Profile of users followed in a basic family health unit hospitalized due to chronic non-communicable diseases

Perfil dos usuários acompanhados em uma unidade básica de saúde da família, internados por doenças crônicas não transmissíveis

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Abstract

The Hospital Information System of SUS (Unified Health System) makes observing the occurrence of about 80% of hospitalizations in the country possible. Hospital admissions are indicators to evaluate the effectiveness of basic health care. Hospitalizations for Chronic Non-Communicable Diseases (CNCD) could be prevented by timely assistance in the Family Health Strategy (FHS). The objective was to identify the profile (sex and age) of patients who needed to be hospitalized for Chronic Noncommunicable Diseases, and the actions of health promotion and prevention of diseases used to reduce morbidity and mortality in this population accompanied in a primary care unit. This was a cross-sectional study with secondary data from the Primary Health Care Information System, encompassing variables related to hospitalizations. The hospitalizations for CNCDs accounted for 37.1% of all hospitalizations in 2015. The highest proportion of hospitalizations occurred in males (49.5%) and in the age groups 38-47 (10.4%) and 48 -57 (9.8%) in all analyzed months; among the causes were Hypertension (59.4%), Diabetes Mellitus (18.8%), pulmonary diseases (10.9%) and cancer (10.9%). Promotion and prevention measures are effective in monitoring risk factors for CNCDs, since they need long-term care; and understanding the capabilities and deficiencies of the complex network of health care is something that is necessary, making the qualifying, organizing and joining these services possible in order to positively impact health outcomes.

Keywords: Primary Health Care. Chronic Disease. Basic Health Unit.

Resumo

O Sistema de Informações Hospitalares do SUS (Sistema Único de Saúde) permite observar a ocorrência de cerca de 80% das internações hospitalares no país. As internações hospitalares são indicadores para avaliar a efetividade da atenção básica à saúde. As hospitalizações por Doenças Crônicas Não Transmissíveis (DCNT) poderiam ser evitadas por uma assistência oportuna na Estratégia de Saúde da Família (ESF). O objetivo foi identificar o perfil (sexo e idade) de pacientes que necessitaram de internações por Doenças Crônicas Não Transmissíveis e as ações de promoção da saúde e prevenção das doenças utilizadas para diminuir a morbimortalidade nesta população acompanhada em uma unidade de atenção primária. Tratou-se de um estudo transversal com dados secundários do Sistema de Informação da Atenção Básica de Saúde, englobando variáveis relacionadas às internações. As internações por DCNT representaram 37,1% do total de internações realizadas em 2015. A maior proporção de internações ocorreu em pacientes do sexo masculino (49,5%) e nas faixas etárias entre 38-47 (10,4%) e 48-57 (9,8%) em todos os meses analisados; entre as causas destacam-se Hipertensão Arterial (59,4%), Diabete Mellitus (18,8%), doenças pulmonares (10,9%) e o câncer (10,9%). As medidas de promoção e prevenção são eficazes para o monitoramento de fatores de risco para as DCNT, pois necessitam de uma atenção a longo prazo; entender as potencialidades e as deficiências da complexa rede de atenção à saúde é algo que se faz necessário, possibilitando qualificar os serviços, a organização e a articulação destes a fim de impactar positivamente nos resultados de saúde.

Palavras-chave: Atenção Primária à Saúde. Doenças Crônicas. Unidade Básica de Saúde.

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INTRODUCTION

Starting from the 1980s, chronic noncommunicable diseases (CDNT) arose as the leading cause of hospitalizations and deaths in Brazil, exceeding the mortality rates recorded for infectious and parasitic diseases. This epidemiological change has led the Ministry of Health to develop specific actions together with various governmental and non-governmental sectors, with the goal of promoting health, improving the quality of life, prevention of complications, and premature deaths.[1]

The established health promotion activities include, as a priority, the control of exposure to risk factors for CNCDs. The prevention of these diseases aims to reduce incidence rates, but mainly to minimize the repercussions that may have significant consequences on the quality of life of the population, on the functioning of the country's health system, and on the increase in costs with public health.[1]

