nations belonging to the various continents also stands out, a phenomenon that helps in the composition of the Brazilian nursing FT, being

they South America with approximately 33.3% (n = 6), Europe with 27.8% (n = 5), Central America with 11.1% (n = 2), Africa with 11.1% (n = 2), Asia with 11.1% (n = 2) and North America with 5.6% (n = 1).[27,28]

Regarding the political position category, it was found that councilor was the one who registered the greatest preponderance, being the same in common with what is found in the literature, when it is exposed that according to data made available by the Superior Electoral Court (TSE), in Elections in 2020, 58,114 were disputed by a universe of 518,329 candidates, with a candidate / vacancy ratio of 8.92.[34]

Another fact that draws attention, when comparing the 2016 Electoral Election with that of 2020, is that there was an evolution in the number of registered candidates, increasing the number from 496,927 to 557,406 related to the political positions of Mayor, Vice-Mayor and Councilman. [34] Historically in Brazil, the first city council was installed in 1532, in the hereditary captaincy by Martin Afonso de Souza, where the first Brazilian village was founded, currently known as the city of São Vicente, located on the coast of the state of SP, becoming known as the "Vincentian Chamber".[34]

In this sense, the councilor is constituted as the political agent elected during the process known as electoral election for a term of four (04) years, receiving the investiture of a legitimate representative of society and, having the role of being the bridge between the population and the Mayor.[35] Etymologically, the origin of the term "councilman" is related to the sense of analyzing, evaluating and also verifying and, in this sense, he is responsible for making complaints of irregularities, supervising the accounts of the local Executive Branch, drafting laws , in addition to performing administrative functions in the city council where it operates.[35]

According to the precept of the CF 1988, in its article number 14, may apply for councilor, whoever is literate, has Brazilian nationality, enjoys the full exercise of political rights, has been affiliated to a political party for more than a year, has at least 18 years of age on election day, has had an electoral domicile in the constituency for at least one year, and is also listed electorally.[4] In its chapter IV, which talks about the municipalities and in article number 29, it is supported by the Brazilian Magna Carta that the "election of the Mayor, the Vice-Mayor and the Councilors, for a term of four (4) years, by means of a direct and simultaneous election held throughout the country.[4]

In the last fifteen (15) elections held between the years 1950-2002, to run for a political seat at the Chamber of Federal Deputies in Brazil, it was found that the majority of parliamentarians ran for reelection, representing an average of approximately 68% .[36, 37] For some researchers interested in the phenomenon of re-election, the development of time limitation as a form of certainty against the exceptional powers of the incumbent is perceived as positive points in the exercise of power, notably perceived by the political systems of the presidential type.[38,39]

Also pointed out as positive points related to the phenomenon of reelection of political office through the electoral election, the expansion of the possibility of "personalizing the exercise of power", in addition to the perpetuation of the performance of the administrative position.[38,39] In this sense, there are the intentionality on the part of the political agent in question, to remain in the exercise of command in the political position, thus conditioning the agenda of the elected official in his first term, or even encouraging him to use it in a

characterized way as "abusive", especially in the course of the electoral process.[37,38,39]

Regarding the category that analyzed the presentation of political parties in the form of isolates or in the development of coalitions, it was identified from the scientific literature that they are of paramount importance for candidacies in proportional and / or majority elections.[40,41] In this sense and, in relation to what is defended with respect to party coalitions, political parties use a number of strategies, among which can be mentioned, the formation of various types of coalitions, to obtain resources such as votes, positions and even policies.[41]

In this way, the realization of the union between the political parties, constitutes itself as a highly complex theme, mainly, if it takes into account the large number of existing party subtitles, as is the case in Brazil, mainly in a context where, the majority of them is founded only, for the purpose of collecting monetary type.[40,41] In relation to the MDB being the political party that registered the greatest preponderance of nursing professionals, who ran for political office in the electoral elections of 2020, a correlation was found with what is shown in the literature, when it is argued that the said party legend reached the largest number of affiliates, accounting for the universe of approximately 2,166,146 in November of that year.[42]

According to data extracted from the TSE, the MDB also received the highest number of votes, accounting for the universe of approximately 10.9 million in the municipal elections of 2020.42,43 The MDB, previously designated as Party of the Brazilian Democratic Movement (PMDB), in the electoral election of 2020 elected the largest number of mayors (802), vice-mayors (673) and councilors (7,237), constituting themselves as the Brazilian political association with the largest preponderance of vacancies in the said political positions.[43]

Final considerartions

The realization of this research verified the reduced number of candidates belonging to the category of nursing, who disputed the electoral election of 2020. In this way, it is verified the need to rethink strategies, devices and policies, which will allow the qualitative and quantitative expansion of the universe of nursing professionals, participants in disputes in Brazilian municipal electoral elections.

Although the present study has limitations in its construction and development, it was possible to gain a greater understanding of the political process and also, in relation to the registration of nursing professionals in the analyzed municipal election. The reduced number of records for participation and active engagement of professionals belonging to the nursing category in electoral elections, can weaken their representation, along with the instances where the routes and directions to be taken are discussed and decided by all agents and institutions. constituents of the health field and also of the whole society.

The phenomenon analyzed in the present research, possibly has a direct and indirect relationship with the existing difficulties of the referred professionals in the health sector, in approving old claims of the category, as is the case of reducing the workload, increasing wages, salaries and bonuses, in addition to improving professional working conditions.

The importance of the participation of professionals belonging to the nursing category in the political dispute processes at the municipal, state and national dimensions is justified as an efficient way to safeguard the inalienable right to health, to defend the public health system and to expand guarantees defense of all vulnerable members of society. It is also up to the various supervisory bodies for the professional exercise and defense of the nursing category, to rethink methodologies and articulations that contribute to the increase in the number of their professionals in the municipal electoral political processes throughout Brazil.

Other studies and research that intend to analyze the registration process for the participation of nursing professionals in municipal, state and federal electoral elections should be encouraged, aiming to allow the generation of greater knowledge in relation to this theme, which is the current and disturbing one. for greater growth and development of this labor category.

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Correspondent Author
Linconl Agudo Oliveira Benito
SEPN 707/907, Via W 5 Norte, University Campus. ZIP: 70790-075. Asa Norte. Brasília, Federal District, Brasil.
linconlbenito@yahoo.com.br

Bariatric surgeries performed in Brazil, 2011-2019

Cirurgias bariátricas realizadas no Brasil, 2011-2019

Cirugías bariátricas realizadas en Brasil, 2011-2019

Linconl Agudo Oliveira Benito[1], Rosana da Cruz Lima[2], Margô Gomes de Oliveira Karnikowski[3], Izabel Cristina Rodrigues da Silva[4]

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1. Universidade de Brasília, Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.
https://orcid.org/0000-0001-8624-0176

2. Hospital das Plásticas de Brasília. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-2881-1193

3. Universidade de Brasília, Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-5662-2058

4. Universidade de Brasília, Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.
https://orcid.org/0000-0002-6836-3583

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RESUMO

Objetivo: Analisar a frequência de implementação de cirurgias bariátricas (CB) realizadas no "Brasil" entre os anos de "2011 a 2019", ou seja, nove (09) anos. **Método:** Estudo exploratório, descritivo e de abordagem quantitativa. Os dados foram extraídos junto a Sociedade Brasileira de Cirurgia Bariátrica e Metabólica (SBCBM). Foi implementada análise estatística do tipo descritiva. Os resultados foram apresentados por meio de tabelas explicativas e de gráficos. **Resultados:** Foi identificado o universo de 493.212 CB realizadas, com média e desvio padrão de (54.801±11.300,2). O ano de 2019 registrou a maior preponderância com 13,9% (n=68.530) e 2011 registrou a menor preponderância com 7% (n=34.629). Foram identificadas 79,9% (n=394.101) CB financiadas pelos Planos de Saúde, 15,3% (n=75.624) pelo SUS e 4,8% (n=23.487) por instituições particulares**. Considerações finais:** Foi verificado aumento na frequência de registros de CB realizadas no recorte geográfico e histórico analisados.
Descritores: Obesidade; Obesidade mórbida; Cirurgia bariátrica.

ABSTRACT

Objective: To analyze the frequency of implementation of bariatric surgery (CB) performed in "Brazil" between the years "2011 to 2019", that is, nine (09) years. **Method:** Exploratory, descriptive study with a quantitative approach. The data were extracted from the Brazilian Society of Bariatric and Metabolic Surgery (SBCBM). Descriptive statistical analysis was implemented. The results were presented using explanatory tables and graphs. **Results:** The universa of 493.212 CB performed was identified, with a mean and standard deviation of (54,801±11,300.2). The year 2019 registered the highest preponderance with 13.9% (n=68.530) and 2011 registered the lowest preponderance with 7% (n=34.629). 79.9% (n=394.101) CB were financed by Health Plans, 15.3% (n=75.624) by SUS and 4.8% (n=23.487) by private institutions. **Final considerations:** There was an increase in the frequency of CB records made in the analyzed geographical and historical section.
Descriptors: Obesity; Morbid obesity; Bariatric surgery.

RESUMEN

Objetivo: Analizar la frecuencia de implementación de la cirugía bariátrica (CB) realizada en "Brasil" entre los años "2011 a 2019", es decir, nueve (09) años**. Método:** Estudio exploratorio, descriptivo con enfoque cuantitativo. Los datos fueron extraídos de la Sociedad Brasileña de Cirugía Bariátrica y Metabólica (SBCBM). Se implementó un análisis estadístico descriptivo. Los resultados se presentaron mediante tablas explicativas y gráficos. **Resultados:** Se identificó el universo de 493,212 CB realizados, con una media y desviación estándar de (54,801±11,300.2). El año 2019 registró la mayor preponderancia con 13,9% (n=68.530) y 2011 registró la menor preponderancia con 7% (n=34.629). 79,9% (n=394,101) CB fueron financiados por Planes de Salud, 15,3% (n=75,624) por SUS y 4,8% (n=23,487) por instituciones privadas. **Consideraciones finales:** Hubo un aumento en la frecuencia de registros de CB realizados en el tramo geográfico e histórico analizado.
Descriptores: obesidad; Obesidad morbida; Cirugía bariátrica.

