HOSPITALIZATIONS CAUSED BY PRIMARY CARE-SENSITIVE CONDITIONS: AN INTEGRATIVE REVIEW

INTERNATIONAL REVIEW ARTICLE

INTERNACIONES POR CONDICIONES SENSIBLES À ATENÇÃO PRIMÁRIA: REVISÃO INTEGRATIVA

J Nurs UFPE on line, Recife, 9(1):228-36, Jan., 2015

ABSTRACT

Objective: analyzing the scientific production about Hospitalizations caused by primary care-sensitive conditions. Method: an integrative review to answering the question << Hospitalizations caused by primary care-sensitive conditions can be considered a good health indicator to assessing the effectiveness of primary health care?>> Held in LILACS and PubMed as well as electronic libraries Cochrane Library and SciELO, from July to August 2014, by combining descriptors using the Boolean AND: Hospitalization AND Primary Health Care AND health indicator'. Results: there were identified 55 articles, 14 have integrated the study: seven PubMed, four in LILACS and SciELO three. Conclusion: the indicator has the potential to evaluating the effectiveness of primary health care services and supporting health decision-making; however, it has its limitations in the source supplies of the databases that are subject to faults and underreporting. Descritors: Hospitalization; Primary Health Care; Health Indicator; Effectiveness.

RESUMO

Objetivo: analizar a produção científica sobre as Internações por Condições Sensíveis à Atenção Primária. Método: revisão integradora para responder a questão << As internações por condições sensíveis à atenção primária podem ser consideradas um bom indicador de saúde para avaliar a efetividade da atenção primária à saúde?>> realizada nas bases de dados LILACS e PubMed além de bibliotecas eletrônicas Cochrane Library e SciELO, de julho e agosto de 2014, pela combinação de descritores empregando o booleano AND: Hospitalização AND Atenção Primária à Saúde AND Indicador de saúde". Resultados: identificaram-se 55 artigos, 14 integram o estudo: sete da PubMed, quatro da LILACS e três da SciELO. Conclusão: o indicador possui potencial para avaliar a efetividade dos serviços de Atenção Primária e amparar a tomada de decisão em saúde; contudo, possui suas limitações nas fontes de alimentação dos bancos de dados que estão sujeitas a falhas e subnotificações. Descritores: Hospitalização; Atenção Primária à Saúde; Indicador de saúde; efetividade.

RESUMEN

Objetivo: analizar la producción científica acerca de las Hospitalizaciones causadas por Condiciones Sensibles a la Atención Primaria. Método: es una revisión integradora para responder a la pregunta << Las hospitalizaciones por condiciones sensibles a la atención primaria pueden ser consideradas un buen indicador de la salud para evaluar la eficacia de la atención primaria de salud?>> Celebrada en LILACS y PubMed, así como en las bibliotecas electrónicas Cochrane Biblioteca y SciELO, en julio y agosto de 2014, mediante la combinación de descritores utilizando el operador AND: hospitalización y atención primaria de salud y los indicadores de salud'. Resultados: se identificaron 55 artículos, 14 han integrado el estudio, siete de PubMed, cuatro en LILACS y SciELO tres. Conclusión: el indicador tiene el potencial para evaluar la eficacia de los servicios de atención primaria de la salud y apoyo a la toma de decisiones en salud, sin embargo, tiene sus limitaciones en las fuentes de alimentación de las bases de datos que están sujetas a fallas y subregistro. Descritores: Hospitalización; Atención Primaria de Salud; Indicador de la Salud; Efectividad.

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INTRODUCTION

The main movement for the creation of the Unified Health System (SUS) was health reform, which triggered the VIII National Health Conference in 1986, and with that, the design of a public system and unified health became real with the approval the Federal Constitution in 1988, and approval of the Organic Laws (8080/90 and 8142/90). For over two decades, improvements in quality of life and health of the population were noticeable, but much still has to be adjusted and improved for this system to working more and more appropriately to the population profile of the country.

The SUS has three levels of action where human resources are distributed, materials and technologies required to provide a natural health care to every system user. Each of the three levels of action considers the subject in its uniqueness, complexity, completeness, socio-cultural integration, in addition to health promotion, prevention, treatment of disease and harm reduction or suffering that may compromise its ability to live in a healthy way.

Primary Care is the first level of health care and is considered the main system gateway. Provides continuous and comprehensive care to a defined population, and works in an organized and integrated way with the different levels of health care; it is developed through management practices, health, democratic and participatory, through multidisciplinary work, with main focus on the target population and defined territory, and take the sanitary responsibility, considering all the social, demographic and cultural context of the population. Carries out its activities with high complexity and low density technologies, which should solve the most frequent health problems and relevance in its territory.