The costs of CNCDs to the public and private health systems are increasing each year as a result of a substantial number of complications and hospitalizations due to CNCDs; which could be avoided by investing in efficient and timely Primary Health Care (PHC) assistance. The impact on the public sector is even greater because the worsening of these diseases occurs more frequently in vulnerable groups, particularly low-income populations, because they are more susceptible to risk factors. Despite the existence and universal access to the Unified Health System (SUS), the personal and family costs that the CNCDs impose are very high and increase the impoverished condition of the carrier population.[1]

CNCDs are currently a public health challenge, requiring an aligned and integrated intersectoral approach for the elaboration, development and implementation of health promotion policies and strategies. The knowledge of the risk factors for CNCD is fundamental, because it is upon these factors that preventive actions can be effective.[2]

The CNCD care is a set of actions that make the distribution, magnitude and trend of these diseases and their risk factors in the population known, as well as identifying their social determinants. This knowledge is capable of encouraging the planning, execution and evaluation of the specific measures of promotion, prevention and control. The experience gained in other countries shows that the success of public health interventions, with regard to risk factors and reducing the prevalence of non-communicable diseases and diseases, is due to the focus on primary health care actions based on monitoring common risk factors and the promotion of health-friendly ways of life and quality of life. These preventive strategies have a lower cost than the therapeutic approaches for specific diseases.[3] The causes of CNCDs involve modifiable and non-modifiable factors. Modifiable factors include, mainly, the harmful consumption of alcohol, smoking, physical inactivity and poor diet. Non-modifiable factors include those that accompany the individual from birth (genetics, sex, and age). However, the development of CNCD is characterized not only by one factor, but by multiple etiologies.[4]

Currently, CNCDs have become the focus of discussion, given their relevance in health and education due to their high morbidity, mortality, and cost to the health system. The effective performance of health professionals in primary care for CNCD care can significantly contribute to the control of these diseases and to the cost of care.[5]

Considering the need to train professionals with competencies to perform primary care and combat the CNCD epidemic, this study aimed to identify the profile (sex and age) of patients who needed to be hospitalized due Chronic Noncommunicable Diseases, and the actions of health promotion and prevention of diseases taken to reduce morbidity and mortality in this population followed in a primary care unit.

METHODS

This was a cross-sectional study on the main causes of hospitalizations, having as a unit of analysis a Basic Family Health Unit

(BFHU), located in the Northern region of the City of São Paulo. Data referring to hospital admissions came from the Basic Health Care Information System and correspond to the period between January and September 2015, a period referring to the data provided by the Primary Care Information System (SIAB, in Portuguese language). The variables analyzed in this study were diagnoses, gender and age. The research project was approved by the Ethics and Research Committee of the University Center São Camilo UNISC, resolution number 1.265.906.

The study was performed with a sample of 297 hospitalization cases. The hospitalizations reported in the BFHU under study defined inclusion criterion as those due to CNCDs (hypertension, pulmonary disease, diabetes, and cancer). Any admissions due to other causes were considered to be under the exclusion criterion.

The BFHU aims to improve the population's access to primary care, provide quality care, and seek greater rationality in the use of resources. The Basic Family Health Unit conducts continuous primary care in basic medical specialties, with a multidisciplinary team enabled in activities to promote, protect, and recover health. It has five Family Health Strategy teams and serves an estimated population of 16,756 people (5089 families enrolled). The population with 20 or more years of age is comprised of 11,281 adults/elderly, among which 690 are diabetic, 2205 hypertensive, 98 alcoholics, 3 have Chagas disease, and 9 have tuberculosis.

The use of indicators such as hospitalizations for conditions sensitive to primary care is a strategy for planning and management. In this study, the diseases considered were those that the Family Health Strategy defines in the Conditions Sensitive to Primary Care (CSAP) lists of hospitalizations.[7] The CSAP groups under study were considered as CNCD because they were included in groups 7 to 13 of National List of Conditions: Asthma, Pulmonary Diseases, Systemic Arterial Hypertension (SAH), Angina, Heart Failure, Cerebrovascular Diseases, and Diabetes Mellitus (DM). Secondary data of interest were collected from the Primary Care Information System (SIAB) 2015.

RESULTS

The hospitalizations for CNCD by CSAP accounted for approximately 40% of all hospitalizations during the study period (Graph 1).

