

SOCIODEMOGRAPHICS AND CLINICAL DATA OF PATIENTS UNDERGOING PHYSIOTHERAPY TREATMENT IN A HOSPITAL IN THE INTERIOR OF THE STATE¹

SOCIODEMOGRAFIA E DADOS CLÍNICOS DE PACIENTES EM TRATAMENTO DE FISIOTERAPIA EM HOSPITAL NO INTERIOR DO ESTADO

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ABSTRACT

To characterize the sociodemographic and clinical characteristics of patients over 18 years of age and both genders admitted to a hospital of low and medium complexity in the central region of the state, as well as to recognize the presence of deleterious habits and the prescription of physical therapy. According to the literature, there is a scarcity of studies that address the proposed design and theme, with interference in the planning and quality of the treatment provided. This is a quantitative, cross-sectional study, conducted retrospectively and descriptively. Through the analysis of medical records of the inpatient unit of patients with physiotherapy prescriptions, the collection was performed from January to October 2020. A total of 328 medical records were verified, with a predominance of women patients (54.6%), white (80.2%), elderly (76.2%), mostly smokers (35.4%), from and residents of the west (22.9%) and north (15.8%) regions of the city. The diseases of cardiovascular (n=374), pneumological (n=45), neurological (n=180), and endocrine (n=157) origin stood out, as for the reason and time of hospitalization, respectively, it was pneumonia (29.3%), in a period of up to 14 days (85.1%). Physiotherapy prescriptions predominated once a day, mostly motor (n=202). The sociodemographic and clinical aspects of the patients contribute to a performance based on the quality of care provided, planning, Assistance, and actions aimed at the specificity and effectiveness of interventions.

Keywords: Hospital Care, Epidemiology, Rehabilitation.

RESUMO

Caracterizar sociodemográfica e clinicamente os pacientes acima de 18 anos e ambos os gêneros, internados em um Hospital de baixa e de média complexidade na região central do estado, assim como reconhecer a presença de hábitos deletérios e a prescrição de fisioterapia. De acordo com a literatura, há uma escassez de estudos que abordem o predito delineamento e o tema proposto, com interferências no planejamento e na qualidade do tratamento prestado. Trata-se de um estudo com delineamento quantitativo, transversal, conduzido de forma retrospectiva e de cunho descritivo. Por meio da análise de prontuários da unidade de internação clínica de pacientes com prescrição de fisioterapia, a coleta foi realizada nos meses de janeiro a outubro de 2020. Verificou-se um total de 328 prontuários, com o predomínio de pacientes mulheres (54,6%), na cor branca (80,2%), idosas (76,2%), em sua maioria tabagistas (35,4%), provenientes e residentes da região oeste (22,9%) e norte (15,8%) do município. Sobressairam-se as doenças de origem cardiovascular

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(n=374), pneumológica (n=45), neurológica (n=180) e endócrina (n=157), quanto ao motivo e tempo de internação, respectivamente, foi considerada a pneumonia (29,3%), em um período de até 14 dias (85,1%). As prescrições de fisioterapia predominaram uma vez ao dia, em sua maioria sendo motora (n=202). Os aspectos sociodemográficos e clínicos dos pacientes contribuem para uma atuação baseada na qualidade do cuidado prestado, planejamento da assistência e de ações voltadas para a especificidade e a efetividade das intervenções.

Palavras-chave: Assistência Hospitalar, Epidemiologia, Reabilitação.

INTRODUCTION

Hospital admissions express important numbers, since according to data from the Brazilian Institute of Geography and Statistics (IBGE, 2019), the Brazilian population was estimated with 210,147,127 inhabitants in the year 2019, which 12,175,787 inhabitants in that year were in the care of the hospital team of the Unified Health System (SUS) (DATASUS, 2019). In Rio Grande do Sul, according to the last census published in 2010, the population corresponded to a total of 10,693,929 people (IBGE, 2010), since in the year 2019, 767,093 individuals were hospitalized in SUS Hospitals (DATASUS, 2019). As for the locality of Santa Maria, in the years between 2011 to 2016, there was an average of 11,580 hospitalizations, with an annual rate of 10,000 inhabitants (SANTA MARIA, 2018).