Primary Care mission is to be resolute, to the health needs of the population through actions of its competence, however, when it does not and sensitive conditions at this level of care are not remedied, failures occur when assisting the population and users search for other network services so that they have resolved their needs, often occurring on the need for hospitalization.

Primary care sensitive conditions are health problems that can and should be treated with care actions developed by primary care, ie competence of actions of this health care level; however, in situations where such assistance is not developed effectively and timely, you may need to use specialized resources and services, requiring the hospitalization of patients. These admissions are used as an indicator to evaluating and monitoring the effectiveness of primary health care.

It is imperative to point out that this health indicator is inversely proportional to the effectiveness of primary care, since an effective and quality care reduces the number of hospitalizations for Primary Care Sensitive Conditions (ICSAP) and makes the use of accessible secondary and tertiary services hospitalizations for causes not sensitive to primary care.

High rates of hospitalizations for conditions sensitive to the first level of attention may be directly related to problems of access and coverage of health services or the low efficiency of primary care.

OBJECTIVE

- Analyzing the scientific production on hospitalizations for sensitive conditions primary health care.

METHOD

This is a bibliographic study, of integrative review type, it allows the synthesis of published studies, allowing the generation of new knowledge. The review was carried out through the following steps: 1-identification of the review problem, 2-selection studies, 3-extraction of data from selected studies, 4-evaluation of the studies included in the review, 5-interpretation or integration of the results, and 6-presentation of the review or synthesis of knowledge in articles analyzed.

It was defined as the research question << Hospitalizations for primary care-sensitive conditions can be considered a good health indicator to assessing the effectiveness of primary health care? >>

The collection of material for the research was conducted from June to August 2014. Searches were carried out through a combination of descriptors in Portuguese and English in electronic libraries Cochrane Library and ScIELO (Scientific Electronic Library Online) and on the basis of data LILACS (Latin American Literature on Health Sciences) and PubMed.

The search for articles was conducted by the two combinations of descriptors, using the Boolean operator AND: 1 “Hospitalization AND Primary Health Care AND Health Indicator” or “Hospitalization AND Primary Health Care AND health status indicators” and 2 “Hospitalization AND Primary Health Care AND effectiveness” or “Hospitalization AND Primary Health Care
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AND Effectiveness”. We opted for the minimum combination of three descriptors or descriptors because it is a specific issue that would not be contemplating using fewer terms or other Boolean operator.

There were defined as inclusion criteria for selection of articles in the study: research published in English and Portuguese, published between the years 2008 and 2014, the initial year of 2008 was chosen because it is the year it was published the national list of Hospitalizations for Primary Care-Sensitive Conditions. Articles of journals indexed online addressing the theme ICSAP; texts available in full and submit: authors, the title of the study, publication year, journal published and place of the Search.

To exclude papers five evaluated criteria were: articles with previous publication date to 2008, which did not present the summary available online, as well as theses, monographs, and duplicate studies and have shown no full text available for free in libraries or electronic data base researched.

After reading the titles and abstracts, selected studies were analyzed and classified according to the level of evidence: I - systematic reviews or meta-analysis of relevant clinical trials; II - evidence of at least one clinical trial randomized controlled well defined; III - well-designed clinical trials without randomization; IV - cohort studies and well-designed case-control; V - systematic review of descriptive and qualitative studies; VI - evidence derived from a single descriptive or qualitative study; VII - authorities’ or expert committees opinion including information interpretations not based on researches.6

After reading the studies there were extracted from them the content and more relevant recommendations given in relation to ICSAP, these variables were the basis for the construction of the reference categories: effectiveness of Primary Health Care;

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RESULTS

After completion of the selection in libraries and electronic database there were obtained 55 articles, to filter the studies that addressed the theme ICSAP was initially performed reading the titles of the articles as the first criterion for selection, then evaluated the summaries or abstracts only after these first procedures, the articles were analyzed in full as the final criterion for inclusion in the study of the article.

The first consultations were in virtual libraries, initially in the Cochrane Library with 11 results by combining the descriptors in English “Hospitalization AND Primary Health Care AND health status indicators” and none with the combination “Hospitalization AND Primary Health Care AND Effectiveness”. However, studies did not include the criteria for the approach in the research. SciELO presented as results three articles by combining “Hospitalization AND Primary Health Care AND health indicator” in both languages and no item with the combination in English and Portuguese “Hospitalization AND Primary Health Care AND effectiveness” the three were selected.