ORIGINAL

Introduction

Obesity is understood as a chronic disease, characterized by high body weight, resulting from the accumulation of adipose tissue, i.e., fat, related to body mass index (BMI) equal to or greater than 30.[1] Its cause is considered by several researchers as multifactorial, depending on the interaction of several factors, such as behavioral, cultural, genetic, metabolic and still social, and its prevalence has grown very sharply in recent decades, especially in developing countries.[1-3]

According to the World Health Organization (WHO), since 1975, the problem of obesity has almost tripled worldwide and in 2016, approximately 1.9 billion adults were in the age group of 18 years or older, could be classified, because they are overweight and more than 650 million people, obese.[2,3] In this context, the vast majority of the world's population lives in nations where, the issue of overweight and morbid obesity, are responsible for reathing more people's lives than the phenomenon of reduced body weight.[3]

Also in 2016, approximately 39% of adults who were 18 years or older were overweight and also 13% could be classified as obese.[2-3] The complexity of this disease is such that, several health problems are related to it, such as high BMI, as an important risk factor for non-communicable chronic diseases (NCDs), cardiovascular diseases, especially heart disease and also acute myocardial infarction (AMI), which were the main cause of death in 2012.[3-4]

Other diseases are also related to obesity such as hypertension (AH), diabetes mellitus (DM), metabolic syndrome (MS), obstructive sleep apnea (OSAS), insulin hormone resistance, musculoskeletal disorders, especially osteoarthritis, some neoplasms such as colon, endometrium, liver, breast, ovaries, prostate, kidneys, gallbladder , in addition to reducing quality of life (QoL).[2-5] The complexity of obesity is such that it is described in the scientific literature, and it is verified that people with it are more predisposed or even in the risk group for the acquisition of COVID-19.[6-8]

In May 2020, Latin America (LA) was classified as the epicenter of the COVID-19 pandemic, which was understood as a region affected by various disparities and social differences, such as inadequate nutrition of people, poor access to various health mechanisms and services, and also, due to the high prevalence of NCDs.[9] Thus, the issue of obesity and its related comorbidities are increasingly prevalent in LA, and in this sense, with the more accelerated expansion in people who are in a situation of social vulnerability, with reduced financial income, among other weaknesses, allowed this disease to be more easily associated with increased severity of COVID-19, in addition to the emergence of direct and indirect complications and death.[9]

As a way to combat and control obesity and morbid obesity, bariatric surgery (CB) emerges as a strategy and help technique in people with this disease and its various comorbidities strongly described, nationally and internationally.[10-11] For other researchers, this surgical procedure through its restrictive, disabsorptive and mixed techniques is currently the only treatment that leads to a reduction in sustained and prolonged body mass, in addition to reduced morbidity and mortality, improved self-esteem and QOL.[10-13]

As a way to combat and control overweight and obesity in all its manifestations, the Ministry of Health (MS) in Brazil instituted by Ordinance number 2,246/2004, basic guidelines for the implementation of Food and Nutrition Surveillance Actions, within the framework of basic health actions

(ABS) of the Unified Health System (SUS), throughout the national territory.[14] Through Ordinance 424/2013, the Ministry of Health redefined the guidelines for the organization of the prevention and treatment of overweight and obesity, as a priority care line of the Health Care Network for People with Chronic Diseases.[15]

By Ordinance 425/2013 the Ministry of Health established the technical regulation, standards and criteria for high complexity care to individuals with obesity.[16] By ordinance number 482/2017, the Ministry of Health included THE by Laparoscopy in the Table of Procedures, Medicines, Orthotics, Prostheses and Special Materials of the SUS and, by Ordinance number 3,411/2019, the Overweight and Obesity Care Line is approved, enabling health facilities such as a High Complexity Care Unit for Individuals with Obesity, in the states of Amazonas (AM), Federal District (DF), Minas Gerais (MG), Piauí (PI), Paraná (PR) and Sergipe (SE).[17-18] In this sense, the objective of this research was to analyze the frequency of CB performed in the geographical section formed by "Brazil", in the historical cut-off formed by the years "2011 to 2019", that is, nine (09) years.

Method

This is an exploratory, descriptive and quantitative study. The data were systematically extracted from the electronic portal of the Brazilian Society of Bariatric and Metabolic Surgery (SBCBM), next to the electronic address [https://www.sbcbm.org.br/]. Electronic bibliographic surveys were carried out, together with national and international computerized databases, the same being the Virtual Health Library (VHL), Google Scholar (Google Scholar), Saber-USP, Minerva-UFRJ, the Institutional Repository-CEUB (RI-CEUB), the Institutional Repository of UnB (RI-UnB) and the Theses-FIOCRUZ, thus acquiring articles from scientific journals, academic productions (course completion papers – TCC, doctoral thesis), official documents, ordinances of the Ministry of Health and related legislation.

The Descriptors in Health Sciences (DeCS) of the VHL, the same "Obesity" with the Identifier DeCS "9951" and the ID of the descriptor "D009765", "Obesity Management" with the identifier DeCS "57174" and the ID of the descriptor "D000073319 ", "Morbid obesity" with the identifier DeCS "19272" and ID of the descriptor "D009767", "Bariatric surgery" with Identifier DeCS "51221" and ID of the descriptor "D050110" , "Gastroplasty" with the Identifier DeCS "23642" and the ID of the descriptor "D015391", "Gastric derivation" with the identifier DeCS "23640" and the ID of the descriptor "D015390", "Jejunoileal derivation" with the Identifier DeCS "24255" and the ID of the descriptor "D007581", "Lipectomy" with the identifier DeCS "23742" and the ID of the descriptor "D015187".

For the process of association and conjugation of the selected descriptors, boolean logic operators of research "and", "or" and "not" were used, according to the methodology proposed by EBSCO Connect, available at the e-portal address: https://connect.ebsco.com/s/article/Pesquisa-com-Operadores-Booleanos?language=en_US

The data acquired from SBCBM form organized with the Microsoft Excel 2016software®, belonging to the Office 2016® for Windows ®, thus being possible to implement statistical analysis of descriptive type, being performed the percentage calculations (%), mean (Me) and standard deviation (σ). The results were presented by means of two (02) explanatory tables and three (03) figures. The authors declare that there are no conflicts of interest.

Results

In the process of organizing and analyzing the data, we identified the universe of 493,212 bariatric surgical procedures performed in Brazil, health plans, SUS and also private, between the years 2011 to 2019, as shown in table 1. The year 2011 recorded the lowest preponderance of the historical and geographic section analyzed accounting for 7% (n=34,629) and 2019 recorded the highest preponderance with 13.9% (n=68,530).

Table 1 - Distribution of the universe of CB recorded by year, percentage, minimum value, maximum value, mean and standard deviation, in Brazil, 2011-2019 (n=493.212): *,**,***,****,*****,******

Year	f	%	Minimum value	Maximum value	M_e	Sd
2019	68.530	13,9	34.629	68.530	54.801	11.300,2
2018	63.969	13				
2017	61.283	12,4				
2016	62.227	12,6				
2015	58.686	11,9				
2014	53.156	10,8				
2013	50.321	10,2				
2012	40.411	8,2				
2011	34.629	7				
Total	**493.212**	**100**				

Source: Adapted from MS and SBCBM, 2021.
* The data presented are faithful to the institutions available.
** CB is an operative procedure that is currently being developed in great frequency due to several factors and, thus, variation(s), updating(ões) and expansion(ões) in its values exposed in the present study may occur.
f = frequency.; % = percentage.; Me = average.; SD = standard deviation.

In the geographic and historical section analyzed, it was also verified mean and standard deviation of (54,801±11,300.2). Table 2 shows the distribution of CB registered by health plans, SUS and individuals per year in Brazil from 2011 to 2019.

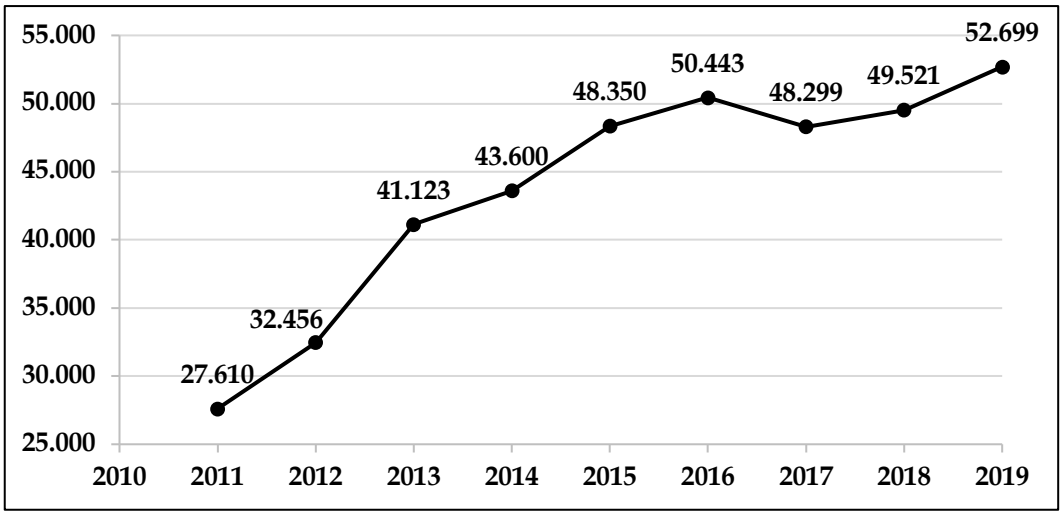
Table 2 - Distribution of CB recorded by health plans, the Unified Health System and P=private individuals per year, in Brazil, 2011-2019 (n=493.212):*,**,***

Year	Health Plan	%	SUS	%	Particulars	%	Total	%
2019	52.699	13,4	12.568	16,6	3.263	13,9	68.530	13,9
2018	49.521	12,6	11.402	15,1	3.046	13	63.969	13
2017	48.299	12,3	10.064	13,3	2.920	12,4	61.283	12,4
2016	50.443	12,8	8.821	11,7	2.963	12,6	62.227	12,6
2015	48.350	12,3	7.541	10	2.795	11,9	58.686	11,9
2014	43.600	11,1	7.025	9,3	2.531	10,8	53.156	10,8
2013	41.123	10,4	6.802	9	2.396	10,2	50.321	10,2
2012	32.456	8,2	6.031	8	1.924	8,2	40.411	8,2
2011	27.610	7	5.370	7,1	1.649	7	34.629	7
Total	**394.101**	**100**	**75.624**	**100**	**23.487**	**100**	**493.212**	**100**

Source: Adapted from MS and SBCBM, 2021.
* The data presented are faithful to the institutions available.
** CB is a surgical procedure that is currently being developed in great frequency due to several factors and, thus, variation(s), updating(ões) and expansion(ões) in its values exposed in the present study./ *** SUS = Unified Health System.

In the process of organizing and analyzing the data, it was also possible to identify that in the identified BC, 79.9% (n=394,101) were implemented by the Health Plans, 15.3% (n=75,624) by the SUS and 4.8% (n=23,487) privately. Figure 1 shows the distribution of CB recorded by health plans, per year, in the geographical and historical context established in this research, and increasing ascent is identified. The year 2019 recorded the highest preponderance with 13.4% (n=52,699) and the year 2011 the lowest with 7% (n=27,610).

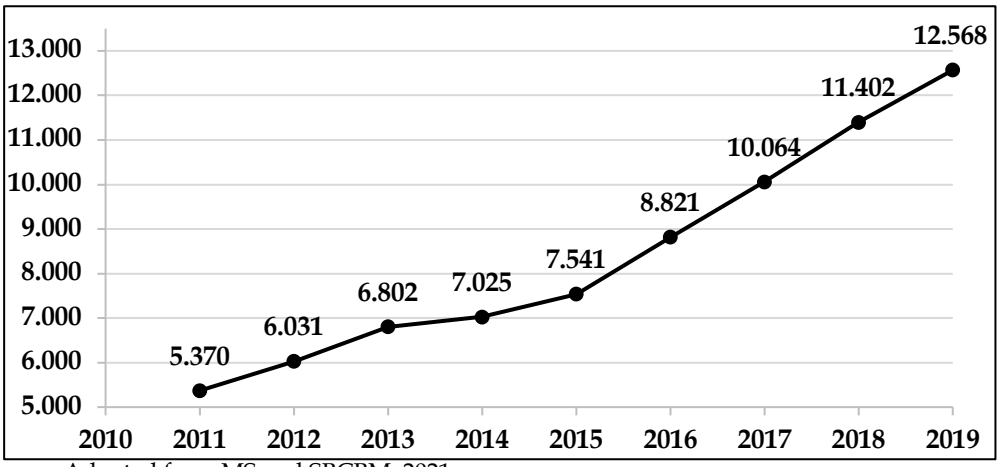
Figure 1 - Distribution of CB registered by health plans, per year, in Brazil, 2011-2019 (n=394.101):*,**



Source: Adapted from MS and SBCBM, 2021.
* The data presented are faithful to the institutions available.
** CB is an operative procedure that is currently being developed in great frequency due to several factors and, thus, variation(s), updating(ões) and expansion(ões) in its values exposed in the present study may occur.