It is during the hospital stay that many individuals receive the diagnosis for acute or chronic diseases, follow-ups, exams, and surgeries, aiming at the treatment of the disease (BRASIL, 2007). In this context, the physiotherapist is one of the health professionals who have their performance in assisting the hospitalized patient, whether with disorders of neurological, cardiac, hemodynamic, respiratory, or motor origin (MATOS *et al.*, 2016); as well as minimizing the effects of prolonged hospitalization, providing a better quality of life and a reduction in post-discharge mortality (MATOS *et al.*, 2016).

Studies indicate the importance of the improvement of motor physical therapy in the hospital environment, not separating it from respiratory physical therapy in specific pathologies with involvement of the motor system, since this joint intervention assists in patient recovery (MESQUITA, 2017). Through the physiotherapy prescriptions, whether motor and/or respiratory, it is important to recognize the patients who are hospitalized and their particularities. According to Ferreira *et al.* (2018), the importance of this knowledge is related to the direction of the treatment provided and the guidance for success in clinical research.

According to the literature, there is a scarcity of studies that address the type of design and the proposed theme. Given the literature, the present study aims to characterize the sociodemographic

and clinical characteristics of individuals admitted with a physical therapy prescription in a hospital in the central region of the state of Rio Grande do Sul.

MATERIALS AND METHODS

This is a cross-sectional study conducted retrospectively and descriptively (PRAÇA, 2015). In the sample, the data used are from the medical records of the inpatient unit of patients with physiotherapy prescriptions in a hospital of low and medium complexity, located in the city of Santa Maria/RS. Included in this study were the medical records of patients of both genders, over 18 years of age, hospitalized in the inpatient unit from January to October 2020. Those whose care was without physical therapy prescription and/or with incomplete data were excluded from the study. The study was approved by the Research Ethics Committee of the Higher Education Institution - IES/RS, opinion number 4.432.106, and CAAE: 39225520.1.0000.5306. Data collection occurred in the period from November 2020 to January 2021, through the analysis of medical records, by the form prepared by the researchers.

Information regarding personal identification was not collected, remaining blinded, since users were identified by number. Therefore, the descriptive analysis of the data considered the following epidemiological variables: sex, age, race, deleterious habits, and residential address. As well as the clinical variables: presence or absence of palliative care, underlying pathology, reason and time of hospitalization, prescription of physical therapy as motor and/or respiratory, and the daily frequency that it was requested. The Microsoft Excel program (version 2016) was used for data tabulation and, analyzed using simple descriptive statistics, presented as absolute frequency (n) and percentage (%), represented in tables. The present work followed Resolution 466/12, which regulates research with human beings, from the perspective of the individual and of collectivities, and bioethical references, and aims to ensure the rights and duties that concern research participants, the scientific community, and the State.

RESULTS AND DISCUSSION

A total of 328 patients' records were verified, which, according to the sociodemographic characteristics, it can be proven that they were more prevalent female and white. The predominantly elderly age group had smoking as the dominant deleterious habit. Regarding the residential address of the inpatients, a higher concentration was found in the western and northern regions of the city (table 1).

Table 1 - Sociodemographic characterization of inpatients with physical therapy prescription (n=328).

| Variables | n | % |
|----------------------------|-----|------|
| Sex | | |
| Female | 179 | 54,6 |
| Male | 149 | 45,4 |
| Race | | |
| White | 263 | 80,2 |
| Brown | 21 | 6,4 |
| Black | 3 | 0,9 |
| Black | 8 | 2,4 |
| Not definited | 33 | 10,1 |
| Age | | |
| 19 years old | 1 | 0,3 |
| 20-29 | 7 | 2,1 |
| 30-39 | 12 | 3,7 |
| 40-49 | 21 | 6,4 |
| 50-59 | 37 | 11,3 |
| 60-69 | 63 | 19,2 |
| 70-79 | 74 | 22,6 |
| 80-89 | 92 | 28,0 |
| 90 or more | 21 | 6,4 |
| Deleterious habits | | |
| Smoking | 116 | 35,4 |
| Chemical Dependency | 9 | 2,7 |
| The two | 35 | 10,7 |
| No | 107 | 32,6 |
| None | 61 | 18,6 |
| Residential Regions | | |
| Center | 38 | 11,6 |
| East Central | 19 | 5,8 |
| Mid West | 31 | 9,4 |
| East | 24 | 7,3 |
| West | 75 | 22,9 |
| North | 52 | 15,8 |
| Northeast | 42 | 12,9 |
| South | 31 | 9,4 |
| Other cities | 12 | 3,65 |
| Districts | 4 | 1,25 |

Source: Construction of the authors.