The LILACS database presented 14 studies, nine of the combination in English and Portuguese “Hospitalization AND Primary Health Care AND health indicator” and five “Hospitalization AND Primary Health Care AND effectiveness” in both languages, four were selected to the review. In PubMed there was obtained as a result 27 articles, 15 by combining English and Portuguese “Hospitalization AND Primary Health Care AND health indicator” and 12 with “Hospitalization AND Primary Health Care AND effectiveness” in the both languages, these, five were duplicates and seven met the requirements for selection.

<table>
<thead>
<tr>
<th>Library database</th>
<th>Studies Obtained</th>
<th>Selected studies</th>
<th>Excluded studies</th>
<th>Combination of Descriptors</th>
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</thead>
<tbody>
<tr>
<td>Cochrane Library</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>“Hospitalization AND Primary Health Care AND health status indicators”</td>
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<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>“Hospitalization AND Primary Health Care AND Effectiveness”</td>
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<tr>
<td>Total</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>“Hospitalização AND Atenção Primária à Saúde AND Indicador de saúde”</td>
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<tr>
<td>SciELO</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>“Hospitalization AND Primary Health Care AND health status indicators”</td>
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<td></td>
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<td>0</td>
<td>0</td>
<td>“Hospitalização AND Atenção Primária à Saúde AND efetividade”</td>
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<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>“Hospitalization AND Primary Health Care AND effectiveness”</td>
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<tr>
<td>LILACS</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>“Hospitalização AND Atenção Primária à Saúde AND Indicator de saúde”</td>
</tr>
</tbody>
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English/Portuguese
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After the selection of 14 studies, all were evaluated according to the following variables: authors, data basis/virtual library, year of publication, title of the study, and the journal of publication.

All studies presented two or more authors. Regarding the library or database searched, PubMed exhibited seven (50%) from the studies selected for review, LILACS four results (28.5%), and SciELO with three studies (21.5%).

Based on years of publishing one (7.2%) was published in 2008, two (14.2%) in 2009, one (7.2%) in 2010, four (28.5%) in 2011, three in 2012 (21.5%), two (14.2%) in 2013, and one (7.2%) in 2014. The years 2011 and 2012 showed the highest number of publications totaling about 50% of the articles selected.

All titles of the articles presented as the focus Hospitalization for primary care-sensitive conditions or conditions sensitive to primary care.

The journals that exhibited more publications on the subject were those with public health emphasis and public health, respectively: Journal of Public Health with four studies (28.5%), Science & Public Health with two (14.2%), epidemiology of Health Services with two (14.2%), Public Health notebook with one (7.2%), APS Magazine with a (7.2%), Medical Care with a (7.2%), Text and Context Nursing with a (7.2%), Journal of the USP School of Nursing with a (7.2%) and Latin American Journal of Nursing, also with a (7.2%).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Library/database</th>
<th>Year</th>
<th>Study Title</th>
<th>Publishing Journal</th>
</tr>
</thead>
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<tr>
<td>A1 Nedel et al</td>
<td>PubMed</td>
<td>2008</td>
<td>The family health program and primary care-sensitive conditions, Baé (RS)</td>
<td>Public Health Magazine</td>
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<tr>
<td>A2 Alfradique et al</td>
<td>LILACS</td>
<td>2009</td>
<td>Hospitalizations for primary care-sensitive conditions: the construction of the Brazilian list as a tool to measuring the performance of the health system (Project ICSAP- Brazil)</td>
<td>Public Health Book</td>
</tr>
<tr>
<td>A3 Fernandes et al</td>
<td>SciELO</td>
<td>2009</td>
<td>Sensitive hospitalizations in primary care as an indicator for evaluation of the family health strategy</td>
<td>Public Health Magazine</td>
</tr>
<tr>
<td>A4 Nedel et al</td>
<td>PubMed</td>
<td>2010</td>
<td>Characteristics of basic attention associated with the risk of hospitalization for primary care-sensitive conditions: a systematic review of the literature</td>
<td>Epidemiology Service</td>
</tr>
<tr>
<td>A5 Carneiro, Caldeira e Santana</td>
<td>PubMed</td>
<td>2011</td>
<td>Perception of doctors on the National List of primary care-sensitive conditions</td>
<td>APS Magazine</td>
</tr>
<tr>
<td>A6 Rehem e Egry</td>
<td>PubMed</td>
<td>2011</td>
<td>Hospitalizations for primary care-sensitive conditions in the State of São Paulo</td>
<td>Public Health Sciences</td>
</tr>
<tr>
<td>A7 Nedel et al</td>
<td>PubMed</td>
<td>2011</td>
<td>Conceptual and methodological aspects in the study of hospitalizations for ambulatory care-sensitive conditions</td>
<td>Public Health Sciences</td>
</tr>
<tr>
<td>A8 Dourado et al</td>
<td>PubMed</td>
<td>2011</td>
<td>Trends in Primary Health Care-sensitive</td>
<td>Medical Care</td>
</tr>
</tbody>
</table>
DISCUSSION

