**AMBULATORY CARE SENSITIVE CONDITIONS: GENERAL HOSPITAL OF MICRO-REGION OF SÃO PAULO MUNICIPALITY, BRAZIL**

**Tania Cristina Morais Santa Barbara Rehem**, **Suely Itsuko Ciosak**, **Emiko Yoshikawa Egry**

1 Derived from the thesis - Primary care sensitive hospitalizations: limits and possibilities of the Brazilian Diagnoses List, presented to the Doctoring Internunits Program in Nursing of the São Paulo and Ribeirao Preto Campi of the University of São Paulo (USP), 2011, funded by the Sao Paulo Research Foundation (Fapesp).

2 Ph.D. in Science. Adjunct Professor of Nursing of the University of Brasilia. Brasília, Brazil. E-mail: tania.rehem@gmail.com

3 Ph.D. in Nursing. Full Professor in Public Health Nursing. Associate Professor of the Department of Public Health Nursing of the USP School of Nursing. CNPq Productivity Researcher 2. São Paulo, Brazil. E-mail: siciosak@usp.br

4 Ph.D. in Public Health. Full Professor in Public Health Nursing. Full professor of the Department of Public Health Nursing of the USP School of Nursing. CNPq Productivity Researcher 1A. São Paulo, Brazil. E-mail: emiyegry@usp.br

**ABSTRACT: Ambulatory Care Sensitive Conditions List was adopted in Brazil, to evaluate access and care effectiveness. This study aimed to present a panoramic view of these hospitalizations in a General Hospital of São Paulo Municipality, Brazil. The methodology used was type ecological and exploratory. The data source was the Hospital Information System of Brazilian Unified Health System collected and a sample of hospitalizations. The results showed that there is a reduction tendency of this kind of hospitalizations and the most important cause during three years was bacterial pneumonia. There was predominance of women and patients older than 65 years old. In conclusion, the List is an important tool to evaluate access and effectiveness of Primary Care Services, but also it is relevant to know and evaluate the health network organization due to assure continuity of care to reach the principle of integrality of health care.**


**INTERNACIÓES POR CONDIÇÕES SENSÍVEIS À ATENÇÃO PRIMÁRIA NO HOSPITAL GERAL DE UMA MICRORREGIÃO DE SAÚDE DO MUNICÍPIO DE SÃO PAULO, BRASIL**

**RESUMO**: O indicador Internações por Condições Sensíveis à Atenção Primária é adotado no Brasil para avaliação da atenção básica. Considerando a sua recente adoção, este estudo tem como objetivo apresentar o panorama dessas internações em um hospital do município de São Paulo, Brasil. Foi realizado um estudo ecológico exploratório, tendo como fontes o Sistema de Informação Hospitalar do Sistema Único de Saúde e uma amostra de prontuários de pacientes internados neste hospital. Para análise, foi utilizada a estatística descritiva. As Internações por Condições Sensíveis à Atenção Primária seguem tendência de redução, sendo as pneumonias bacterianas as que mais internaram no período; maior frequência para a faixa etária de 65 anos de idade e mais, e para o sexo feminino. Internações por Condições Sensíveis, somente, não são suficientes para avaliação da atenção básica, mas permite avaliar a organização da rede de saúde, que deve assegurar continuidade do cuidado em busca do princípio da integralidade.

**DESCRITORES**: Hospitalização. Atenção primária à saúde. Avaliação.

**INTERNAMIENTOS POR CONDICIONES SENSIBLES DE ATENCIÓN PRIMARIA EN SALUD: ESTUDIO EN HOSPITAL GENERAL DE LA CIUDAD DE SÃO PAULO, BRASIL**

**RESUMEN**: El indicador Internamientos por Condiciones Sensibles a la Atención Primaria fue adoptada en Brasil para evaluación de los servicios de este nivel. Se objetivó presentar el panorama de estos internamientos en un Hospital de la ciudad de Sao Paulo, Brasil. Se realizó un estudio ecológico, exploratorio, cuya fuente fue el Sistema de Información Hospitalarios del Sistema Único de Salud y una muestra de expedientes de pacientes internados en este Hospital. Se utilizó la estadística descriptiva. Los internamientos por Condiciones Sensibles siguen la tendencia de reducción: siendo las neumonias bacterianas las mayores causas de internamiento; la frecuencia fue más alta para los mayores de 65 años de edad y para el sexo femenino. Las internaciones por condiciones sensibles, por sé, no son suficientes para evaluar la atención primaaria pero permite evaluar la organización de la red de salud, para asegurar la continuidad del cuidado integral a los pacientes.