By analyzing the data obtained in the hospital information system, it is understood that most patients were declared as white (80.2%), corroborating the last demographic census of 2010, which revealed a high rate of white Brazilians served in this system (47.51%) (IBGE, 2010). However, the white population in Rio Grande do Sul corresponded to 83% (IBGE, 2007).

The study by Nunes *et al.* (2017), which aimed to assess the association of multimorbidity, primary care model, and health insurance ownership with hospitalization, was in line with the

findings of this research, in which their sample of hospitalization, in general, almost 2/3 were women, with white skin color being the most preferred (78.6%), consisting of 31.2% of individuals aged 75 years or older.

Regarding the predominantly elderly age group, the information was in line with the findings in the literature, since there is an association of age with the occurrence of multimorbidity, which may be responsible for the cause of death and disability of this population (HARRISON *et al.*, 2017). Therefore, multimorbidity can increase the occurrence of hospitalization, thus the need for specific planning for the care of the elderly population.

According to the location of housing of individuals, identified through medical records, it was found that the western and northern regions of the city had higher numbers of hospitalizations, which is directly related to health outcomes. Given the above, the recognition of the population served is considered important, since it will allow the development of regional interventions, directed to the specificities of each location, ensuring the user's quality of life (SANTA MARIA, 2018). Therefore, it is essential to improve the effectiveness of the places that provide health services, to promote specialized care close to the user, according to the public resources available for the implementation and maintenance of these services (CIRINO *et al.*, 2018).

In table 2, according to the clinical characteristics, the most frequent underlying pathologies found in hospitalized patients are represented. It is noteworthy that most patients had more than one concomitant disease, with more than half of the people who were hospitalized having Systemic Arterial Hypertension (SAH). Within the cardiovascular diseases, eight people with Chronic Vascular Insufficiency (2.4%), seven with coronary disease (2.1%), three people with deep vein thrombosis (0.9%), two people with Chagas Disease (0.3%) and with peripheral vascular insufficiency or aneurysm only one hospitalized person (0.3%) were classified.

In the research findings, less than 14% of the inpatients suffered from pneumological pathologies, and only one had pulmonary hypertension (0.3%). As for neurological diseases, approximately one-third of the patients were affected by stroke. Also in table 2, other neurological diseases were found: four people hospitalized with epilepsy (1.2%), three people with traumatic brain injury, neurosyphilis, and impaired neuro psychomotor development (0.9%), two people with neuro toxoplasmosis and meningitis (0.6%). In addition, only one person had the following conditions: spondylolisthesis, spondylodiscitis, cerebral palsy, myelopathy, encephalopathy, Machado Joseph's disease, demyelinating disease, poliomyelitis, and fibromyalgia (0.3%).

Less expressive data were found regarding the pathologies that were less present, with three users or fewer each ($\leq 0.9\%$), which were: anemia, parotitis, pancreatitis, hyperthyroidism, diverticulitis, gastroesophageal reflux disease, colitis, cholelithiasis, adenomyosis, urinary incontinence, cirrhosis, erysipelas, psoriasis, and cellulitis. In addition, five users were hospitalized for urinary tract incontinence (1.5%).

However, still, seven patients (2.1%) were considered previously healthy in the electronic medical record findings and only one patient was unaware of his underlying pathologies. Also, in this study, 38 of the patients who were admitted (11.6%) were considered to be in palliative care.