Figure 2 shows the distribution of CB recorded by the SUS, per year, in the historical and geographic cut established in the present production, and increasing ascent is identified. The year 2019 recorded the highest preponderance among those analyzed, registering 16.6% (n=12,568) and the year 2011 the lowest preponderance with 7.1% (n=5,370), respectively.

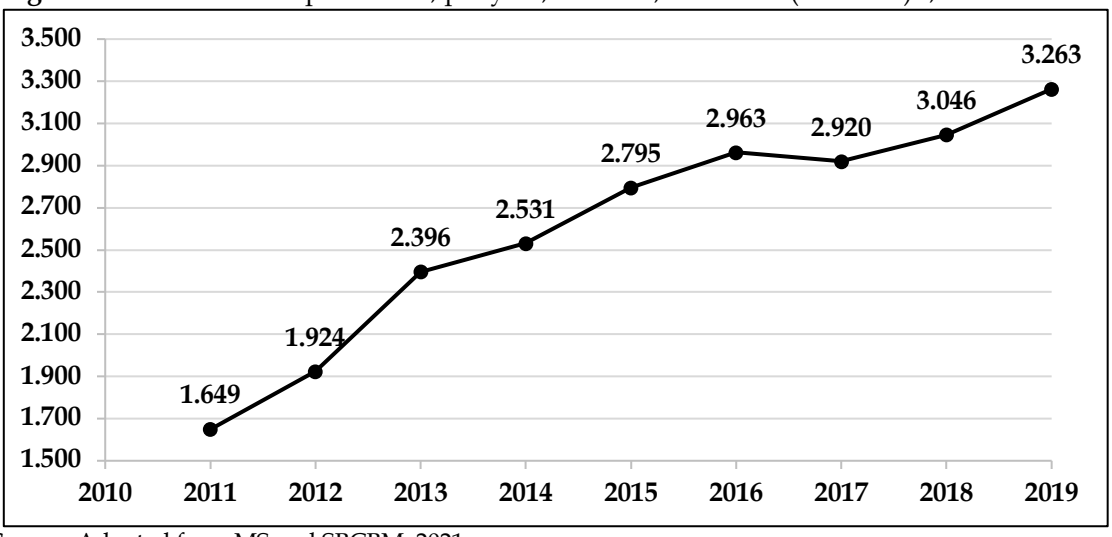
Figure 2 - Distribution of CB registered by SUS, per year, in Brazil, 2011-2019 (n=75.624):*,**



Source: Adapted from MS and SBCBM, 2021.
* The data presented are faithful to the institutions available.
** CB is an operative procedure that is currently being developed in great frequency due to several factors and, thus, variation(s), updating(ões) and expansion(ões) in its values exposed in the present study may occur.

Figure 3 shows the distribution of cb scans financed privately per year, in the historical and geographic section instituted, and it is possible to verify that the year 2019 was the one that recorded the highest preponderance of this surgical procedure with 13.9% (n=3,263) and the year 2011 the lowest with 7% (n=1,649).

Figure 3 - Distribution of private CB, per year, in Brazil, 2011-2019 (n=23.487):*,**



Source: Adapted from MS and SBCBM, 2021.
* The data presented are faithful to the institutions available.
** CB is an operative procedure that is currently being developed in great frequency due to several factors and, thus, variation(s), updating(ões) and expansion(ões) in its values exposed in the present study may occur.

Discussion

The issue of increased CB performance can be understood due to several phenomena, such as the increase in the number of people who are overweight, obese or morbidly obese, worldwide, and this phenomenon is classified as a true pandemic, identified in all age groups.[1-5,20-21,24] Among the various policies adopted internationally to combat and control obesity and morbid obesity, as well as to combat its impacts, the WHO's "Global Strategy for Food, Physical Activity and Health" can be cited.[20]

This important international strategy was adopted by the World Health Assembly (MAS) in 2004, which proposed in its body measures to support diets and regularity in the performance of physical activities.[20] Another noteworthy action was the creation by WHO of the "Global Plan of Action for the Prevention and Control of Noncommunicable Diseases 2013-2020", aiming to fully respect the commitments of what became known as the United Nations Political Declaration on Noncommunicable Diseases.[2-3,20]

In relation to the number of CBs performed internationally, the United States (USA) is in first place and Brazil is considered the second country in the world, and women represent approximately 76% of their patients, according to data provided by the SBCBM and the National Association of Private Hospitals (ANAHP).[22-23] To better understand the different forms of organization and financing of this operative procedure in Brazil, it is important to remember some legislative provisions instituted nationally, such as Law number 8,080/90, related to the conditions for the promotion, protection and recovery of health, in

addition to the organization and functioning of the corresponding services.[25]

In this important law, it is stated in article 1 that it regulates, throughout the national territory, health actions and services, performed alone or jointly, on a permanent or eventual basis, by natural or legal persons governed by public or private law.[25] The importance of Law 8.080/90 is such that, in it, it is defended in article 2 that, health is a fundamental right of the human being, and the State must provide the conditions necessary for its full exercise and, in its § 1, it is maintained that it is the duty of the State to guarantee health, because it consists in the formulation and implementation of economic and social policies aimed at reducing the risks of diseases and other diseases and the establishment of conditions that ensure universal and equal access to actions and services for their promotion, protection and recovery.[25]

Another important document related to the issue of health in Brazil is Law number 8,142/90, which provides for community participation in the management of the SUS and on intergovernmental transfers of financial resources in the health area.[26] In this important Law, it is stated that the SUS, which deals with Law No. 8,080/90, will count, in each sphere of government, without prejudice to the functions of the Legislative Power, with the collegiate bodies, being the Health Conference and the Health Council.[26]

The Complementary Law (LC) number 141/2012, the main percentages of financial investment are presented in relation to the respective municipalities, states and the Union with regard to the SUS, which are defined, resulting from the presidential sanction of the Constitutional Amendment number 29.[27-28] Thus, and, by this important Law, municipalities and the Federal District (DF) must carry out annually application of at least 15% of their collection in relation to taxes in public health actions and services and, with the states approximately 12%.[27-28]

It is important to present what is defended with the "Charter of The Rights of Health Users", and two of its guidelines are exposed, in the first that, every person has the right to access to goods and services ordered and organized to guarantee the promotion, prevention, protection, treatment and recovery of health and, in the second, that every person has the right to adequate treatment and at the right time to solve their health problem.[29] The issue of increased CB performance is also related to the increase in people who are in morbid obesity or obesity, as advocated by the Brazilian Institute of Geography and Statistics (IBGE).[30]

In its National Health Survey conducted in 2019 (PNS 2019), conducted in partnership with the Ministry of Health, it is argued that approximately seventeen (17) years ago, four out of ten Brazilians were overweight and, in the last information obtained, and at present, there are approximately six out of ten Brazilians in this condition.[30] In this interpretative context and according to the information contained in this important research, approximately 96 million Brazilians are overweight and, the result obtained by calculating BMI, points out that they are in the classified range as overweight or obesity.[30]

The complexity of this public health problem is also related to the total percentage of people with obesity, as presented in this important IBGE production, when it is exposed that it more than doubled in this period, where it previously registered approximately 12.2%, expanding to 26.8%.[30,31] Another phenomenon that possibly contributes to the increase in the frequency of CB is the process of judicialization of health, as a way of guaranteeing the fundamental

principle that is the right of defense and safeguarding of life.[32]

In this sense, several researchers are positioned in their academic productions in relation to this issue, arguing that nowadays, there are several legal processes filed by obese and morbidly obese people to perform this surgical procedure surgical procedure and also revisional plastic surgery after —bariatric surgeries (post-CB).[32-33] Another issue that contributes to the increase in the performance of CB in Brazil, are the efforts made by the national health agency, that is, the Ministry of Health in the fight and control of obesity and morbid obesity, through its policies, strategies and methodologies of action.[34]

In this context, ordinance number 5 of January 31, 2017 can be cited, which makes public the decision to incorporate the CB procedure by laparoscopy within the scope of the SUS.[34] By Ordinance number 482, dated March 6, 2017, the CB procedure by Laparoscopy is included in the Table of Procedures, Medications, Orthotics, Prostheses and Special Materials of the SUS.[35]

The Federal Council of Medicine (CFM) through Resolution No. 1,766/05, established safe standards for the surgical treatment of morbid obesity, defining indications, accepted procedures and the action team.[36] This important document was changed through the resolution of cfm number 1,942/2010, which established safe standards for the surgical treatment of morbid obesity, defining indications, procedures and its team.[36-37]

Another issue that may have contributed to the increase in the frequency of CB was the incorporation with this technique of laparoscopy, and it has been used since 1994, with the technique of the mixed type of gastric bypass in Roux Y.[38-40] This surgical technique for reducing and controlling obesity, combined with laparoscopy technique reduces the possibility of developing complications when compared to the conventional technique, besides being less invasive.[38-40]

For some researchers, only surgical procedures named adjustable gastric band (BGA), biliopancreatic leads (BPD) and gastrojejunal bypass gastrojejunal gastroplasty procedures in Roux-y (DGJYR) are currently widely performed worldwide.[39-41] In this interpretative context, although these techniques were developed in the mid-1960s, it was only in the late 1990s that a greater interest was aroused in them and, thus, part of this interest is due to the development of access to these surgical procedures, using the laparoscopic technique.[38-41]

For other researchers, the high interest in performing laparoscopic BC is represented because it constitutes itself as minimally invasive, in addition to the great adherence of surgical professionals to use it in their surgical procedures, because, despite its complexity, it has several positive points in their favor.[40-42]

Technically, the beneficial factors of laparoscopic surgeries are, for example, the absence of a large incision, in addition to the use of CO2 and the degree of reduced tissue injury.[42-44] For other researchers, surgeries performed by laparoscopy have advantages such as earlier ambulation of the patient, in addition to the availability of his discharge more quickly, thus allowing the anticipation of the return to his habitual activities, less impairment during the postoperative period of respiratory function, which preserves all the activity of the diaphragmatic body, in addition to the reduced formation of adhesions, and also , pain(s) of lesser intensity.[44-46]

Another factor that may have contributed to the increase in the performance of BC in Brazil was the contemplation of this procedure in people who are between 16 and 18 years of age, through a specific evaluation and of people who are over 60 years of age, after performing a risk-benefit assessment,

and these criteria were proposed through the GM/MS ordinance of number 425/2013.[16] According to some scholars, in adolescence, in adulthood, and during pregnancy, the phases of higher incidence of obesity are identified, and in this sense, the period in which numerous mechanisms are used for weight loss, such as diets and medication consumption, being the main motivations for performing CB. aesthetics and health.[47-48]

The problem of obesity and morbid obesity is such that, several are the "unsuccessful" attempts implemented, aiming at weight loss and its maintenance, besides being achieving body weight, considered ideal and not a healthy body weight.[47-48] The scientific literature points out that the weight loss generated by CB does not only mean the process of "defatfating", that is, moving from an obese body to a thin body, but rather the person having numerous plans, desires, needs, aspirations and feelings, for example, of pride in having managed to perform the CB, until its opposite, that is, the guilt and frustration of having arrived in this situation.[48]

In a research that analyzed the trajectory of female speople in the search for weight loss using CB, it was verified the great influence of what is known as "body transformation", experienced in the identity of these candidates for the surgical procedure in question.[48-49] In this context, it is verified that the patient "creates" for herself, a "new reality", in which, her old desires, habits, customs, values and beliefs, no longer served, needing to be replaced, because the body of an obese or obese morbid person had been "transformed", through the realization of the CB in a thin body, in a very short space of time, aiming to adapt to a new reality , different from that lived up to that moment.[49]

Furthermore, in relation to the increase in CB performed in the geographical and historical section instituted, it can be mentioned the powerful influence on the contemporaneity of the aesthetic issue, in the sense of the "look of the other" towards "my person", which according to some researchers, also strongly mark the decision process for performing this operative procedure of reduction and control of body weight and combat ing obesity.[49-51] According to the SBCBM, currently the SUS has approximately 85 high complexity care services, for the attention of people with obesity and morbid obesity in 22 states, and the five (5) states of the federation, in which, there are no such services qualified for cb performance are the Amazon (AM), Roraima (RR), Amapá (AP), Rondônia (RO) and also Piauí (PI).52 In addition, in Brazil, the costs of obesity and its rights and indirect impacts to public coffers, can reach approximately 2.4% of gross domestic product (GDP), which is estimated at about R$ 84.3 billion per year (billion/year).[52-53]

Final Consideration

The present research demonstrated an increase in the frequency of CB performed in Brazil from 2011 to 2019, pointing to its importance in combating and controlling obesity and its associated comorbidities in people belonging to all social layers. A greater understanding was also allowed, with regard to the expansion in the performance of the surgical procedure analyzed, due to the increase in the quantity of its different techniques, incorporation of other technologies in its realization and also, in the changes evidenced in society during contemporaneity.