**DESCRIPTORES**: Hospitalización. Atención primaria de salud. Evaluación.
INTRODUCTION

The evolving situation presented by the increase of the provision of healthcare services may signal an expansion of access for the population to these services, however, some challenges remain in relation to the quality of the services provided and, consequently, to the field of meeting the health needs, which are renew at each stage of implementation of the Brazilian National Health System (SUS). To address these challenges, the 2006 Health Pact proposed the structuring of a supportive and regionalized network of actions and services that qualify the management process.1

The structure of these networks must have, as a starting point, the organization of the primary healthcare, located at the center of this network, such as organizing the flow and counter-flow of people to the other levels of the system, with the exception of the cases of urgency and emergency.1 With regard to these flows, in many situations in which primary healthcare is not resolutive, the demand for hospitalizations probably includes a proportion of cases with diagnoses sensitive to this level of care, in which they could be resolved.

In Brazil, one of the alternatives that can be used to evaluate primary healthcare and its consequences regarding the other levels of the system is the use of the indicator Hospitalization for Ambulatory Care Sensitive Conditions (HACSC). This indicator comes from a concept developed by John Billings2 in the 1980s, which is the concept of potentially preventable hospitalizations or ambulatory care sensitive conditions, as an indirect reflection of problems with the access and effectiveness of primary healthcare. Since then, studies have been conducted using data from potentially avoidable hospitalizations, showing its close relation with the characteristics of the healthcare systems, especially with the politics of primary healthcare.3,7 In Brazil, the first national list of HACSCs was created in 2007, having as its conceptual framework the model proposed by Caminal-Homar and Casanova-Matutano, adapted for the Brazilian context.8 According to this model, it is assumed that, for some health conditions, opportune and good quality primary healthcare - through activities such as disease prevention; early diagnosis and timely treatment of acute conditions; and the control and monitoring of chronic diseases,8 can avoid hospitalization or reduce its frequency.

In 2008, after undergoing evaluation by the Brazilian Family Health Society and public consultation, the final version of the Brazilian HACSC List was published, through Regulation SAS/MS No. 221, of April 17, 2008.9 Composed of 19 groups of causes, with 74 diagnoses classified according to the tenth revision of the International Classification of Diseases (ICD-10), it makes up a set of diagnoses for which an effective primary healthcare would reduce the number of hospitalizations. Given the above and considering that the Ministry of Health states, in the previously mentioned regulation, that the Brazilian list should be used as an instrument for the evaluation of the primary healthcare and/or the use of hospital care,9 the performance of studies, using this indicator, to verify the behavior of these hospitalizations in Brazil is justified.

This study aimed to provide an overview of the groups of causes of HACSC and other groups of causes of hospitalization, in a general hospital of the health microregion of Cidade Ademar of the municipality of São Paulo, Brazil, in the period 2006 to 2008, identifying the Primary Health Units (PHU) located in the catchment area where the patients hospitalized for HACSC live, through a sample of medical records from 2008, and also to describe the overview of the causes of hospitalizations in this sample of medical records.

METHODOLOGY

A descriptive and ecological study was conducted, considering the hospitalizations in a general hospital located in the of health microregion of Cidade Ademar, in the municipality of São Paulo as the unit of analysis. This microregion is located in the south of the municipality and is composed of the administrative districts of Cidade Ademar, Pedreira and Campo Grande.10 The realization of the overview of the HACSCs in the Pedreira General Hospital (PGH), the only one in the health microregion of Cidade Ademar, involved the following steps:

The first step described the profile of the patients hospitalized for HACSC and of the hospitalizations for other groups of causes that occur in the hospital, using data collected from the Hospitalization Authorizations (HAs) of the Hospital Information System of the Brazilian National Health System (HIS/SUS), in the period 2006 to 2008. For this the following indicators were used: proportional hospitalization by groups of causes, proportional hospitalization by gender, proportional hospital by age group, participation of the HACSCs in the total hospitalizations, percentile distribution of...
the HACSC group in the total hospitalizations of patients for these causes, considering the gender and age of the patients. The data for the preparation of the profile of the HACSCs were obtained from the Brazilian HACSC List, composed of 19 diagnostic groups, totaling 120 ICD-10 categories (with three digits) and 15 subcategories (with four digits), according to Regulation SAS/MS No. 221 of April 17, 2008. For the identification of the HACSCs in the HIS/SUS a definition file (DEF) was generated, from the selection of the causes of hospitalizations by means of the respective codes. The program Tabwin, Version 3.5, developed by the IT Department of the SUS (DATASUS) of the Ministry of Health was used.

The second stage of the study was the analysis of a sample of medical records of the patients hospitalized in the PGH, in 2008, with the purpose of obtaining information about the addresses of the patients hospitalized for HACSC, considering that this information, being sensitive, is not contained in the HAs that are made available through DATASUS. The collection of the address of the patient aimed to identify the PHU located in their territory of residence, which would be responsible for their primary healthcare. At this stage, information was also collected for the elaboration of the profile of the HACSCs, based on the same sample of medical records, this being: diagnosis, gender, age and deaths. To define the sample of medical records 10,616 HAs of the patients hospitalized in 2008 were separated and then, using the simple random sample criterion, with the SPSS software, 816 HAs were selected and identification in the medical records. Of the 816 patient records selected for the study, 65 were discarded because they presented problems of reliability, for example, the primary diagnosis was written in pencil.

To identify the PHU of the home area of the patient responsible for their primary healthcare, the Primary Health Unit locator system (BuscaUBS) of the Municipal Health Secretariat was used. Through this system, by typing in the address of the patient, it is possible to locate the PHU nearest to that residence, which is responsible for the primary healthcare. To achieve this overview, descriptive statistics were used in the processing and analysis of the data. This work, as it involves collecting data from medical records, was approved by the Research Ethics Committee of the University of São Paulo School of Nursing (process n. 860/2009/CEP-EEUSP) and that of the Pedreira General Hospital (Registration CEP-HGP: 01/1/P) in accordance with the provisions of the National Health Council Resolution n. 196, of October 10, 1996.

RESULTS

When analyzing all the hospitalizations of the PGH (39,871) that occurred during the period 2006 to 2008, it was seen that their distribution by groups of causes was: 8,380 hospitalizations (21.02%) for primary healthcare sensitive conditions; 7,737 (19.40%) for childbirth; and 23,754 (59.58%) hospitalizations due to other causes. Excluding the hospitalizations for childbirth, the total number of hospitalizations, during this period, was 32,134, and the proportion of HACSC increased to 26.1%. When analyzing the data according to year, it was verified that there was an increase in the frequency of hospitalizations for HACSC, births and other causes, in the years 2006 and 2007, and a decrease in all types of hospitalizations in 2008. The largest increase occurred between 2006 and 2007 in the hospitalizations for other causes (23.46%), followed by births (17.03%), then HACSCs (7.28%). Considering only the behavior of the HACSCs according to year, in the total of the hospitalizations in the period, it was verified that initially there was an increase in the frequency of such hospitalizations, which rose from 3,228 in 2006 to 3,463 in 2007, and then fell in 2008, with the occurrence of 1,689 cases. However, in terms of the proportion of the total hospitalizations, a reduction occurred year by year during the study period: from 24% in 2006, to 21% in 2007 and 15.9% in 2008 (a reduction over the period of 47.7% or 8.1 percentage points).