Table 2 - Clinical characterization regarding the underlying pathologies of the inpatients with physiotherapy prescription.

| Variables | n | % |
|---|-----|------|
| Cardiovascular | | |
| Systemic Arterial Hypertension (SAH) | 210 | 64 |
| Cardiopathies | 71 | 21,6 |
| Congestive heart failure (CHF) | 60 | 18,3 |
| Peripheral arterial obstructive disease | 12 | 3,7 |
| Other | 21 | 6,0 |
| Pneumological | | |
| Cronic Obstructive Pulmonary Disease (COPD) | 28 | 8,5 |
| Asthma | 10 | 3,0 |
| Obstructive sleep apnea | 4 | 1,2 |
| Pneumonia | 3 | 0,9 |
| Neurological | | |
| Cerebral Vascular Accident (CVA) | 105 | 32 |
| Alzheimer's | 41 | 12,5 |
| Parkinson's | 8 | 2,4 |
| Other | 26 | 7,8 |
| Infectious Diseases | | |
| Acquired immunodeficiency virus | 11 | 3,4 |
| Tuberculosis | 7 | 2,1 |
| Hepatitis C | 6 | 1,8 |
| Syphilis | 1 | 0,3 |
| Endocrine | | |
| Diabetes Mellitus (DM) | 89 | 27,1 |
| Hypothyroidism | 34 | 10,4 |
| Benign Prostatic Hyperplasia | 18 | 5,5 |
| Obesity | 16 | 4,9 |
| Renal | | |
| Chronic kidney disease | 19 | 5,8 |
| Renal insufficiency | 4 | 1,2 |
| Pyelonephritis | 1 | 0,3 |
| Nephrolithiasis | 2 | 0,6 |
| Psychopathological | | |
| Depression | 10 | 0,3 |
| Schizophrenia | 6 | 1,8 |
| Not specified | | |
| Neoplasia | 32 | 9,8 |
| Inflammatory Disease | 3 | 0,9 |

Source: Construction of the authors.

About underlying pathologies, it is possible to identify the occurrence of several associated diseases. In a study by Eira *et al.* (2018), it was shown that the most prevalent risk factors for stroke are SAH (68.9%), dyslipidemia (29.8%), Diabetes Mellitus (DM) (26.7%), and heart diseases (22.7%). According to the results obtained, DM was the endocrine disease with the highest prevalence, since some of its complications include neuropathy, diabetic foot, amputations, and nephropathy, which are considered causes of hospitalization (COSTA *et al.*, 2017). Because of this, health education is a practice to be used as a working tool to assist individuals with chronic diseases. Considering the singularities of the disease, in search of effective control to prevent chronic complications (SALCI; MEIRELLES; SILVA, 2018).

Smoking was represented as the main deleterious habit, in Brazil it is considered responsible for the mortality of 157 thousand people per year, 12.6% of the total annual deaths, of which 74% occur as a result of Chronic Obstructive Pulmonary Disease (COPD), 18% due to coronary heart disease and 13% due to cerebrovascular diseases (CVA) (PINTO *et al.*, 2019). In addition, it is appointed with 21.4% of all cancer deaths (REZENDE *et al.*, 2019), corroborating with the data found in this study, since most patients were smokers and presented the aforementioned comorbidities.

Table 3 represents the main reasons and the length of hospital stay. The reasons with a sample smaller than ten were suppressed from the results due to the great diversity and, consequently, lower expressiveness. A short hospitalization period stood out, with only eight patients staying longer than 22 days.

Table 3 - Reason and length of hospitalization of patients with physical therapy prescription (n=328).

| Variables | n | % |
|-----------------------------------|-----|------|
| Reason for hospitalization | | |
| Pneumonia | 96 | 29,3 |
| Urinary incontinence | 49 | 14,9 |
| STROKE | 40 | 12,2 |
| CHF | 33 | 10,1 |
| COPD | 29 | 8,8 |
| Infected lesion | 15 | 4,6 |
| Cellulite | 12 | 3,7 |
| Erysipelas | 10 | 3,0 |
| Other | 44 | 13,4 |
| Hospitalization time | | |
| Up to 7 days | 144 | 43,9 |
| 8 to 14 days | 135 | 41,2 |
| 15 to 21 days | 41 | 12,5 |
| 22 to 28 days | 4 | 1,2 |
| 29 or more | 4 | 1,2 |

Source: Construction by the authors.

As for the reasons for hospitalization, pneumonia was the most frequent, it is known that the response to treatment is due to the patient's characteristics, which involve advanced age and associated chronic pathologies, such as COPD, DM, and Congestive Heart Failure (CHF) (ITO *et al.*, 2017). Thus, corroborating the data, according to a study by Rosseto *et al.* (2019), which aimed to analyze the ranking and percentage variation of the main causes of hospitalization and death of Brazilian elderly between 2005 and 2015, according to gender and age groups, in the year 2015 pneumonia was considered the first cause of hospitalization among the elderly.