On the other hand, other factors that contributed to the expansion in the performance of CB were also verified, such as the greater availability of services organized and managed by the MS for this purpose, the fight and control of chronic non-communicable diseases (NCDs) associated with and the increase in the Brazilian population universe of people who were overweight, obese and morbidly obese, perceived by government research. The incorporation of people aged sixteen years or older, in addition to people over the age of sixty years, provided that the established safety parameters were observed, also contributed to the increase in the realization of CB in our nation.

Despite presenting some limitations in its constitution, the present research, in addition to meeting the proposed objectives, also offered a genuine contribution in elucidating the phenomenon under analysis. Due to the magnitude and complexity of obesity, morbid obesity and CB, other research and academic productions should be encouraged, aiming to gain greater understanding of this current and disturbing theme.

The patient submitted to this surgical and surgical procedure should also be supported at all times before, during and after the performance of THE, including as a way to reduce the right and indirect impacts of its implementation and in society. Scientific associations and associations, interested and involved with this important and complex process, should redouble their efforts and attention, aiming to allow the availability of this important procedure, in a democratic way, in addition to launching the usas initiatives in mitigation and elimination of all risks and vulnerabilities involved in its realization.

The class bodies, responsible for supervising the professional practice of interdisciplinary, multidisciplinary and transdisciplinary health teams, should also participate in processes and strategies that allow growth and development, including qualitative, related to this surgical procedure of reduction and control of high body weight. In this sense, it is up to society as a whole to develop expanded care and holistic care, so that the obese and morbidly obese person more harmoniously reduced their vulnerabilities, derived from this disease and its numerous comorbidities.

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Correspondent Author
Linconl Agudo Oliveira Benito
SEPN 707/907, Road W 5 Norte, University Campus. ZIP: 70790-075. Asa Norte.
Brasília, Federal District, Brazil.
linconlbenito@yahoo.com.br

The reality of syphilis in pregnant women: epidemiological analysis between 2014 and 2018

A realidade da sífilis em gestantes: análise epidemiológica entre 2014 e 2018

La realidad de la sífilis en gestantes: análisis epidemiológico entre 2014 y 2018

Debora Faria da Costa[1], Denise Philomene Joseph van Aanholt[2], Suely Itsuko Ciosak[3]

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REVISA

1. University of Sao Paulo, School of Nursing. Sao Paulo, Sao Paulo, Brazil https://orcid.org/0000-0002-2630-5510

2. . University of Sao Paulo, School of Nursing. Sao Paulo, Sao Paulo, Brazil https://orcid.org/0000-0003-1439-0321

3. . University of Sao Paulo, School of Nursing. Sao Paulo, Sao Paulo, Brazil https://orcid.org/0000-0001-5884-2524

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RESUMO

Objetivo: conhecer as gestantes com sífilis no estado de São Paulo, últimos cinco anos disponíveis. **Método:** estudo epidemiológico, quantitativo descritivo transversal, com dados secundários, com diagnósticos notificados (Sistema de Informação de Agravos de Notificação) - banco de dados do Departamento de Informática do Sistema Único de Saúde, das gestantes com sífilis, período 2014-2018. **Resultados:** encontrado 44.894 gestantes com sífilis no estado de SP, com crescimento importante nos dois últimos anos, maior prevalência (53,1%) na idade de 20-29 anos, raças brancas (43,1%), ensino fundamental completo (27,9%) e médio completo (26,1%). Maior percentual de diagnósticos realizado no primeiro trimestre (49,4%) e, 3,9% das gestantes não realizaram tratamento. **Conclusão:** é um agravo crescente, com baixa qualidade no preenchimento das fichas de notificação, prejudicando a assistência/qualidade do pré-natal, interferindo nas análises adequadas, afetando a tomada de decisão para tratamento correto. Resultados podem auxiliar em ações de educação em saúde e prevenção dos grupos vulneráveis.

Descritores: Sífilis congênita; IST; doenças sexualmente transmissíveis; doenças venéreas bacterianas; treponema pallidum.

ABSTRACT

Objective: to get to know pregnant women with syphilis in the state of São Paulo, the last five years available. **Method:** epidemiological, quantitative, descriptive cross-sectional study, with secondary data, with notified diagnoses (Information System for Notifiable Diseases) - database of the Department of Informatics of the Unified Health System, of pregnant women with syphilis, period 2014-2018. **Results:** found 44,894 pregnant women with syphilis in the state of SP, with significant growth in the last two years, higher prevalence (53.1%) at the age of 20-29 years, white races (43.1%), complete elementary school (27,9%) and complete high school (26.1%). Higher percentage of diagnoses performed in the first trimester (49.4%) and 3.9% of pregnant women did not undergo treatment. **Conclusion:** it is a growing problem, with low quality in filling out the notification forms, impairing the prenatal care / quality, interfering in the appropriate analyzes, affecting the decision-making for correct treatment. Results can assist in health education and prevention of vulnerable groups.

Descriptors: Congenital syphilis; IST; sexually transmitted diseases; bacterial venereal diseases; treponema pallidum.

RESUMEN

Objetivo: conocer mujeres embarazadas con sífilis en el estado de São Paulo, los últimos cinco años disponibles. **Método:** estudio epidemiológico, cuantitativo, descriptivo transversal, con datos secundarios, con diagnósticos notificados (Sistema de Información de Enfermedades Notificables) - base de datos del Departamento de Informática del Sistema Único de Salud, de gestantes con sífilis, período 2014-2018. **Resultados**: se encontraron 44.894 gestantes con sífilis en el estado de SP, con crecimiento significativo en los últimos dos años, mayor prevalencia (53,1%) en la edad de 20-29 años, razas blancas (43,1%), primaria completa (27 , 9%) y bachillerato completo (26,1%). Mayor porcentaje de diagnósticos realizados en el primer trimestre (49,4%) y 3,9% de gestantes no recibieron tratamiento. **Conclusión:** es un problema creciente, con baja calidad en el llenado de los formularios de notificación, perjudicando la calidad / atención prenatal, interfiriendo en los análisis adecuados, afectando la toma de decisiones para el correcto tratamiento. Los resultados pueden ayudar en la educación sanitaria y la prevención de grupos vulnerables.

Descriptores: Sífilis congénita; IST; enfermedades sexualmente transmisibles; enfermedades venéreas bacterianas; Treponema pallidum.

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ORIGINAL

Introduction

Caused by a gram-negative bacterium, syphilis is a sexually transmitted infection (STIs), curable and exclusive to the human being, which has as an etiological agent Treponema pallidum. Because it is a silent infection, has an initial clinical picture that can be confused with other diseases, generate serious consequences for the infected and have one of the highest transmission rates, among the diseases that can be transmitted during the pregnancy-puerperal cycle, syphilis characterizes a major public health problem.[1]

Syphilis is divided into four stages, each containing specific symptoms of the disease. Initially, primary syphilis occurs, characterized by the appearance of a single painless lesion, usually in the genitals, but which can also arise in the anus, oropharynx, lips or hands. In secondary syphilis, the etiological agent is systemically housed and has as manifestations the cutaneous rash rich in treponema. After this stage, syphilis becomes latent, a phase in which the disappearance of the clinical manifestations of the secondary stage is evidenced and, finally, tertiary syphilis occurs, which may manifest a few years later, affecting the nervous, cardiovascular, mucous, tissue and bone system. [1]

The transmission of syphilis occurs predominantly through sexual contact, however, there is also vertical transmission to the fetus or transplacental route, called congenital syphilis, which can occur in any gestational phase and at any stage of the disease and is the result of not testing for syphilis during prenatal care or inadequate treatment.[2]

Congenital syphilis can be diagnosed in two stages, early and late. The clinical picture of early diagnosis is characterized by symptoms of prematurity, low birth weight, hepatomegaly, anemia, among others. On the other hand, late congenital syphilis is evidenced by developmental delay, neurological deafness, short jaw, seizures etc.[2]

In addition to the dysfunctions caused by congenital manifestation, syphilis during pregnancy can generate serious psychoemotional problems for pregnant women, since the occurrence of abortions, stillbirths, premature delivery and neonatal death are frequent.[2]

During pregnancy, several tests are performed in prenatal consultations, in accordance with the Prenatal Guide in Primary Care: State Department of Health of Rio Grande do Sul. Among these tests, the diagnosis of syphilis is made by immunological tests and direct examination, performed in the first and third trimester of pregnancy.[3]

Syphilis is a curable disease and its treatment is done with doses of Penicillin G Benzathena, according to the stage, being the only safe and effective option to treat pregnant women, and must be strictly followed and respected, so that there is a guarantee in the success of the therapeutic resource.[1]

Once it's vital importance for the performance of epidemiological surveillance and consequent control by the health system, acquired, gestational and congenital syphilis have a compulsory notification character, according to the current Ordinance of the Ministry of Health.[4]

The World Health Organization (WHO) estimates that one million pregnant women a year will be affected by this disease worldwide, putting more than 200,000 children at risk of premature death.[5]

Estimates published by the same Organization show that in 2016 there were more than half a million (approximately 661,000) cases of congenital

syphilis worldwide, resulting in more than 200,000 stillborns and neonatal deaths.[6]

In 2014, who set a goal of less than half a case of syphilis for 1,000 live births, Brazil is 16 times above. In 2007, the case rate was 1.9 per 1,000 children born alive and 10 years later 8.6 cases were found for every 1,000 children born alive.[7]

According to the Department of Informatics of the Brazilian Unified Health System (DATASUS), in 2017 4,013 cases of congenital syphilis were reported in the state of São Paulo, and among these, 3,347 pregnant women underwent prenatal care.[8] It is estimated that 25.6% of the cases of syphilis during untreated pregnancy result in early or late fetal deaths, of the cases reported to the Notifiable Diseases Information System (SINAN), 4.5% were cases of syphilitic stillborn and 3.9% abortions due to syphilis.[9]

In view of the above, this study aims to know how syphilis is and who are the pregnant women with syphilis in the state of São Paulo, in the period from 2014 to 2018, what age, schooling and race of the pregnant women are, as well as to verify the gestational age in which the diagnoses occurred and which treatment scheme was adopted in view of these results. This period was considered because it is the last five years available in SINAN, through the DATASUS database.