The total number of hospitalizations from January to September 2015 was 297. The hospitalizations for CNCDs accounted for 37.4% of the total number of hospitalizations performed in 2015, the highest proportion of hospitalizations occurred in males (49.5%) of the analyzed months (Graph 2). Among the cases of hospital admissions due to CNCD that occurred, the most frequent cases were with those in the 38-47 years age group (Graph 3).

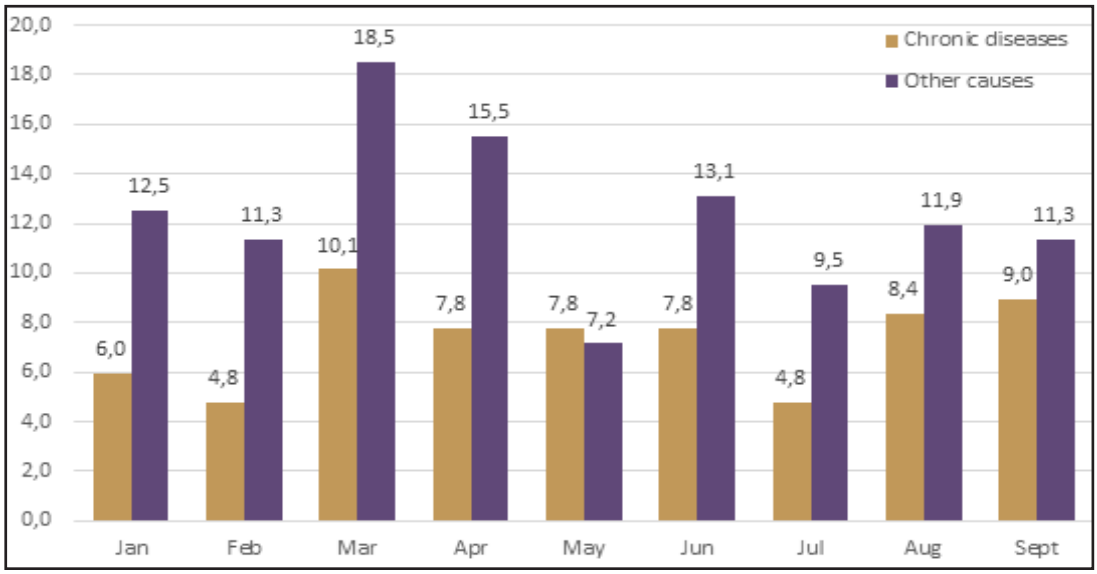
With respect to the causes of hospitalizations, the most common were SAH (59.4%), DM (18.8%), pulmonary diseases (10.9%), and cancer (10.9%). Among cardiac diseases included in the Brazilian CSAP list, SAH had the highest incidence, being the main cause of hospitalizations. Pulmonary disease-related admissions increased in the autumn and winter months. The change in the population profile with the increase of life expectancy also reflects the profile of hospital admissions, such as cancer, which is the fourth cause of hospitalization.

In relation to the strategies used by the Family Health Unit to reduce morbidity and mortality by CNCD, the creation of spaces that encourage health promoting actions and stimulate physical body activity / practices and healthy lifestyles; Lian Gonga[A], promotion of healthy eating activities in the National School Feeding Program and the Food Transformation Group

[A] Lian Gong in 18 therapies was established in the 1960s by Chinese orthopedic physician Zhuang Yuen Ming. In 2006, the Ministry of Health included Lian Gong as a component of integrative and complementary practices authorized through the National Policy on Integrative and Complementary Practices in the SUS. It consists of 54 exercises divided into three parts, where the first treats pain in the neck, shoulders, upper back, lower back and lower limbs (Lian Gong Qian Shi Ba Fa); the second involves joints, tendons and internal organs (Lian Gong Hou Shi Ba Fa); and the third acts on respiratory and cardiovascular disorders (Lian Gong Shi Ba Fa Xu Ji). It is also characterized as a health promotion activity, inasmuch as it guarantees the development of personal skills, quality of life and provides a discussion and builds the concept of health.[6]