Regarding the length of stay of patients, it can be considered a short period of up to 14 days, due to the hospital cited as the seat of study being of low and medium complexity. The data presented demonstrate the need for strengthening the role of Primary Health Care (PHC) in the face of timely interventions of aggravations in the conduct of prevention and health promotion in the context of chronic diseases so that possible complications are avoided since the decline in the resolution of cases in PHC can be considered a cause of avoidable hospitalizations (SOUZA *et al.*, 2018).

The results highlight that health promotion and disease prevention actions found in PHC are of utmost importance for the especially elderly population, such as the promotion of healthy eating habits; encouragement of physical activity; tobacco control, prevention and control of noncommunicable diseases (such as diabetes and hypertension), among others (BRASIL, 2018).

Table 4 shows the number of physiotherapy prescriptions, divided into respiratory and motor physiotherapy. Not excluding the patients who had both prescriptions (73%), with a sample of 239 patients, of which (17%) corresponded only to the motor physiotherapy prescription and 10% only to respiratory physiotherapy.

Table 4 - Quantity of physical therapy prescriptions

| Variables | n | % |
|--------------------|-----|------|
| Respiratory | | |
| Once a day | 177 | 54 |
| Twice a day | 54 | 16,5 |
| Three times a day | 29 | 8,8 |
| Four times a day | 11 | 3,4 |
| Motor | | |
| Once a day | 202 | 61,6 |
| Twice a day | 52 | 15,9 |
| Three times a day | 28 | 8,5 |
| Four times a day | 13 | 4 |

Source: Construction by the authors.

Regarding the prescriptions for respiratory and motor physical therapy, both were performed at least once a day. The frequency of physical therapy appointments should be determined according to individualized therapeutic planning since rehabilitation aims to return the patient to functional status within their pathophysiological scenario (NASCIMENTO, 2021).

The practice of the physical therapist in this institution is conditioned to the medical staff since they are the ones who prescribe and determine the frequency of care. The institution justifies the need for a medical prescription for the care of the physical therapist, attributing it as a requirement for billing the consultation and procedures. However, the professional physiotherapist has a higher education - in Brazil - regulated since the 60's - with the ability to perform the evaluation, diagnosis, and physiotherapeutic treatment, that is, he is qualified in his expertise to attend with autonomy, based on what was found in the physical-functional evaluation and the techniques of physiotherapy, qualifying and quantifying them (COFFITO, 1987).

Ribeiro and collaborators (2018) analyzing, also, the main aspects of the competence of the professional physiotherapist when working with patients in the hospital area, found that this professional promotes, preserves, or functionally rehabilitates the human body in its best potential, biological, and social and emotional repercussions, attributing to their conditions of functional physical health and having direct repercussions in a search for their quality of life. Furtado and collaborators (2020) point out that physical therapy is fundamental in a hospital environment for the reduction of deleterious effects on the musculoskeletal and cardiorespiratory system coming from this area, and through early mobilization, bronchial hygiene, and cardiorespiratory monitoring there is an impact on the clinical and functional improvement of patients, contributing to a shorter hospital stay and lower costs for the hospital system.

As for the limitations of the study, the incomplete filling out of medical records stands out, since there is a compromise in the discussion of some epidemiological and clinical variables predicted by the research. This factor justifies the need for studies related to the theme, to generate relevant data for care planning, associating primary and secondary care.

Thus, the results obtained regarding the knowledge of the influence of sociodemographic and clinical variables aim to control or reduce the increase and prevalence of chronic diseases, such as directing specific actions. So that during the period of hospitalization, the individual is directed to his or her health unit of reference, to seek continuity of care through health promotion, avoiding future hospitalizations. Therefore, there is a need to bring primary and secondary care closer together, through new studies that can seek ways to clarify to users the importance of the role of PHC as a first contact, thus avoiding disease progression, means of disease prevention, and health maintenance.