Method

This is an epidemiological study, descriptive cross-sectional, with secondary data, using the diagnoses notified in SINAN, from the DATASUS database, related to pregnant women with syphilis in the period from 2014 to 2018, considering as the last five years available in that database.

Data were collected regarding age, gestational age, schooling, race of pregnant women and treatment scheme in the proposed period.

Regarding a descriptive study, based on the collected data, a table and graph were elaborated to better expose the results and elaborate the analyses, as well as the discussions.

For being a secondary study, it was not necessary to submit it to the Research Ethics Committee of the School of Nursing of the University of São Paulo, as recommended by Resolution 466/12 of the National Health Council.

Results

Through the collection of data made available by SINAN, through the DATASUS database, and used in this study, we found a total of 44,894 pregnant women with syphilis in the state of São Paulo, between 2014 and 2018. These findings, presented in Figure 1, show that there has been a significant increase in cases over the years, however, there is a progressive growth in the occurrence of syphilis diagnoses in pregnant women from 2016.

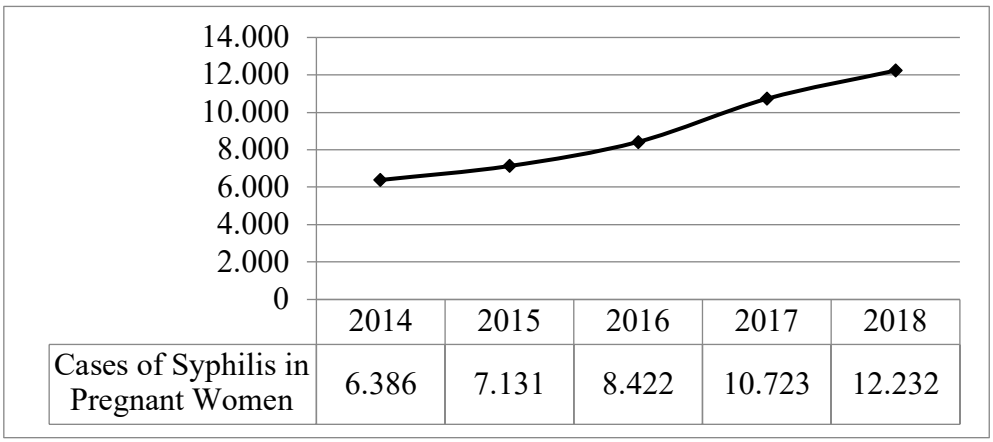

Figure 1-Evolution of syphilis cases in pregnant women per year of diagnosis, from 2014 to 2018, in the state of São Paulo, Brazil, 2020.

Data regarding age groups show that the highest percentage of syphilis diagnoses indicated was among pregnant women aged 20 to 29 years (53.1%), the other groups, 10 to 19 years and 30 years or more, occurred with a distribution of more or less similar with 24.0% and 22.9%, respectively (Table 1).

Table 1- Distribution of cases and percentages of syphilis in pregnant women, according to demographic variables, diagnosed between 2014 and 2018, in the state of São Paulo, Brazil, 2020.

Variables	n	%
Age Range[a]		
10 to 19 years	10.769	24,0
20 to 29 years	23.836	53,1
30 years or more	10.288	22,9
Total	44.893	100
Race		
White	19.338	43,1
Black	5.240	11,7
Yellow	265	0,6
Brown	17.379	38,7
Indigenous	91	0,2
Ignored	2.581	5,7
Total	44.894	100
Education[b]		
Illiterate	112	0,3
Incomplete Fundamental	9.816	21,9
Complete Fundamental	12.534	27,9
Full Medium	11.726	26,1
Complete Superior	633	1,4
Ignored	10.072	22,4
Total	44.893	100
Gestational Age		
1st Quarter	22.170	49,4
2nd Quarter	12.894	28,7
3rd Quarter	8.647	19,3
Gestational Age Ignored	1.183	2,6
Total	44.894	100

Treatment Scheme[c]		
Penicillin	41.951	93,4
Other Scheme	629	1,4
Unrealized	1.734	3,9
Ignored	577	1,3
Total	44.891	100

a) 1 notification is not recorded in SINAN for this variable, n= 44,893 (total cases considered for this variable)
b) 1 notification was classified in SINAN as 'not applicable' and was not included in the table, n= 44,893 (total cases considered for this variable)
c) 3 notifications are not recorded in SINAN for this variable, n= 44,891 (total cases considered for this variable

Regarding the variable race, the highest number of cases was found among white reported pregnant women (19,338 – 43.1%), followed by brown women (17,379 – 38.7%). The lowest number of cases found was among women considered indigenous (91 - 0.2%). It also occurs that there is a considerable number of 2,581 (5.7%), described as ignored, as can be seen in Table 1.

It was verified that the highest percentages for schooling were concentrated among pregnant women who had completed elementary and complete secondary education, 27.9% and 26.1% respectively. On the other hand, we have 1.4% of pregnant women with a complete university degree. As in the previous variable, the percentage given as ignored (22.4%) is significant, indicated in Table 1.

Gestational age, divided quarterly, had the highest percentage of diagnoses in the first trimester (49.4%). However, an important portion was diagnosed in the later trimesters, with 28.7% in the 2nd trimester and 19.3% in the last trimester of pregnancy (Table 1).

Regarding the treatment regimen performed in pregnant women with syphilis in the state of São Paulo, of the total of those diagnosed, 41,951 (93.4%) pregnant women were treated with at least one dose of penicillin. We had 1,734 (3.9%) pregnant women who did not undergo any treatment, which added to the ignored ones (1.3%), make up more than 5% of the diagnosed pregnant women (Table 1), contributing to the increase in births of patients with congenital syphilis.

In both variables, gestational age and treatment regimen, 1,183 (2.6%) and 577 (1.3%) of the ignored, respectively, that contribute to a reading of the problem incompletely (Table 1).

It was also found that there is no consonance of the data presented when comparing the results of the totals of the variables of the cases of the diagnoses, as described in Table 1, with one diagnosis less recorded in the SINAN database in the variables age and schooling and three related to the treatment scheme.

Discussion

Over the years studied, there was a significant increase in the number of cases of pregnant women with syphilis in the state of São Paulo, this increase may be related to the Stork Network program of the Unified Health System, implemented from 201110, which stimulates the women's support and follow-up from family planning, prenatal care, childbirth to the puerperium. On the other hand, it may also be associated with the implementation in primary care of rapid tests for screening of syphilis and reagent tests (treponemal and non-

treponemal), during prenatal care, which help to expand the access of the population for the detection of syphilis and consequent decrease in underreporting.[11-12]

The progressive growth, presented from 2016 on, can be explained by the change in the criteria for defining cases that began to consider the notifications of women during prenatal, childbirth and/or puerperium, who, regardless of whether they present symptoms or not, presented some positive reagent test. Until then, only women diagnosed with prenatal care were reported as syphilis during pregnancy.[13]

Analyzing the age group, it was evidenced that the highest concentration of pregnant women diagnosed with syphilis were between 20 and 29 years, as indicated by some studies that reinforce this trend of young women, sexually active and in the reproductive phase.[13] These findings explain the need for information from primary care on family planning and health education for protected sexual activities, thus avoiding STIs and related consequences, during and after pregnancy, if not properly treated.[12]

The data presented regarding race show that most pregnant women declare themselves white and brown, respectively. These results differ from national data9,14, in which the highest percentage of syphilis is seen in self-declared brown pregnant women, as well as from studies conducted in other states[15,16], as shown in the city of Montes Claros-MG, in which higher numbers of syphilis cases were found in pregnant women who self-reported as brown.[15]

However, some studies, such as ours, have indicated a higher proportion of syphilis in pregnant women who declared themselves white, such as são José do Rio Preto-SP[12] and in southern Brazil.17 Such findings can be explained by the population of women living in these places being mostly white.[18]

The lowest percentage related to race, seen in this study, was among self-declared indigenous women and that may also be due to low coverage in these localities, because they are places that have sociocultural barriers, in addition to geographic women.[19] However, it may be an indication of underreporting, as shown in a study conducted in the period from 2011 to 2014, in the indigenous population of Mato Grosso do Sul, where 45 cases of gestational syphilis, out of a total of 79, were not reported to SINAN, demonstrating a large number of sub-records.[20]

Our sample revealed a higher number of pregnant women with complete elementary and complete secondary education, similar to other national studies[12,16-17], which contradict the study conducted in maternity hospitals of the public health system in Brazil, between January 2010 and December 2011, in which it was found that the majority of pregnant women with syphilis had completed only elementary school.[14]

Although the level of education of the studied population is higher than the average and, still, having found pregnant women with complete higher education, there seems to be a difficulty in accessing the health network, information, diagnosis and appropriate treatment, and it is necessary that health education measures and actions occur for this group of young women and at fertile ages, considering the vulnerability existing in the social groups in which they live.[19]

Several studies express the high social vulnerability in which these pregnant women are exposed and also point out that low schooling, age group and race influence the increase in cases and contribute to syphilis in pregnant

women and congenital syphilis continue to be a major public health problem.[12,14,19]

The gestational age at which the diagnosis of syphilis is made is an important given, since the later the diagnosis, the greater the chance of the occurrence of congenital syphilis and other consequences for pregnant women and the conceptus, already mentioned in this study. The results presented for this variable showed that 49.4% of the diagnoses were made in the first trimester, and this value was satisfactory and similar to the national data.[13] The precocity of the tests is of vital importance, because the rate of infected pregnant women has been alarming, as pointed out in a study conducted in Guarapuava-PR between 2014 and 2015, in which 24 women were found, in a total of 27 pregnant women, diagnosed for syphilis in the first trimester of pregnancy.[21]

We noted that a significant percentage showed the diagnosis for syphilis in pregnant women in the second (28.7%) and third (19.3%) quarters, worrying results due to the consequences on the fetus and which are similar to the study conducted in Palmas-TO, in which 36.8% and 35.1% of late diagnoses were detected, performed respectively in the second and third trimester of pregnancy.[16]

The appropriate and safe treatment for gestational syphilis, according to the clinical protocol and therapeutic guidelines for the prevention of vertical transmission of syphilis[2], is performed with Penicillin. In this study, most cases of syphilis in pregnant women were treated with at least one dose of penicillin, but there is no information on whether the treatment was appropriate for each gestational age and phase of syphilis. There was also a significant percentage of pregnant women who did not undergo any treatment. This finding is reproduced in another study conducted with pregnant adolescents diagnosed with syphilis in curitiba city, PR, where 8.8% of them also did not undergo treatment.[22]

Based on these data, the reasons for this treatment should not have been performed in these pregnant women should be questioned. A study on the relationship between the offer of diagnosis and treatment of syphilis in primary care identified that a significant percentage of professionals did not administer penicillin, and only 22.71% of the municipalities in the Southeast region had the protocoled treatment. Possibly, this data is related to the fear of primary care professionals to anaphylactic reactions and structural scarcity to deal with possible complications resulting from.[23]

The variables gestational age and treatment regimen are important to verify the quality of prenatal care, since diagnosis and treatment are performed in primary care units. Failures in this process result in abortions, prematurity, deaths, children with congenital syphilis, generating psychosocial, physical and emotional exhaustion for those involved, in addition to longer hospitalization time and higher health costs.