During the study period, when analyzing the hospitalizations according to the municipality of residence of the patient, considering all causes and also HACSC, almost all of the patients were resident in São Paulo (more than 99% of the hospitalizations). Regarding the hospitalization diagnoses, the group of causes of HACSC that lead to most hospitalizations, in all the years of the study, was that of bacterial pneumonia. However, the reduction of 19.9% in the frequency of these hospitalizations should be noted when comparing the year 2008 to 2006. It can be observed that, in 2006, the HACSC groups with higher frequencies were the bacterial pneumonias, totaling 704 hospitalizations (21.8%); followed by the hypertension group, with 458 hospitalizations (14.2%); then kidney and urinary tract infections with 329 hospitalizations (10.2%). For the other years
studied, the groups remained the same, however, the group of kidney and urinary tract infections moved into the second position. Heart failure and infection of the skin and subcutaneous tissue formed the fourth and fifth HACSC groups with more people hospitalized in the years 2006 and 2007. In 2008, heart failure remained and the group of the cerebrovascular diseases came to occupy the fifth place. It is noteworthy that the group of infectious gastroenteritis and complications held the sixth place among the causes of hospitalization in 2006, with 196 hospitalizations (6.1%), and in 2007, with 184 hospitalizations (5.3%). In 2008, this group occupied the seventh position with 106 hospitalizations (6.3%).

When analyzing the HACSCs considering all causes, comparing the years 2006 and 2008, the three diagnostic groups that reduced most were: diseases preventable by immunization and sensitive conditions (100% - there were no cases in 2008), asthma (66.1%) and infections of the skin and subcutaneous tissue (65.9%). The group of causes in which the frequency reduced least during the period was that of anemia (10%). It is noteworthy that the only group that increased in occurrence was that of the diseases related to the prenatal period and to the birth (36.8%).

When analyzing the behavior of the hospitalizations in the PGH according to the age group, regardless of the cause, it was observed that in the three years, the group that was hospitalized most frequently was that of 15-24 years of age, followed by the 25-34 years group and the 65 years of age and older group. In all the years under study, the age group 65 years of age and over ranked third regarding the frequency of hospitalizations. In the HACSCs group, the age group with more people hospitalized, considering all the years studied, was that of 65 years of age and over, followed by the age group of less than one year. In 2006, the age group that ranked third in incidence of hospitalization was that of 1 to 4 years of age. For the years 2007 and 2008, the group was that of 55 to 64 years of age. According to different causes of HACSC and age group, it can be observed that, in the age group of 65 years of age and over, there were 2,284 hospitalizations in the period and the groups of causes with more hospitalizations in this age group were hypertension (19.83%), heart failure (18.82%) and kidney and urinary tract infections (14.0%). These same groups appear as the main causes when analyzing the age group of 55 to 64 years of age.

Analyzing the groups of causes, it can be observed that, in the years 2007 and 2008, there was an increase in the proportion of hospitalizations for hypertension and a reduction in hospitalizations due to kidney and urinary tract infections. The proportion of hospitalizations for heart failure remained the same in the two years. Regarding the age group of less than one year, a total of 1,167 hospitalizations occurred in the period. In 2006 and 2007, the groups for which more people were hospitalized were: bacterial pneumonias (68.43% and 71.52% respectively), asthma (10% and 6.22% respectively) and kidney and urinary tract infections (6.86% and 9.33% respectively). In the year 2008, considering the same age group, the groups for which more people were hospitalized were similar: bacterial pneumonias (63.0%), kidney and urinary tract infections (14.65%) and pulmonary diseases (7.32%). Regarding the age group of 1 to 4 years during the study period, of the total of 973 hospitalizations for HACSC, the most frequent groups of causes were bacterial pneumonias (64.65%), infection of the skin and subcutaneous tissue (9.76%), gastroenteritis (8.8%) and asthma (7.91%).

In the three years there were more females hospitalized, with 24,816 individuals, considering all causes, while 15,055 men were hospitalized. This same behavior was observed when analyzing only the HACSCs, excluding the other causes. When analyzing the profile of hospitalizations per year, it can be seen that in 2006 and 2007 the two HACSC groups that lead to more hospitalizations, considering both females and males, were the bacterial pneumonias (in 2006, 18.54% of the hospitalizations were of females and 25.27% males; in 2007, 19.45% of the hospitalizations were of females and 24.30% males), and hypertension (in 2006, 15.41% of the hospitalizations were of females and 12.90% males). Also in 2008 the group of the bacterial pneumonias was the one in which more people were hospitalized, considering both sexes (16.98% female and 18.04% male), however, the second leading cause of hospitalization was hypertension for the males (10.57%) and kidney and urinary tract infections for the females (16.43%). It is important to note that, although the same group of causes (bacterial pneumonias) were the most frequent in both sexes, this group was proportionally higher in males in all the study years.