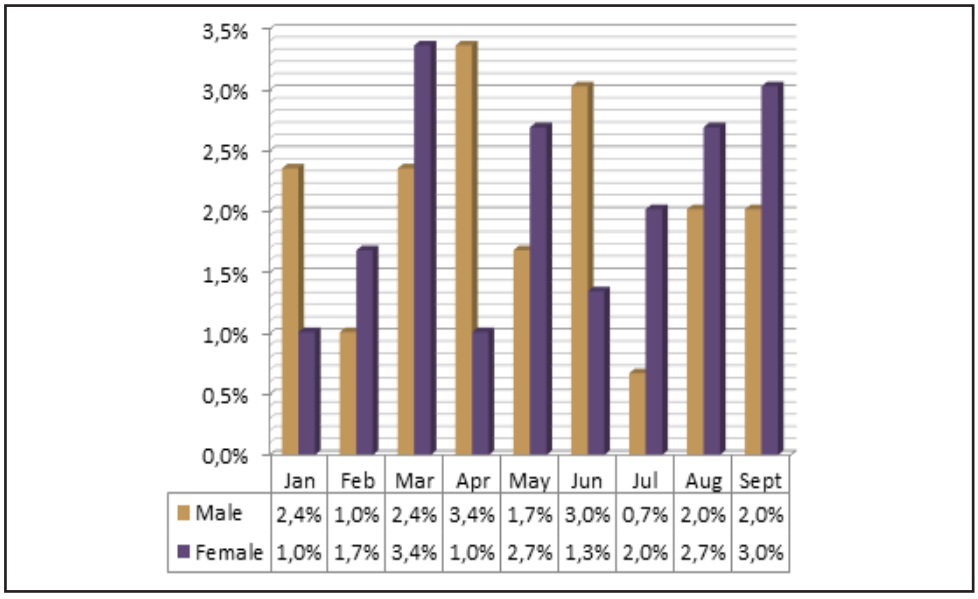
(FTG); prevention and cessation of smoking, with special attention to the most vulnerable groups; guarantee of home-based follow-up by community health agents for CNCD patients; care and follow-up, monitoring and surveillance of the interdisciplinary team; intersectoral partnerships (schools, churches, industries); educational activities with adolescents (drugs, alcohol and tobacco); System for Registration and Monitoring of Hypertensive and Diabetic patients (HIPERDIA), Glycemic Monitoring; Women's and Men's Health Group.

Graph 1 – Index of Hospitalizations (/10,000 residents) of Registered Users in a Basic Family Health Unit of São Paulo, Jan. / Sept. 2015.



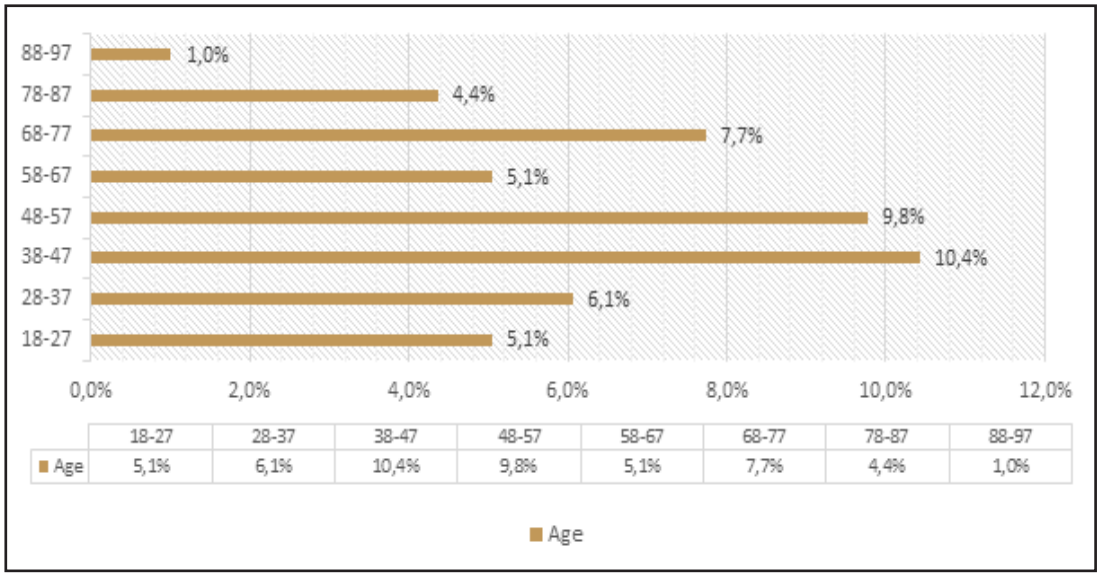
Source: (SIAB, 2015).