CONCLUSIONS

Thus, it is concluded that the population with the highest rates of hospitalization in a low and medium-complexity hospital, with a prescription for physical therapy, are elderly females, smokers, and generally with other associated comorbidities, who were admitted due to pneumonia, which makes it paramount greater attention to this population. The results suggest an optimization and

effectiveness of health services closer to the individuals, to provide the strengthening of PHC in prevention and health promotion, causing fewer hospitalizations, as well as highlighting the role of the physiotherapist in contributing to the patient's recovery process.

Therefore, from this research there was a greater knowledge of the patients who have a physiotherapeutic intervention about their sociodemographic and clinical characteristics, allowing projections of the hospital and contributing to a performance based on the quality of care, through the planning of assistance and actions aimed at the specificity and effectiveness of interventions.

REFERENCES

BRASIL. Conselho Nacional de Secretários da Saúde. **Assistência de média e alta complexidade no SUS**. Brasília: CONASS, 2007.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. **Orientações técnicas para a implementação de Linha de Cuidado para Atenção Integral à Saúde da Pessoa Idosa no Sistema Único de Saúde - SUS**. Brasília: Ministério da Saúde, 2018.

CIRINO, S. *et al.* Modelo não linear de localização de instalações de serviços de saúde com indicador de acessibilidade incorporado. **Cadernos de Saúde Pública**, v. 34, n. 3, p. e00185615, 2018. Disponível em: <https://doi.org/10.1590/0102-311X00185615>. Acesso em: jun. 2020.

COFFITO. **Resolução COFFITO N° 80, DE 09/05/1987**. Baixa Atos Complementares à Resolução COFFITO-8, relativa ao exercício profissional do Fisioterapeuta, e à Resolução COFFITO-37, relativa ao registro de empresas nos Conselhos Regionais de Fisioterapia e Terapia Ocupacional, e dá outras providências, 1987.

COSTA A. F *et al.* Carga do Diabetes Mellitus tipo 2 no Brasil. **Cadernos de Saúde Pública**, Rio de Janeiro/RJ, v. 33, n. 2, p. 1-14, 2017. Disponível em: <https://doi.org/10.1590/0102-311X00197915>. Acesso em: maio 2021.

DEPARTAMENTO DE INFORMÁTICA DO SISTEMA ÚNICO DE SAÚDE (DATASUS), **Internações Hospitalares do SUS por local de internação-BRASIL**, 2019. Disponível em: <https://bit.ly/43Jk4O>. Acesso em: ago. 2020.

EIRA, C. *et al.* Trombólise intravenosa no Acidente Vascular Cerebral Isquêmico Agudo Depois dos 80 Anos. **Medicina Interna**, Lisboa, v. 25, n. 3, p. 169-178, 2018.

FERREIRA, J. *et al.* Atuação do fisioterapeuta em enfermaria hospitalar no Brasil. **Fisioterapia Brasil**, Rio de Janeiro/RJ, v. 18, n. 6, p. 788-799, 2018.

FURTADO, M. V. de C., COSTA, A. C. F da, SILVA, J. C., MORAES, R. M de. O papel da fisioterapia no ambiente hospitalar. **Revista PubSaúde**. Paraná/PR, v. 4, p. 1-6, 2020. Disponível em: <https://dx.doi.org/10.31533/pubsau4.a052>. Acesso em: maio 2021.

HARRISON, C. *et al.* The prevalence of diagnosed chronic conditions and multimorbidity in Australia: a method for estimating population prevalence from general practice patient encounter data. **PLoS One**, United States/USA, v. 12, n. 3, p. 1-13, 2017. Disponível em: <https://doi.org/10.1371/journal.pone.0172935>. Acesso em: jun. 2021.

INSTITUTO BRASILEIRO DE GEOGRAFIA ESTATÍSTICA (IBGE). **População estimada**: IBGE, Diretoria de Pesquisas, Coordenação de População e Indicadores Sociais, Estimativas da população residente com data de referência 1º de julho de 2019. Disponível em: <https://bit.ly/2McqD1>. Acesso em: ago. 2020.

INSTITUTO BRASILEIRO DE GEOGRAFIA ESTATÍSTICA (IBGE). **População no último censo**: IBGE, Censo Demográfico 2010. Disponível em: <https://bit.ly/43WCSrw>. Acesso em: ago. 2020.