The Primary Care (PC) is the main proposal of care model of the World Health Organization, presents yet, as the first level of care to SUS health, being considered the main gateway into the health system.7-9

The AP makes up the level of the original health service for any new need, whether preventive, with established disease or rehabilitation of an illness.10 Offers continuous health care for major population problems, coordinates and integrates care, as also refers to the action of other care health network. Shares responsibility for users' access, quality of service and cost, has attention to prevention, treatment and rehabilitation, longitudinalty care and reinforces teamwork. Determines and organizes the work of all other levels of health systems, rationalizes the use of all resources, both basic and specialized, targetted for the promotion, maintenance and health improvement.11-14

A suitable primary care system is able to reducing the occurrence of preventable situations and indicative of poor care, such as lack of educational activities aimed at disease prevention and health promotion, inadequate home visits or high period of time, access problems the reference services, and an excess of referrals and hospitalizations for sensitive problems the actions of a satisfactory primary care. Studies indicate that a health system that has its foundations with strong reference in Primary Health Care (PHC) is more effective, more suitable for the population, has lower costs and is more equitable even in contexts of great social inequality.11,14

The PHC has as foundations and guidelines ascribed the territory; universal and continuous access to health services; bond and accountability between the teams and the population of the territory; comprehensive care in its various aspects; and encourage the participation of users as a way to expand their autonomy, capacity in the construction of care and carrying out public participation.2 This level of attention also has the ability to impact on the social determinants of health through intersectoral work, since the PHC has the function of facilitating the integration of institutions, agencies, professionals and health workers to avoid fragmentation of the take care and achieve a comprehensive and integrated care.15

To strengthen primary health care actions in Brazil, the Family Health Program (PSF) has been defined as the main strategy for the consolidation of AP, with the aim of redirecting the care model, through principles that address family, with territory and previously defined population, consisting of a multidisciplinary team that has as guiding instruments to work co-responsibility,
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The creation of the Family Health Program (PSF) occurred in 1994, as a substitute proposal of the health paradigm, showing no disease as the focus of assistance, but the family and the individual. In 1997, it was redefined as a strategy management and was renamed Health Strategy for the family (FHS).

The FHS aims to prioritizing prevention, promotion and recovery of health, full and continuously and is supported by the health surveillance criteria, in actions organized from the territory where families are found, the health problems community, intersectoral and the social production of health paradigm, and reaffirms the basic principles of SUS.

The Family Health Strategy uses objectives, targets and defined, established and formulated steps by norms centrally. It works to providing assistance through health teams to a defined population of six hundred to a thousand families. The multidisciplinary teams are composed of general practitioners, nurses, nurse technicians and community health workers (CHWs) sufficient to cover the entire population registered with a maximum of 750 people by ACS and 12 professional per team. The family health teams include territorial actions that go beyond the walls of health facilities, emphasizing educational activities and prevention of specific risks and problems with basic actions of health care for priority groups.

The FHS rearranges the primary care services, focusing on the family and community and integrating them to other levels of care, takes change of character in the organizational paradigm of healthcare services through a broad view of health and integrated care assuming a more comprehensive character, articulated to other levels and guiding the restructuring of the system.

These services represent a major breakthrough in improving the health indicators of the population sensitive to the offered shares assists. In areas where the FHS operates in an effective and timely manner there was a reduction of infant mortality indicators, avoidable hospitalizations and decrease deaths by preventable diseases.

Aiming to strengthen PHC in the country, the Ministry of Health launched on October 21st, 2011, Ordinance No. 2488, which provides for the National Policy of Primary Care (PNAB). This Act provided a review of guidelines and standards for the organization of primary care, to the Family Health Strategy (FHS) and the Program of Community Health Agents (PACS). PNAB evaluates the uniqueness of the population based on the territory, acts in the perspective of care through acceptance and the need for the user’s health, analyzing criteria of risk, vulnerability, resilience and demand, using various technologies that assist in solving the various situations of the territory health-disease process.