Graph 2 – Hospitalizations for chronic noncommunicable diseases, according to sex, in a BFHU in São Paulo, Jan / Sept. 2015.



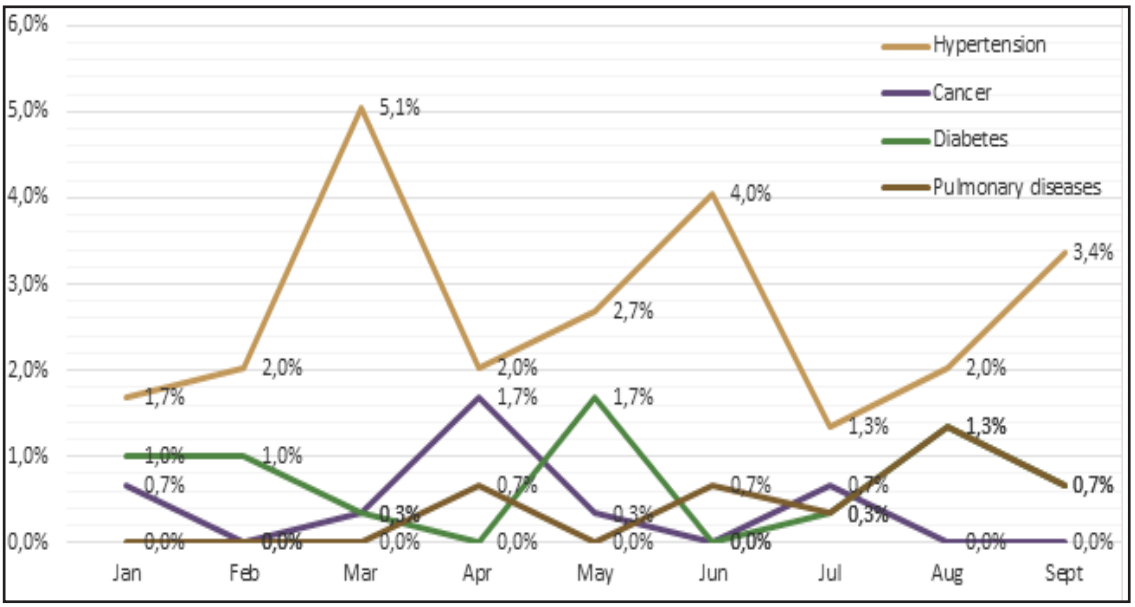
Source: (SIAB, 2015).

Graph 3 – Hospitalizations related to Chronic Non-Communicable Diseases, according to age, in BFHU in São Paulo, Jan. / Sept., 2015.



Source: (SIAB, 2015).

Graph 4 – Hospitalizations for Chronic Non-Communicable Diseases of Primary Health Care in a BFHU in São Paulo, Jan. / Sept., 2015.



Source: (SIAB, 2015).

DISCUSSÃO

The Family Health Strategy is considered a priority for the reorganization of primary care in Brazil, and the impact of primary health care on the reduction of hospitalizations due to CSAP were defined in Ordinance No. 221 of April 17, 2008[7].

However, several studies show that the incidence of CNCDs has increased progressively, creating an expressive demand for health care. This reality needs epidemiological surveillance and monitoring.[8,9]

According to the World Health Organization (WHO), in 2011 about 80% of CNCD-related deaths occurred in middle- or low-income countries. In countries with high incomes, this index drops to 13%.[10] These high socioeconomic impact data have as their main cause the lack of resources and policies in underdeveloped countries to meet the needs for CNCD control measures.

Gender inequality was observed in the study, since the male sex had a greater number of hospitalizations; given that it also reflects the shortcomings of the reception strategies to meet the needs of males. It is clear that we must take another approach to reach this male population that does not see the health unit as a space of opportunity for the practice of care. Another point observed in this study was that the greater proportion of hospitalizations occurred in the age groups of 38-47 (10.4%) and 48-57 (9.8%).