INSTITUTO BRASILEIRO DE GEOGRAFIA ESTATÍSTICA (IBGE). **População total e respectiva distribuição percentual, por cor ou raça, segundo as grandes regiões, unidades da federação e Regiões Metropolitanas**: síntese dos indicadores sociais 2008. São Paulo: Instituto Brasileiro de Geografia e Estatística, 2007.

ITO, A. *et al.* Prognostic factors in hospitalized community-acquired pneumonia: a retrospective study of a prospective observational cohort. **BMC pulmonary medicine**, London, v. 17, n. 1, p. 1-10, 2017. Disponível em: <https://doi.org/10.1186/s12890-017-0424-4>. Acesso em: maio 2021.

MATOS, C. A. de *et al.* Existe diferença na mobilização precoce entre os pacientes clínicos e cirúrgicos ventilados mecanicamente em UTI?, **Fisioterapia e Pesquisa**, São Paulo/SP, v. 23, n. 2, p. 124-128, 2016. Disponível em: <https://doi.org/10.1590/1809-2950/13965623022016>. Acesso em: maio 2021.

MESQUITA, C. R.; DIOGENES, V. P. Desafios da atuação fisioterapêutica no contexto da residência multiprofissional: relato de experiência. **Journal of Health Connections**, Sergipe/SE, v. 1, n. 1, p. 19-32, 2017.

NASCIMENTO, J. **Prescrição Clínica de Exercício, visão do novo fisioterapeuta**. São Paulo: Editora Fisiointensiva, 2021.

NUNES, B. P. *et al.* Hospitalização em idosos: associação com multimorbidade, atenção básica e plano de saúde. **Revista de Saúde Pública**. São Paulo/SP v. 51, n. 43, p. 1-10, 2017. Disponível em: <https://doi.org/10.1590/S1518-8787.2017051006646>. Acesso em: fev. 2021.

PINTO, M. *et al.* Carga do tabagismo no Brasil e benefício potencial do aumento de impostos sobre os cigarros para a economia e redução de mortes e adoecimento. **Cadernos de Saúde Pública**, Rio de Janeiro/RJ v. 35, n. 8, p. 1-18, 2019. Disponível em: <https://doi.org/10.1590/0102-311x00129118>. Acesso em: set. 2021.

PRAÇA, F. S. G. Metodologia da pesquisa científica: organização estrutural e os desafios para redigir o trabalho de conclusão. **Revista Eletrônica: Diálogos Acadêmicos**, Fortaleza/CE, v. 8, n. 1, p. 72-87, 2015.

REZENDE, L. F. M. *et al.* Proportion of cancer cases and deaths attributable to lifestyle risk factors in Brazil. **Cancer epidemiology**. v. 59, p. 148-157, 2019.

RIBEIRO, E.C. de O. *et al.* Perfil de competência do (a) fisioterapeuta na atenção hospitalar. **Nova Técnica**. São Paulo: Hospital Sírio Libanês, SP. p. 1-13, 2018.

ROSSETTO, C. *et al.* Causas de internação hospitalar e óbito em idosos brasileiros entre 2005 e 2015. **Revista Gaúcha de Enfermagem**. Porto Alegre/RS, v. 40, p. e20190201, 2019. Disponível em: <https://doi.org/10.1590/1983-1447.2019.20190201>. Acesso em: jun. 2021.

SALCI, M. A.; MEIRELLES, B. H. S.; SILVA, D. M. V. G. Um olhar para a prevenção das complicações crônicas do diabetes sob as lentes da complexidade. **Texto & Contexto-Enfermagem**. Florianópolis/SC, v. 27, n. 1, p. 1-8, 2018. Disponível em: <https://doi.org/10.1590/0104-07072018002370016>. Acesso em: maio 2021.

SANTA MARIA. **Plano municipal de Saúde. Santa Maria:** Secretaria de Município da saúde, 2018.

SOUZA, L. A. *et al.* Relações entre a atenção primária e as internações por condições sensíveis em um hospital universitário. **Revista Gaúcha de Enfermagem**. Porto Alegre/RS, v. 39, p. e2017-0067, 2018. Disponível em: <https://doi.org/10.1590/1983-1447.2018.2017-0067>. Acesso em: maio 2021.