In the second stage of the study the data were analyzed from 751 medical records of patients hospitalized in the PGH, in 2008, with 127
(16.91%) diagnoses identified for HACSC and 624 (83.09%) hospitalizations for other causes. Regarding the HACSC diagnoses recorded in the medical records, a greater frequency was observed of hospitalization for heart failure (11.02%), followed by stroke, not specified as ischemic or hemorrhagic (10.24%), arterial hypertension (8.66%) and unspecified asthma (7.87%). Of the diagnoses for other causes of hospitalization recorded in the medical records, a greater frequency was observed for spontaneous vertex delivery (18.59%), followed by unspecified bronchopneumonia (10.10%) and incomplete spontaneous abortion, complicated by genital tract and pelvic infection (3.37%). In the group of the HACSCs there were more hospitalizations of people aged 65 years and over (33.08%), followed by the age group of less than one year of age, and of 1 to 4 years of age, both with 11.03%. In the other causes group, more patients 20 to 24 years of age (12.50%) were hospitalized, followed by the group of people between 25 and 29 years of age (10.73%) and less than one year of age (10.01%). Analyzing only the hospitalizations for HACSCs in the medical records (127), it was observed that there was a certain equivalence of these hospitalizations between the two sexes, i.e. 64 females hospitalized (50.39%) and 63 males (49.61%). In the hospitalizations for other causes, excluding the HACSC, in a total of 624 records, it was observed that 396 females (63.46%) were hospitalized and 228 males (36.54%).

Of the total of 28 deaths registered in the medical records, five were in the HACSC group (17.86%) and 23 in the group of other causes of hospitalization (82.14%). Analyzing the proportion of deaths between the two groups some similarity was observed, in that, in the HACSC group the percentage of deaths was 3.94%, while in the other causes group it was 3.69%. Regarding gender, it was verified that, in the HACSCs group all the deaths that occurred were of males, while in the other causes group 13 were of females and 15 of males. All the deaths of patients of the HACSCs group occurred in individuals over 55 years of age, with one patient 106 years of age. When verifying the diagnosis of these patients, it was observed that 3 deaths (60%) had stroke as the cause, without hemorrhagic or ischemic being specified.

The majority of the patients hospitalized in the PGH for HACSC in 2008 resided in the borough of Cidade Ademar, in the administrative districts of Cidade Ademar, Campo Grande and Pedreira. When analyzing the addresses of these patients, according to the catchment area of the Primary Health Units, it was observed that the majority of them resided in the catchment area of the Vila Arriete PHU (13.46%), followed by the Jardim Miriam PHU (8.65%), the Jardim São Jorge PHU (7.69%), the Parque Doroteia PHU, and the Vila Missionária PHU/AMA, both with 6.73%. Of the PHUs listed above, with the exception of the Jardim São Jorge PHU, the others do not have family health teams.10

DISCUSSION

The first issue that deserves attention concerns the data used to describe the overview, because, in the first step, the groups of HACSC diagnoses were used, considering the volume of hospitalizations made in the PGH (39,871), registered in the HIS/SUS and, in next step, the diagnoses were used individually, considering that this information was sought directly from a sample of 816 medical records. This aspect does not compromise the results of the study, as the analysis of the HACSC can be performed considering both the diagnostic groups, selected according to the possibilities of intervention, as defined in Regulation SAS/MS No. 221 of April 17, 2008, as well as the use of the diagnoses, individually, that compose each group. Accordingly, the eventual choice for the use of the diagnostic groups or the individual diagnoses can be determined by the size of the sample of data to be analyzed, which will ultimately depend on the aims of the study.