This hospital morbidity profile constitutes an instrument for the revision and elaboration of new strategies that allow greater control and surveillance of the population exposed to the risk factors for CNCD. Knowledge of the inpatient profile due to CNCDs contributed to the planning and execution of strategies for the needs of the population assisted in this BFHU. For example, with the aging population there are anatomical-physiological changes, appearing as functional losses, so the great question in recent times is how to preserve the quality of life and functional capacity11. This process of longevity is associated with an increase in the prevalence of chronic diseases and a paradigm shift in public health, which favor the limitation of the elderly in their daily activities[12].

According to the "*Plan of strategic actions for coping with chronic non-communicable diseases (CNCD) in Brazil 2011-2022*[1]", the monitoring of CNCDs is an important component for surveillance. The training of health teams to define indicators are included among the means to carry out this monitoring. Among them are the National Policy for Health Promotion, which prioritizes healthy eating, physical activities, prevention of tobacco and alcohol use, and health education[1].

Reflections on the work process and coping strategies used by health teams emerge through differences between the sexes; since they involve health care aimed at individual and gender needs[13].

The evolution and clinical complications of hypertension, DM and pulmonary diseases are the main causes of hospitalization, which requires more effective measures to monitor cardiac diseases. The SAH is considered one of the greatest problems of Public Health today. This disease has a high risk of complications when uncontrolled, being associated with modifiable risk factors, sensitive to primary health care, susceptible to health promotion activities, prevention of complications, early diagnosis, treatment and follow-up by health teams[14].

Regarding the data on the causes of

hospitalizations, this study is consistent with similar studies and also reveals the care transition,[15] which is characterized by an increased demand for medical clinic and rehabilitation needs and services. Studies have shown a gradual decline over the years in relation to pulmonary diseases during the fall and winter months and possibly resulting from the immunization strategy against the influenza virus[16].

CONCLUSION

In Brazil, CNCDs are highly representative and constitute a public health problem causing great economic and social impact. From the results presented in this article it was possible to observe the profile (sex and age) of users who needed to be hospitalized for Chronic Noncommunicable Diseases, and the health promotion and prevention actions used to reduce morbidity and mortality in this population. Showing the reality of the BFHU, permits planning early interventions by the health teams that make up the BFHU, focused on populations at risk to provide surveillance and monitoring for patients with chronic disease.

The strategies of the BFHU agree with the coping strategies of CNCDs in Brazil; there is a need to intensify the monitoring of risk factors; the monitoring of disease-specific morbidity and mortality; and access to the service and medicines.

The prevention and control of CNCDs and their risk factors are fundamental to avoid their growth and their consequences, which directly affect the quality of life and the health system in the country.

Given the magnitude of the hospitalization problem, as well as the increased morbidity due to CNCDs, there is the need for a more in-depth reflection on the prevention of risk factors in adults in primary care in this clinic. CNCDs need long-term care, and understanding the capabilities and shortcomings of the complex network of health care is necessary, because with this, there is a possibility of qualifying, organizing and joining these services starting from primary care, in order to positively impact health-related outcomes.