The quality of prenatal care can also be noted, due to the quality of the records and notifications, a fact not evidenced in this study. Filling out the notification form incompletely results in serious consequences, since the lack of data makes it impossible to have real accuracy of the situation of syphilis in pregnant women in these population groups. The low quality of the records and the underreporting of gestational syphilis hinder the prevention of congenital syphilis and allow the increase of the case curve, consequently causes this STi, to continue to be a public health problem.

It is also worth mentioning that the data recorded in SINAN and made available by DATASUS, even if they allow an overview of the disease, make it impossible to further detail the situation of syphilis in pregnant women, since it was not possible to cross-reference the variables and with this, the analysis may have presented some vieses in the interpretation.

Conclusion

Through this study, it was possible to evidence that syphilis is still very present in the population and directly expose the social vulnerability existing in the country. The results showed a growing sample, especially in recent years and that most pregnant women diagnosed with syphilis were young, from 20 to 29 years old, in active sexual and reproductive phases. It was also evidenced that more than 50% of the women had attended elementary and high school, complete and, analyzing race, mostly, were self-declared white, considering the population profile found at the site of this study.

Regarding the gestational age in which the diagnoses were made, it was seen that they occurred mostly in the first trimester, despite having significant percentages in the other trimesters. Regarding the treatment regimen, as recommended by the current protocols, more than 90% of the diagnoses were performed with penicillin doses, but there is no information on whether the treatment was appropriate for each gestational age and syphilis phase.

Considering the consequences for those involved, more specific and targeted actions are needed for each extract of the population, because prevention, diagnosis and treatment are performed in primary care.

The fundamental aid for the knowledge of these data for future interventions are notifications and records. A low quality in filling out these instruments, having information ignored or presented incompletely, in addition to impairing care, is an indication of a lame quality of prenatal care, which interferes with an appropriate and consequent decision-making analysis, regarding the search for syphilis patients, their communicators and institutions, of the correct treatment.

It is worth remembering that the diagnosis of syphilis is simple, fast and easily accessible to the population in primary health care networks, as well as, its treatment is effective, when performed properly and low cost, which does not justify these results found, requiring greater involvement of all health agencies, professionals, from academia, to an effective education , seeking to guide, prevent, forward and control this STIs, which lead to such serious consequences and, despite new emerging diseases, continue to exist in our environment.

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Correspondent Author
Debora Faria da Costa
419 Dr. Enéas Carvalho de Aguiar Av. ZIP: 05402-000. Cerqueira César, Sao Paulo, Sao Paulo, Brazil.
debora.f.c@usp.br

Variants of the SARS-COV-2 virus that cause COVID-19 in Brazil

Variantes do vírus SARS-COV-2 causadoras da COVID-19 no Brasil

Variantes del virus SARS-COV-2 que causan COVID-19 en Brasil

Linconl Agudo Oliveira Benito[1], Rosana da Cruz Lima[2], Ana Maria de Lima Palmeira[3], Margô Gomes de Oliveira Karnikowski[4], Izabel Cristina Rodrigues da Silva[5]

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REVISA

1. University of Brasilia, Graduate Program in Health Sciences and Technologies. Brasilia, Federal District, Brazil.
https://orcid.org/0000-0001-8624-0176

2. Hospital das Plásticas de Brasília. Brasilia, federal District, Brazil.
https://orcid.org/0000-0003-1439-0321

3. State Department of Health of the Federal District, Directorate of Primary Health Care, Epidemiological Surveillance And Immunization Center. Brasilia, Federal District, Brazil.
https://orcid.org/0000-0003-3043-3678

4. University of Brasilia, Graduate Program in Health Sciences and Technologies. Brasilia, Federal District, Brazil.
https://orcid.org/0000-0002-5662-2058

5. University of Brasilia, Graduate Program in Health Sciences and Technologies. Brasilia, Federal District, Brazil.
https://orcid.org/0000-0002-6836-3583

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RESUMO

Objetivo: Analisar as variantes do vírus SARS-COV-2 causadoras da COVID-19 no Brasil, identificadas até fevereiro de 2021. **Método:** Estudo exploratório, descritivo, comparativo e quantitativo. Os dados foram adquiridos no Ministério da Saúde (MS). **Resultados:** Foram identificadas as variantes "VOC B.1.1.7, VOC202012/01 ou 201/501Y.V1" do Reino Unido, a "VOC B.1.351 ou VOC202012/02 ou 20H/501Y.V2" da África do Sul e a "VOC B.1.1.28.1 ou P.1 ou 20J/501Y.V3" do Brasil/Japão. As variantes VOV P.1 e a VOC B.1.1.7 foram as mais preponderantes do Brasil, com o universo de 334 casos, onde a primeira registrou 89,5% (n=299) e a segunda 10,5% (n=35). A região Nordeste (NE) registrou a maior preponderância das duas variantes contabilizando 32,6% (n=109) e o estado da Paraíba (PB) a maior preponderância da variante VOV P.1 com 23,1% (n=69). **Considerações finais:** As mutações do vírus SARS-CoV-2, causador da COVID-19, podem ter causado o surgimento de nova linhagem do vírus em circulação no Brasil.
Descritores: Variantes; COVID-19 ; Brasil; Epidemiologia.

ABSTRACT

Objective: To analyze the variants of the SARS-COV-2 virus that causes COVID-19 in Brazil, identified until february 2021. **Method:** Exploratory, descriptive, comparative and quantitative study. The data were acquired at the Ministry of Health (MS). **Results:** The variants "VOC B.1.1.7, VOC202012/01 or 201/501Y.V1" from the United Kingdom, "VOC B.1.351 or VOC202012/02 or 20H/501Y.V2" from South Africa and the "VOC B.1.1.28.1 or P.1 or 20J/501Y.V3" from Brazil/Japan. The VOV P.1 and VOC B.1.1.7 variants were the most prevalent in Brazil, with a universe of 334 cases, where the first registered 89.5% (n=299) and the second 10.5% (n=35). The Northeast region (NE) registered the highest preponderance of the two variants accounting for 32.6% (n=109) and the state of Paraíba (PB) the highest preponderance of the VOV P.1 variant with 23.1% (n=69) . **Final considerations**: Mutations of the SARS-CoV-2 virus, which causes COVID-19, may have caused the emergence of a new strain of the virus in circulation in Brazil.
Descriptors: Variants; COVID-19 ; Brazil; Epidemiology.

RESUMEN

Objetivo: Analizar las variantes del virus SARS-COV-2 que causa COVID-19 en Brasil, identificadas hasta febrero de 2021. **Método:** Estudio exploratorio, descriptivo, comparativo y cuantitativo. Los datos se obtuvieron del Ministerio de Salud (MS). **Resultados:** las variantes "VOC B.1.1.7, VOC202012/01 o 201/501Y.V1" del Reino Unido, "VOC B.1.351 o VOC202012/02 o 20H/501Y.V2" de Sudáfrica y el "VOC B.1.1.28.1 o P.1 o 20J/501Y.V3" de Brasil/Japón. Las variantes VOV P.1 y VOC B.1.1.7 fueron las más prevalentes en Brasil, con un universo de 334 casos, donde la primera registró 89,5% (n=299) y la segunda 10,5% (n=35). La región Nordeste (NE) registró la mayor preponderancia de las dos variantes con 32,6% (n=109) y el estado de Paraíba (PB) la mayor preponderancia de la variante VOV P.1 con 23,1% (n=69). **Consideraciones finales**: Las mutaciones del virus SARS-CoV-2, que causa COVID-19, pueden haber causado la aparición de una nueva cepa del virus en circulación en Brasil.
Descriptores: Variantes; COVID-19 ; Brasil; Epidemiología.

ORIGINAL

Introduction

COVID-19 is a recently emerged respiratory disease, caused by the severe acute respiratory syndrome of coronavirus 2 (SARS-CoV-2), characterized by the appearance of pneumonia, lymphopenia, "exhausted" lymphocytes and also, by a true cytokine storm, recently becoming understood as a severe pandemic and complex public health problem.[1,2] According to some researchers, in December 2019, a new outbreak was identified where it was possible to diagnose pneumonia and, which was believed to have been caused possibly, by a new Coronavirus strain, its beginning being detected in the province of Hubei, in the People's Republic of China, next to the city of Wuhan, verifying that it spread very quickly to approximately twenty-four (24) other nations.[2,3]

The present disease classified by some scholars as dangerous and complex, possibly is closely related to the phenomenon of people who have been exposed to it and, having contracted it, as a result of being in a certain Chinese market, which commercialized among its products, animals live, seafood and many other goods.[4,5] On December 29, 2019, four (04) people diagnosed with pneumonia were admitted to a given hospital based in Wuhan, making it possible to recognize that they had developed labor activities in a market of the wholesale type, specialized in the provision of seafood in Huanan.[6]

The Disease Control Center (CDC-China) was notified by this hospital, which allowed Chinese epidemiologists and researchers to identify other patients who were linked to the incident previously seen in the seafood and similar market, and on 30 December December 2019, the year in which the formal registration of this phenomenon was made to the Chinese CDC, by the competent authorities responsible for health in the province of Hubei.6 For some researchers, it was pointed out that the spread of COVID-19 was such that it represented itself and presented a growth and development far superior to the capacity of efficient and effective response of the various types of health services, with the European nations, due to the complexity and magnitude of this international health issue.[7]

On January 22, 2020, the Public Health Emergency Operations Center (COE-COVID-19) was founded in Brazil by the Ministry of Health (MS), constituting itself as a series of actions, strategies and policies that were adopted, possessing as the main objective, to guide the countless positive actions in response to the national public health emergency and, seeking the implementation of coordinated actions within the entire Unified Health System (SUS).[6] On January 30, 2020, after the opinion from several international specialists and researchers, the World Health Organization (WHO) was able to declare that the phenomenon in question was constituted as a Public Health Emergency of International Importance (ESPII), after confirmation of the registration of thousands of cases and hundreds of cases. deaths, directly related to the new coronavirus COVID-19, derived from records made by China's health authorities.[8]

In Brazil, on February 6, 2020, Law No. 13,979 was enacted, which provided for measures to deal with the public health emergency of international importance, resulting from the coronavirus responsible for the 2019 outbreak, constituting itself as a legislative document, implemented as a way of supporting civil society against COVID-19 and its impacts.[9] This notorious legislative provision has been altered through the Law of 14,019, of July 2, 2020, aiming to

provide for "the mandatory use of masks by individual protection, for circulation in accessible public and private spaces, on public roads and on public transport, on the adoption of aseptic measures of access places, including public transport, and on the availability of sanitizing products to users during the duration of the measures to tackle the collective health emergency of international importance resulting from the COVID-19 pandemic ".[10]

The word "corona" has ancestry from Latin and has as crown meaning, this characteristic identified through its guided visualization by means of electron microscopy, because these viruses are in the form of circles, representing a kind of "spicules" that end in "droplets", looking like a real crown.[11] The pathology that this complex virus produces is designated as COVID-19, where, it can be understood that the acronym "CO" means corona, "VI" is used to represent a virus and the letter "D" is related to the disease, in the past it was called "2019 new Coronavirus" or "2019-nCoV", and the Coronavirus Study Group of the International Virus Taxonomy Committee Coronavirus Studies of the International Committee on Virus Taxonomy) proposed that the virus should be designated SARS-Cov-2.[12,13]

In this epidemiological context, the need to develop policies, strategies and action methodologies is pointed out, for the control and protection of society, health professionals and people who are most vulnerable to COVID-19, aiming to minimize its transmissibility, mortality and impacts derived from its magnitude.[14,15] In this sense, it was constituted as objective of the present research, to analyze the variants of the SARS-COV-2 virus that cause COVID-19 in Brazil, identified until February of the year of 2021.