Regarding the results of the overview performed in the PGH in the Cidade Ademar micro-region, considering the three years, it was verified that there was a higher frequency of hospitalizations due to other causes, followed by those due to HACSCs and those due to births. When the data was analyzed according to year, it was verified that there was a reduction in the frequency of all hospitalizations in 2008, with the HACSCs, in proportional terms, decreasing year by year, totaling a 47.7% reduction over the period studied. The reduction in the HACSCs, as shown in the above data, converges with results from other studies that indicate a reduction or stabilization of HACSCs in Brazil.8,12-14

An important aspect to be considered concerns the exclusion of the hospitalizations for childbirth, in order to provide a clearer analysis of the HACSCs. Childbirth is not a disease and, if retained, would mask the data by reducing the proportionate share of the real diseases (when
excluding the births, the proportion of HACSC in the PGH increased from 21.02% to 26.1%). Reasons for the exclusion of the births when analyzing the HACSC were found in a study using national data in 2006, which considered that these hospitalizations represent a natural outcome of pregnancy, are influenced by birth rates, affect only a portion of the female population and do not represent pathology.8

Regarding the groups related to the most frequent causes of HACSC in the PGH, in the three years, bacterial pneumonia, arterial hypertension and kidney and urinary tract infections occupied the top three positions. These results converge with the results of a study conducted in the state of São Paulo, in which these diagnoses were also present among the leading causes of HACSC.13 Conversely, the results of this study differ from other national studies, performed with data from Brazil, data from Curitiba* and data from the macroregion Juazeiro-BA and Petrolina-PE, in which gastroenteritis and its complications, heart failure and asthma were prominent among the main causes of hospitalization.8,14 Concerning the diseases preventable by immunization and sensitive conditions, attention is drawn to the reduction of these hospitalizations in the PGH, converging with results of other studies.8,12-13 Conversely, it was observed that hospitalization due to causes related to childbirth and the prenatal period, the only group that increased the occurrence during the study period (36.8%), continued to take place in the PGH, as in other areas of Brazil. This fact stands out, considering that the monitoring of pregnant women in the actions related to the prenatal period and childbirth is one of the priorities of primary healthcare. In this sense it was hoped that these causes of hospitalization would occupy another position in this overview.

In all the years studied, the age group that was most hospitalized in the PGH, according to the HACSCs, was that of 65 years of age and over, which was also the most hospitalized when analyzing the sample of medical records of this hospital, with emphasis on the age group of 80 years and over. A similar result was found when analyzing the HACSC data in the municipality of Curitiba’, where the hospitalizations for HACSC increased from the age group of 45 years of age, especially in the population aged 65 years or over. The hospitalizations in this age group may be explained in several ways, including the epidemiological and demographic transition with the increase in life expectancy leading, therefore, to the emergence of diseases, especially chronic degenerative ones. Furthermore, the difficulties inherent in this life period, due to the difficulty of access to healthcare services, lack of caregiver, transportation, treatment adherence due to the difficulty of understanding the guidance, and adequate nutrition, among others, may worsen the health, leading to hospitalization.

Regarding gender, more women than men were hospitalized in the PGH for HACSC, considering the three years studied, and the sample of medical records in 2008. Other studies also indicate a higher frequency of hospitalization for sensitive conditions among females.14-15 A study conducted by comparing the effect of the Community Health Agent Program (CHAP) and the Family Health Program (FHP) regarding the hospitalization rate for females, shows that the effect of the CHAP was relatively stable because the FHP grew significantly during the period studied.15 The increase in the hospitalizations of females, for sensitive conditions in the studies mentioned above, deserves further analysis, considering that, initially, this growth may have occurred because of improved access. In this case, after this initial moment, a reduction of these hospitalizations is expected to occur. Furthermore, studies on issues of gender and HACSC should be performed, as they may contribute to the elucidation of the greater incidence of these hospitalizations of women.

Regarding the HACSCs of the PGH, the fact that the majority of the people hospitalized in the year 2008 came from the Cidade Ademar micro-region is expected, considering that the PGH was built in this location in order to serve the population of the region.16 In relation to the distribution of the HACSCs, according to the catchment area of the Primary Health Units, it is highlighted that, with the exception of the São Jorge PHU, all the other PHUs do not have Family Health Strategy (FHS) teams. This fact may indicate a reduction of these hospitalizations due to the action of the FHS,

* Rehem TCMSB, Oliveira MRF, Amaral TLC, Ciosak SI, Egry EY. Internações por condições sensíveis à atenção primária: um estudo em Curitiba/PR. Brasil. Sent for publication in the Revista da Escola de Enfermagem da USP.
as shown in a study in which the relationship was verified between HACSC and FHS coverage, and a direct and inverse relationship suggested, because, in the period studied, there was an increase of FHS coverage and reduction of HACSCs. However, the results of the aforementioned study, involving HACSC and the FHS, should not be considered as conclusive, since it did not include adjustment methodology that permits a more systematic and thorough analysis, that is, no causal relationships were established, being a study with only aggregated data. Accordingly, the decreasing trend of the HACSCs may be due to the FHS, or to a decreasing trend in hospitalizations as a whole.