REFERENCES

1. Ministério da Saúde (Brasil). Secretaria de Vigilância em Saúde. Departamento de Análise de Situação de Saúde. Plano de Ações Estratégicas para o Enfrentamento das Doenças Crônicas Não Transmissíveis (DCNT) no Brasil 2011-2022. Brasília: Ministério da Saúde; 2011. Disponível:<http://bvsms.saude.gov.br/bvs/publicacoes/plano_acoes_enfrent_dcnt_2011.pdf>. Acesso em: 21 abr. 2016.
2. Goulart, FAA. Doenças crônicas não transmissíveis: estratégias de controle e desafios e para os sistemas de saúde. Brasília: Ministério da Saúde. 2011.
3. Ministério da Saúde (Brasil). A vigilância, o controle e a prevenção das doenças crônicas não-transmissíveis: DCNT no contexto do Sistema Único de Saúde. Brasil. Ministério da Saúde - Brasília: Organizações Pan-Americanas da Saúde, 2005. Disponível em: < http://bvsms.saude.gov.br/bvs/publicacoes/DCNT.pdf>. Acesso em 10 out. 2017.
4. Ministério da Saúde (Brasil). Sistema de Informação de Atenção Básica em Saúde (SIAB). Disponível em: <http://www.datasus.gov.br>. Acesso em 03 abr. 2015.
5. Rehem, TCMSB.; Egry, EY. Internações por condições sensíveis à atenção primária no estado de São Paulo. Ciênc. Saúde Coletiva, Rio de Janeiro, dez. 2011;16(12):4755-4766. Disponível em: < http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232011001300024>. Acesso em 2 set. 2017.
6. Moreira, MRC. et al. Lian Gong em 18 terapias: uma proposta para prevenir os transtornos traumáticos cumulativos. Revista Oficial do Conselho Federal de Enfermagem. 2013;4(1). Disponível em: <http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/499/189>. Acesso em 2 set. 2017.
7. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. PORTARIA Nº 221, DE 17 DE ABRIL DE 2008. Disponível em: <http://bvsms.saude.gov.br/bvs/saudelegis/sas/2008/prt0221_17_04_2008.html>. Acesso em 2 set. 2017.
8. Ministério da Saúde (Brasil). Secretaria de Vigilância à Saúde. Secretaria de Atenção à Saúde. Diretrizes e recomendações para o cuidado integral de doenças crônicas não-transmissíveis: promoção da saúde, vigilância, prevenção e assistência. Brasília: Ministério da Saúde, 2008.
9. Veras, R. P. Estratégias para o enfrentamento das doenças crônicas: um modelo em que todos ganham. Rev Bras Geriatr Gerontol. 2011;14(4):779-786. Disponível em: <http://www.redalyc.org/articulo.oa?id=403834044017>. Acesso em 2 set. 2017.

10. Malta, DC; Stopa, SR; Szwarcwald, C. L.; Gomes, N. L.; Silva Júnior, J. B.; Reis, A. A. C.. A vigilância e o monitoramento das principais doenças crônicas não transmissíveis no Brasil –Pesquisa Nacional de Saúde, 2013. Rev. Bras. Epidemiologia, 2015;18(2):3-16. Disponível em: <http://www.scielo.br/pdf/rbepid/v18s2/1980-5497-rbepid-18-s2-00003.pdf>. Acesso em 2 out. 2017.
11. Moreira, RM. et al. Qualidade de vida, Saúde e Política Pública de Idosos no Brasil: uma reflexão teórica. São Paulo, 2013, Revista Kairós: Gerontologia, 16(1). Disponível em: <http://revistas.pucsp.br/index.php/kairos/article/view/17629/13128>. Acesso em 2 set. 2017.
12. Barreto, MS.; Carreira, L; Marcon, SS. Envelhecimento populacional e doenças crônicas: Reflexões sobre os desafios para o Sistema de Saúde Pública. Revista Kairós: Gerontologia, [S.l.], 2015;18(1):325-339. Disponível em: <https://revistas.pucsp.br/index.php/kairos/article/view/26092/18731>. Acesso em: 3 set. 2017.
13. Schwarz. E. Reflexões sobre gênero e a Política Nacional de Atenção Integral a Saúde do Homem. Rev. Ciência da Saúde Coletiva. 2012;2581-2583
14. Santos, SS., Vasconcelos, DFSA. Hospitalizações por hipertensão arterial essencial em caráter de urgência no Brasil, 2008-2012. Rev. Ciênc. Méd. Biol., Salvador, 2013;12:465-471, dez.2013.
15. Soto, PHT. et al. Morbidades e custos hospitalares do Sistema Único de Saúde para doenças crônicas. Rev. Rene, 2015;16(4):567-575. Disponível em:<http://www.revistarene.ufc.br/revista/index.php/revista/article/view/2039/pdf>. Acesso em 2 set. 2017.
16. Duncan BB.; Stevens A; Schimidt MI, mortalidade por doenças crônicas no Brasil: situação em 2010 e tendências de 1991 a 2010. In Ministério da Saúde. Saúde Brasil, 2011. Disponível em: <http://www.lume.ufrgs.br/bitstream/handle/10183/94848/000880149.pdf?sequence=1>. Acesso em 29 ago. 2016.

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