Method

It is a research classified as exploratory, descriptive, comparative and characterized by a quantitative approach, which aimed to analyze the variants of the virus "SARS-COV-2" that causes COVID-19, in the geographic section formed by "Brazil", identified until the February 2021 period. To facilitate the process of acquiring the data necessary for the construction of this research, they were acquired from the Health Surveillance Secretariat (SVS) of the Ministry of Health (MS), accessed on its electronic portal at the address [https://www.gov.br/saude/pt-br].

The data related to the identified variants of the SARS-COV-2 virus that cause COVID-19 in Brazil, were generated after carrying out an analysis developed in the "Epidemiological Week 8" (02/21/2021 to 02/27/2021). In this sense, it is understood that the SVS / MS, developed the weekly data collection process with the respective State Health Secretariats (SES), in relation to the results of the implemented sequencing that they have access to, regarding the notifications.[21]

Computerized bibliographic surveys were also carried out with the electronic database, the same being the Google Scholar (Google Scholar), the Virtual Health Library (VHL), Minerva-UFRJ, Saber-USP, Teses-FIOCRUZ, thus acquiring articles from scientific journals, official documents and related legislation. VHL Health Sciences Descriptors (DeCS) were also used, identified by the electronic address [https://decs.bvsalud.org/], being the same, "epidemiology" with the DeCS identifier "28566" and the descriptor ID "D004813", "coronavirus infections" with the DeCS identifier "31543" and the

descriptor ID "D018352", "epidemiological surveys" with the DeCS identifier "28627" and the descriptor ID "D006306", "pandemics" with the DeCS identifier "54399" and the descriptor ID "D058873", "public health policies" with the DeCS identifier "50207" and the ID of the descriptor "DDCS050207", "public health" with the DeCS identifier "28455" and the descriptor ID "D011634", "severe acute respiratory syndrome" with the DeCS identifier "37050" and the descriptor ID "D045169".

The Microsoft Excel 2016® software, belonging to the Microsoft Office 2016® for Windows® Package, was used for the process of organizing and analyzing the acquired data and, aiming to expand the interpretative process, a descriptive statistical analysis was carried out, and the calculations were implemented. percentages (%). The results were presented in the format of one (1) explanatory table, one (1) table and three (3) figures, and the use of maps of the Brazilian regions and federative units (UF), also constituted themselves as strategies for better interpretation of the findings. The authors of the present study declare that there are no conflicts of interest.

Results

In the process of organizing and analyzing the data, it was possible to identify some variants related to COVID-19, which were more prevalent with the island nations of the United Kingdom (England, Scotland, Wales and Ireland). North), South Africa and Brazil / Japan, as shown in table 1. In the item specifications, issues related to the process of collecting biological samples of the identified variants of COVID-19, the date on which they were collected, were exposed, process notification by the respective nations and their local transmissibility.

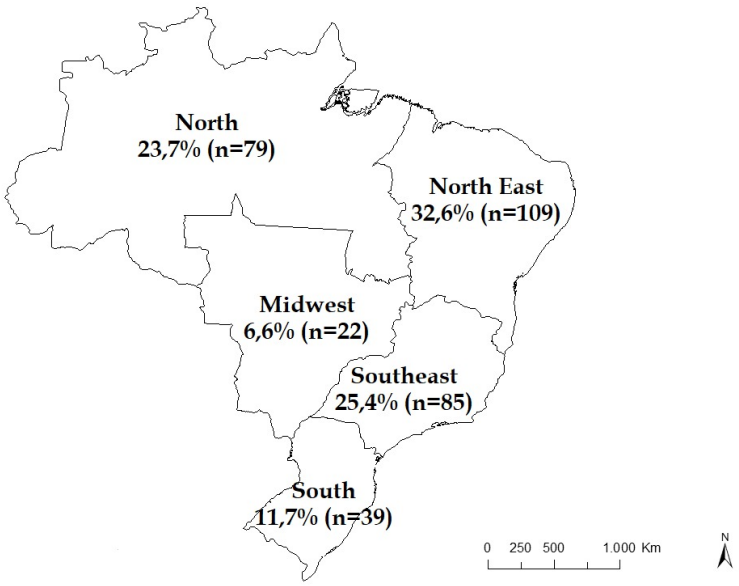
Table 1 – Distribution of the different identified variants of COVID-19 by location and specifications:*

Variants	Location	Specifications
VOC B.1.1.7, VOC202012/01 ou 201/501Y.V1	UK	Identified in samples from "September 20, 2020", it has already been reported by 94 countries, with 8 countries reporting cases in the week prior to the date of publication. Local broadcasting was reported by 47 countries.
VOC B.1.351 ou VOC202012/02 ou 20H/501Y.V2	South Africa	Identified in samples from the beginning of "August 2020", it has already been reported by 46 countries, with 2 countries reporting cases in the week prior to the date of publication. Local broadcast was reported by 12 countries.
VOC B.1.1.28.1 ou P.1 ou 20J/501Y.V3	Brazil/ Japan	Identified in samples from "December 2020", it has already been notified by 21 countries, with 6 countries reporting cases in the week prior to the date of publication. Local broadcast was reported by 2 countries.

Source: Adapted from SVS/MS, 2021.
* Epidemiological Week 8 (21 a 27/2/2021).

In figure 1, the distribution of registered cases of variants of attention from COVID-19 is presented, according to the respective Brazilian regions, with the universe of 334 records being identified. The Northeast region (NE) accounted for the largest preponderance with 32.6% (n = 109) and the Midwest (CO) the lowest with 6,6% (n=22).

Figure 1 – Distribution of registered cases of care variants VOV P.1 and VOC B.1.1.7, according to the regions in Brazil, until the epidemiological week 8* (n=334):



Source: Adapted from SVS/MS, 2021.
* Epidemiological Week 8 (21 a 27/2/2021).

When analyzing the variants identified in Brazil, it was identified that "VOV P.1" obtained the highest preponderance with 89.5% (n = 299) and "VOC B.1.1.7" the lowest with 10.5% (n = 35) as shown in table 1. When analyzing the highest frequency of attention variants of COVID-19 by federative units (UF), it was found that Paraíba (PB) registered the highest preponderance with 20.7% (n = 69) and the lowest preponderance, tied each with a record, were found Maranhão (MA), Piauí (PI), Sergipe (SE) and Tocantins (TO) who registered respectively 0,3% (n=1).

Table 1 – Distribution of cases of care variants, according to federative units, in Brazil up to the epidemiological week 8 (n=334*):

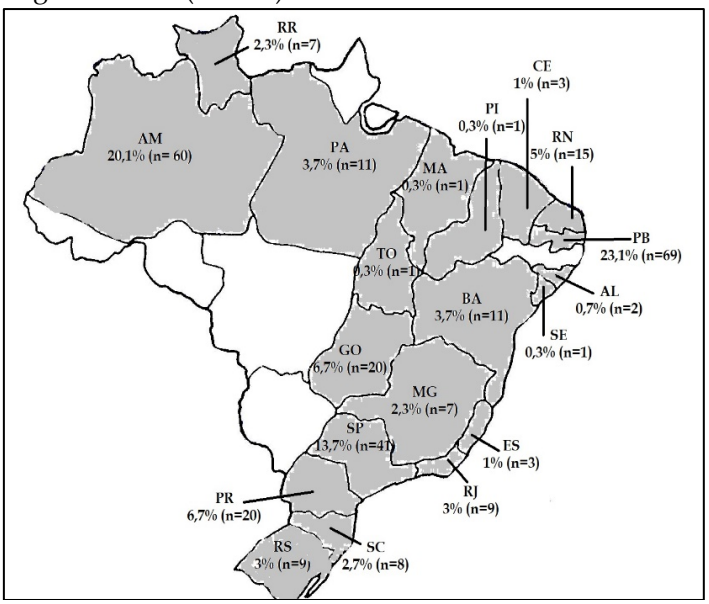
UF **,***	VOV P.1 (%)	VOC B.1.1.7 (%)	Total (%)
Paraíba	69 (23,1)	-	69 (20,7)
Amazonas	60 (20,1)	-	60 (18)
São Paulo	41 (13,7)	11 (31,4)	52 (15,6)
Goiás	20 (6,7)	2 (5,7)	22 (6,6)
Paraná	20 (6,7)	2 (5,7)	22 (6,6)
Rio Grande do Norte	15 (5)	-	15 (4,5)
Bahia	11 (3,7)	6 (17,1)	17 (5,1)

Pará	11 (3,7)	-	11 (3,3)
Rio de Janeiro	9 (3)	1 (2,9)	10 (3)
Rio Grande do Sul	9 (3)	-	9 (2,7)
Santa Catarina	8 (2,7)	-	8 (2,4)
Minas Gerais	7 (2,3)	13 (37,1)	20 (6)
Roraima	7 (2,3)	-	7 (2,1)
Ceará	3 (1)	-	3 (0,9)
Espírito Santo	3 (1)	-	3 (0,9)
Alagoas	2 (0,7)	-	2 (0,6)
Maranhão	1 (0,3)	-	1 (0,3)
Piauí	1 (0,3)	-	1 (0,3)
Sergipe	1 (0,3)	-	1 (0,3)
Tocantins	1 (0,3)	-	1 (0,3)
Total	**299 (100)**	**35 (100)**	**334 (100)**

Source: Adapted from the State Health Secretariats (SES), SVS/MS, 2021.
* Data updated on March 1, 2021, subject to revisions.
** UF: Federative Unit.
*** UF where the sample was collected.

Figure 2 shows the distribution of cases of the variant of attention type VOV P.1, according to Brazilian UFs, up to the epidemiological week 8, making it possible to identify the universe of 299 records, in twenty states, being them Amazonas (AM), Alagoas (AL), Bahia (BA), Ceará (CE), Espírito Santo (ES), Goiás (GO), Maranhão (MA), Minas Gerais (MG), Pará (PA), Paraíba (PB), Paraná (PR), Piauí (PI), Rio de Janeiro (RJ), Rio Grande do Norte (RN), Rio Grande do Sul (RS), Roraima (RR), Santa Catarina (SC), São Paulo (SP), Sergipe (SE) and Tocantins (TO). The UFs in Acre (AC), Amapá (AP), Distrito Federal (DF), Mato Grosso (MT), Mato Grosso do Sul (MS), Pernambuco (PE), Rondônia (RO), did not account for records of care variants like "VOV P.1".

Figure 2 - Distribution of cases of attention variants of type VOV P.1, according to UF, in Brazil up to the epidemiological week 8 (n=299*):



Source: Adapted from the State Health Secretariats (SES), SVS/MS, 2021.
* Data updated on March 1, 2021, subject to revisions.
** UF: Federative Unit.

*** UF where the sample was collected.

In figure 3, the distribution of cases of the VOC B.1.1.7 type of care variant is shown schematically, according to Brazilian UFs, up to the epidemiological week 8, making it possible to identify the universe of 35 in six (06) states, being they Bahia (BA), Goiás (GO), Minas Gerais (MG), Paraná (PR), Rio de Janeiro (RJ), São Paulo (SP). The UFs of Acre (AC), Amazonas (AM), Alagoas (AL), Ceará (CE), Federal District (DF), Espírito Santo (ES), Maranhão (MA), Mato Grosso (MT), Mato Grosso do Sul (MS), Pará (PA), Paraíba (PB), Pernambuco (PE), Piauí (PI), Rio Grande do Norte (RN), Rio Grande do Sul (RS), Rondônia (RO), Roraima (RR), Santa Catarina (SC), Sergipe (SE), Tocantins (TO), cases of type of attention variants VOC B.1.1.7.