As can be observed, the results of the HACSCs in the PGH have similarities with the results of other studies conducted in Brazil, however, caution must be exercised when using them to evaluate the performance of the primary healthcare, because this is an indicator that presents limitations. Dependence on the hospital information and problems in the records of the HAs/HIS are some issues that should be considered when using this indicator. The results of the HACSCs, in studies conducted in Brazil, which feature gastroenteritis and its complications, iron deficiency anemia, arterial hypertension, and diabetes, among others, indicate the coexistence of a double burden of disease, which can be defined as diseases of poverty and development. In this sense, the hospitalizations for gastroenteritis and its complications, for example, may not necessarily occur due to lack of access and effectiveness of the primary healthcare, but as a result of the process of social production and reproduction, which, in turn, influences the processes of sickness and dying of the social groups. The access to education, income, leisure, housing conditions, i.e. the social determinants, may influence the occurrence of these hospitalizations, being factors exogenous to the primary healthcare.

CONCLUSIONS

Despite these aspects, the HACSCs constitute an important indicator, not only for the evaluation of primary healthcare, but also for the system as a whole, as much as they provide an indication of possible problems in the access and quality of the healthcare services. Thus, this contributes to the discussion of the effectiveness of the principles and guidelines of the SUS, which are, integrity, accessibility, universality, and intersectorality. In this sense, they can contribute to the reflection on the limits and possibilities of the practice, both of the professionals involved in the implementation of the primary healthcare, as well as of those responsible for managing the local, regional and national health policies. Furthermore, considering the recent adoption of this indicator in Brazil, it is of great importance for studies to be performed in order to delineate its scope and validity in the practice.

REFERENCES

3. Bermúdez-Tamayo C, Márquez-Calderón S, Rodríguez del Aguila MM, Perea-Milla López E, Ortiz Espinosa J. Características organizativas de la atención primaria y hospitalización por los principales ambulatorio care sensitive conditions: a study in which the relationship was considered conclusive, since it did not include adjustment methodology that permits a more systematic and thorough analysis, that is, no causal relationships were established, being a study with only aggregated data. Accordingly, the decreasing trend of the HACSCs may be due to the FHS, or to a decreasing trend in hospitalizations as a whole.

As can be observed, the results of the HACSCs in the PGH have similarities with the results of other studies conducted in Brazil, however, caution must be exercised when using them to evaluate the performance of the primary healthcare, because this is an indicator that presents limitations. Dependence on the hospital information and problems in the records of the HAs/HIS are some issues that should be considered when using this indicator. The results of the HACSCs, in studies conducted in Brazil, which feature gastroenteritis and its complications, iron deficiency anemia, arterial hypertension, and diabetes, among others, indicate the coexistence of a double burden of disease, which can be defined as diseases of poverty and development. In this sense, the hospitalizations for gastroenteritis and its complications, for example, may not necessarily occur due to lack of access and effectiveness of the primary healthcare, but as a result of the process of social production and reproduction, which, in turn, defines the processes of sickness and dying of the social groups. The access to education, income, leisure, housing conditions, i.e. the social determinants, may influence the occurrence of these hospitalizations, being factors exogenous to the primary healthcare.

CONCLUSIONS

Despite these aspects, the HACSCs constitute an important indicator, not only for the evaluation of primary healthcare, but also for the system as a whole, insomuch as they provide an indication of possible problems in the access and quality of the healthcare services. Thus, this contributes to the discussion of the effectiveness of the principles and guidelines of the SUS, which are, integrity, accessibility, universality, and intersectorality. In this sense, they can contribute to the reflection on the limits and possibilities of the practice, both of the professionals involved in the implementation of the primary healthcare, as well as of those responsible for managing the local, regional and national health policies. Furthermore, considering the recent adoption of this indicator in Brazil, it is of great importance for studies to be performed in order to delineate its scope and validity in the practice.

REFERENCES