The PNAB reinforces the need for the APS be developed with the highest level of capillarity and decentralization, in order to get closer and closer to reality in which people are inserted, as should be the preferred contact of users, the main door entry into the health system and acts as careordinator, has ideals that underline the SUS principles and guidelines with a focus on the uniqueness of user assistance, accessibility, bond, continuity of care, comprehensive care, accountability, humanization, equity and social participation.

To assess the quality of care provided by primary care health indicators are designed to analyzing and supporting the planning of health actions in the three levels of care. In the 1980s came an indicator that measured hospital performance; however, we observed that timely and effective action of outpatient services decreased the rate of hospitalizations.

The Hospitalizations by Primary Care-Sensitive Conditions were called initially for Ambulatory Care Sensitive Conditions, created as a hospital evaluation indicator in the United States; however, it can be used to evaluate the effectiveness of Primary Health Care (PHC), whereas a high solving the APS is directly related to decreased hospitalizations, because it works with promotion, prevention, rehabilitation and health hazards.

Countries that had a universal health system and based on the principles of Primary Health Care (PHC), use the ICSAP as an indicator of the effectiveness of PHC. The Brazil, following international trends also began to analyze ICSAP rates for assess and monitor the effectiveness of APS.

The analysis and search for explanations for high rates of ICSAP should assist the manager in decision-making in relation to improving the quality of health care services. In order to develop a health indicator to contribute to assess and compare the PHC in the country, a list of health problems was created, adapted to Brazilian epidemiological situation.

This list was presented based on the tenth revision of the International Classification of Diseases (ICD-10); the final version of the...
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Brazilian List of ICSAP was published on April 17th, 2008, in an annex of Ordinance No. 221. They included 120 categories ICD-10 (three-digits) and 15 subcategories (four digits), grouped according to the possibility of action and the magnitude of injuries, totaling 19 diagnostic groups.4, 5, 17, 20, 22, 25

In relation to the main groups of diseases preventable by the action of primary health care and can in many cases require hospitalization, are vaccine-preventable diseases, gastroenteritis, noncommunicable diseases. This health care level can also reduce readmissions and length of stay in the hospital for several diseases. Hospitalization rates for these conditions mentioned are more frequent at the extremes of age, that is, the highest incidences are in children and the elderly.5, 20, 22, 25

The ICSAP occur due to several factors, with multiple causes, ranging from access and quality of care provided by family health teams, to the social determinants of the territory and the working process of the Teams. The ICSAP indicator has the possibility to evaluate the PHC and the health system as a whole.22

When the FHS coverage is not universal, it is necessary to assess socioeconomic characteristics of the population to be able to interpret the effect of care model on hospitalizations for primary care sensitive conditions.7

Between 1999 and 2007 there was a reduction of 24% of ICSAP profile served by the Unified Health System, from this perspective it is clear that there was a decrease 2,5 times higher as compared to the reduction of other conditions that are not sensitive to PHC. This reduction is directly related to availability and expansion of the Family Health Strategy in the country.20

The FHS should act intersectorial manner, seeking support from other network services, areas of the social sphere and economic development, so that through this joint is possible to act more effectively and improve people's quality of life, extend the range of solvability of PHC and consequently reduce the rate of hospitalization for conditions that should be addressed and followed for this level of care.

CONCLUSION

The Primary Health Care has as main objective reorienting the model of SUS, the Family Health Strategy; however, this service should be evaluated and monitored continuously. From the literature presented, the hospitalization indicator for Sensitive Conditions has the potential to evaluating the effectiveness of primary health care services. Hospitalizations for primary care-sensitive conditions are possible to comparing the performance of various health services and raising research on inequalities in access between regions and communities, assisting in strengthening primary care.

The information provided by ICSAP can help to analyzing the sanitary and epidemiological health situation, but also serve as a tool to assist in making evidence-based decision and thus, the development of public actions and policies of effective health to people's needs.

It's worth noting the limitations of ICSAP indicator and the need to continue producing discussion on the theme presented. A reduction in hospitalization rates from these causes suggests only possible improvements in primary health care. The analysis of these hospitalizations depends on administrative data (such as hospitalization permits), and this can exacerbate the problems present in these databases, which were not created by the study. The use of hospitalizations for primary care-sensitive conditions to research requires a careful analysis of own sources of hospital data.

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from:
www.ncbi.nlm.nih.gov/pubmed/21430576


Submission: 2014/09/04
Accepted: 2014/11/21
Publishing: 2015/01/01

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