Figure 3 - Distribution of cases of attention variants of the VOC B.1.1.7 type, according to UF, in Brazil up to the epidemiological week 8 (n=35*):

Source: Adapted from the State Health Secretariats (SES), SVS/MS, 2021.
* Data updated on March 1, 2021, subject to revisions.
** UF: Federative Unit.
*** UF where the sample was collected.

Discussion

The World Health Organization (WHO), in conjunction with the various national authorities, health institutions, researchers and specialists, continues to carefully develop and monitor the numerous collective health events, closely associated directly and indirectly with the variants of the "SARS-CoV -2 ", providing daily updates on this complex phenomenon, when information becomes accessible.[16] In this sense, it is possible to infer that the" SARS-CoV-2 "virus, as well as many other viruses, can undergo mutation processes (s) expected and, in order to be able to assess their characterization of the genomic type, a certain quantity of their respective samples, must be confirmed on account of the RT-qPCR that are sent to carry out their genomic sequencing.[17,18]

Thus, RT-qPCR is constituted as a new laboratory technique, currently considered as a gold standard, that is, "gold standard", for the diagnosis of COVID-19, as prescribed by WHO, constituting itself as a derivation of the discoveries implemented by the American biochemist Dr. Karry Mullis in the

80's, having as one of its main characteristics, the detection and also, in the quantification of the fluorescence process, emitted during each cycle of a reaction developed by the Polymerase Chain Reaction (PCR) and also , in relation to its sensitivity in finding few copies of deoxyribonucleic acid (DNA) present in a respective sample.[18,19] After the process of characterization of the initial genomic type of "SARS-CoV-2", this virus can be fragmented into different genetic groups, also known as clades and, when certain types of specific mutations have appeared, they can establish themselves in a new type of lineage, or that is, another genetic group of the aforementioned virus that is in circulation.[17,18,19]

According to the European Center for Disease Prevention and Control (European Center for Disease Prevention and Control - ECDC), when this phenomenon occurs, it is characterized as a new form of variant of the respective viral agent and, when its respective mutations cause in the emergence of relevant clinical-epidemiological changes, the appearance of greater severity and even greater potential for infectivity will be allowed.20 In this sense, this variant is classified as "VOC", of the English language, "variant of concern" , in Portuguese and can be translated as "attention variant" and / or "concern", and these attention and / or concern (VOC) variants are undoubtedly considered to be of concern, due to the respective mutations, which indicate an increase in the process of transmissibility and also to the worsening of the epidemiological situation (s) next to the area (s) where they are respectively identified.[20]

According to the Ministry of Health, on January 9, 2021, the variant of attention in Brazil "P.1", was initially identified in Japan, among some travelers who were in the state of Manaus, in Amazonas (AM) and, days later, Brazilian researchers were able to identify it in samples from certain patients also from Manaus, making it possible to collect samples of material for exams for later diagnosis, in December 2020.21 Thus, and considering that the process of genomic sequencing is being implemented by several laboratory institutions in the country and that, not all of them belong to what is known as the National Network of Public Health Laboratories, a large number of results may have been reported only in the municipal or state dimension, or even failed to be notified to any of the Unified Health System (UHS).[21]

On the other hand, the respective results may also have only been deposited with open genomic sequencing sites, making the process of global registration of the respective cases more difficult.[20,21] In Brazil, the organization of the National System of Public Health Laboratories (SISLAB) , was instituted through the ordinance of MS number 2,031, of September 23, 2004, where it is constituted as a set of national networks of laboratories, organized in subnets, by grievances or programs, in a hierarchical way by degree complexity of activities related to health surveillance, including epidemiological surveillance and environmental health surveillance, health surveillance and medical assistance.[22]

The complexity of this theme is such that, analyzing it with the Caribbean, it was possible to verify the existence of variants in the "ACE2" and "TMPRSS2" genes, which were potentially associated with the issue of susceptibility or even with the gravity generated by COVID- 19, although the scientific literature points to this subject, that it is sparse and poorly systematized.[23] In this sense, it is possible to infer that some of the aforementioned variants, were distributed differently, among populations belonging to the African, American continent, Asian and European, or even, were potentially associated with the process of expansion, susceptibility and also of its severity in relation to COVID-19.[23]

The responsible authorities in the United Kingdom, notified on December 14, 2020 to the WHO, the existence of a variant named as "SARS-CoV-2 VOC 202012/01" or "B.1.1.7.", Being that said strain, carried the amount of approximately 14 defining mutations, including 7 along with the S.24 protein. its "ACE-2" receiver, which in this sense, can explain its characterized expansion in a fast way.[24]

Recent experiments have shown that the process of "elimination" of amino acids makes it easier for the new coronavirus to infect cytological structures more easily, and, to date, the strain has been found in approximately seventy (70) nations, and of these, the number of twenty-nine (29) has the possibility of being transmitted locally, which aggravated the epidemiological condition (s) with the United Kingdom, Portugal and other countries located in europe in mid-december 2020 and january 2021.[25] the national health authorities of south africa announced on december 18, 2020, the detection of a new type of variant of "SARS-CoV-2" designated as " B.1.351 "(or 501Y.V2), due to the presence of the" N501Y "mutation process.[26]

Despite the variant of type "B.1.1.7" also having developed the mutation "N501Y", the realization of phylogenetic analyzes, showed that the variant classified as "B.1.351", detected in South Africa, has its origin different.[26] Japan notified on January 9, 2021 to the WHO, the appearance of a new variant of "SARS-CoV-2", "P1", that is, it is initially reported as "B.1.1.248 ", And it was possible to detect it in four (04) people from Brazil, who were traveling, and this variant was not genetically related to variants of the type" SARS-CoV-2 B.1.1.7 "and also" B.1.351 ", having been identified in the month of December of the year 2020, in the city Manaus in Amazonas (AM), in Brazil.[27]

This variant has a quantity of twelve (12) mutations with the "S" protein, including three (03) mutations of common interest with "B.1.351", that is, "K417N" / T "," E484K "and" N501Y ", Which can allow transmissibility to be affected, in addition to the immune response process.27 The process called as evolutionary convergence, may be related to the phenomenon of these strains, having origins described as different, however, having the same phenomena of mutation and, therefore, this designation is given when the characteristics are similar and selected in different locations, because they represent clear advantages, for example, of greater transmissibility and successful replication.[28]

It is also important to mention, what was defended by some researchers, regarding the mutation named "E484K", in relation to the Brazilian strain "P.2", which was first identified in October of 2020 , being defended that it was constituted as the most prevalent among the strains identified in people who were under health treatment.29 Thus, it was also possible to carry out the identification of the existence of other signs and symptoms in the month of November, in the month of November. state of Rio de Janeiro, Brazil.[29]

According to data derived from the Fiocruz Genomic Network, present at the electronic address [http://www.genomahcov.fiocruz.br/], it was possible to show by the researchers of several institutes of the Oswaldo Cruz Foundation (FIOCRUZ) that, since the first known moments of emergency, in relation to strains of the type "P.1" and also "P.2" in the month of October 2020, for only four (4) months, they were responsible for approximately seventy-five percent (75%) of all strains that had been sequenced in the Brazilian national territory.[30] Institutions participating in the Fiocruz Genomic Network, the Aggeu Magalhães Institute (IAM), the Carlos Chagas Institute (ICC), the Oswaldo Cruz Institute

(IOC), the Gonçalo Moniz Institute (IGM), the National Health Quality Control Institute (INCQS), the René Rachou Institute (IRR) and the Technical Office do Ceará and the Diagnostic Support Unit of the COVID (UNADIG).[31]

The data derived from research developed by the Fiocruz Genomic Network and / or deposited with the GISAID Platform by other institutions, strictly follow the established international standards of nomenclatures related to respiratory viruses, of the main SARS-CoV-2 strains found in Brazil.[32] On the other hand, as exposed by some researchers, in the Brazilian city of Manaus, in Amazonas (AM), understood as the main financial, commercial and economic center of the Northern region (N), it was verified that the two identified strains corresponded to approximately 97.8% of all viral samples sequenced, by the month of January of the year 2021.[27]

According to data provided by the Brazilian Institute of Geography and Statistics (IBGE), Manaus (AM) constitutes itself as the most populous Brazilian city in the state of Amazonas, of the entire Brazilian Amazon, of the North (N) region, being located geographically close to the center of the largest tropical forest in the world and still, having an estimated population of approximately 2,219,580 inhabitants in the year 2020.[33,34] In addition to the questions and facts presented, with regard to the different identified variants of COVID-19 to date, it is verified with the national and international scientific literatute, the appearance of others in Brazil, in South Africa, in the United States of America (USA), in France, in Japan and, in many other nations, what points to the importance and the need for greater attention to the aforementioned theme, as well as for the development of other actions to combat and systematize control.[27,35,36,37,38,39,40]

Final considerations

Through this research, it was possible to identify two (02) variants related to COVID-19 in several UFs in Brazil, namely "VOV P.1" and "VOC B.1.1.7" and in this sense, it is It is of fundamental importance that efforts to combat and control these public health problems be redoubled. Although the study has limitations, it offered a genuine contribution in terms of greater knowledge of the emergence of variants of COVID-19 in Brazil.

The phenomenon of the appearance of COVID-19 variants is closely related to several issues, such as, for example, the reduced use of the protective mask and also hand hygiene, using water and soap and / or alcohol gel, in addition to the fragile realization care, such as when coughing or sneezing, cover the mouth with the forearm, according to the recommended technique. Another issue also identified and, which may be related to the emergence of the COVID-19 variants in Brazil, is the diminished implementation of social isolation, proposed to combat the agglomeration (s) of people, disrespected by a considerable portion society, evidenced strongly by the various daily informational, journalistic and communicational vehicles.

Other phenomena that may also be contributing to the emergence and increase of variants of COVID-19 in Brazil, are the persistent social agglomerations, the phenomenon of the organization of parties and clandestine entertainment events, related to the non-compliance with the countless preventive sanitary measures, instituted by the governments in all political spheres, and also the limited knowledge in relation to the disease in question, its

direct and indirect impacts, in addition to its consequences on national public health. The intensification of the population's immunization process in all age groups is also a powerful strategy to combat and control COVID-19 and its variants, not only in Brazil, but in all other nations.

Support for higher education institutions (HEIs) and national science, research and innovation development centers should also be expanded, aiming to guarantee the purchase of active pharmaceutical ingredients (IFA) for the immunobiological production and subsequent vaccination of all the society. In this sense, it is perceived the need to develop other mechanisms and public policies in all Brazilian national spheres, aiming to mitigate and prevent COVID-19 and its variants, from bringing irreparable consequences today and for the next generations.

It is up to health professionals and researchers, political organizations in all their representative dimensions and society as a whole, to multiply the development of efforts, aiming at reinforcing control measures and combating Covid-19 and its variants, effectively reducing the its process of transmissibility and mortality. Other studies and research aimed at analyzing the emergence of variants related to COVID-19 in Brazil, its direct and indirect impacts on society, in addition to the differences in this emerging issue in the various UFs, should be encouraged in order to allow for a greater elucidation of this complex phenomenon. , thus bringing "peace in the heart of the human creature".

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Correspondent Author
Linconl Agudo Oliveira Benito
SEPN 707/907, Via W 5 North,
University Campus. ZIP: 70790-075. Asa Norte. Brasilia, Federal District, Brazil.
linconlbenito@yahoo.com.br