


TEMPORAL TREND OF HOSPITAL ADMISSIONS OF CHILDREN DUE TO AMBULATORY CARE-SENSITIVE CONDITIONS IN FEIRA DE SANTANA, BAHIA, 2009 TO 2019

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SUMMARY

Hospitalizations for Ambulatory Care-Sensitive Conditions (ACSC) represent avoidable hospitalizations that are caused by diseases and conditions that respond well to interventions implemented in Primary Health Care. The objective of this study was to analyze the temporal trend of HACSC in children aged 0 to 9 years, considering age components and main causes, in Feira de Santana – Bahia, 2009 to 2019. This is a time series study in which the trend was analyzed with the simple linear regression model with serial correction of the residuals proposed by Prais and Winsten, with 5% significance. Data were collected from the Hospital Information System, the Information System on Live Births, e-Gestor Atenção Básica and the Brazilian Institute of Geography and Statistics. Most HACSC was in the age group of 1 to 4 years, male, brown race/skin color. Infectious gastroenteritis and complications were one of the most frequent causes in the age subgroups, showing a decreasing trend; Hospitalizations for epilepsy and infection of the skin and subcutaneous tissue showed an increasing trend. Hospitalization rates for diseases related to prenatal care and childbirth in children under 1 year of age showed an increasing trend. Financial resources, planning in the Family Health Strategy and intersectoral actions, covering all stages of the child cycle and the peculiarities of this population, are necessary to prevent/minimize the occurrence of HACSC.

Keywords: Hospital admission. Child health. Primary Health Care. Family Health Strategy. Time series studies.

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INTRODUCTION

Hospitalizations for Ambulatory Care-Sensitive Conditions (ACSC) represent avoidable hospitalizations, as these hospitalizations are caused by diseases and conditions that can be well managed in Primary Health Care (PHC), with resolute actions, preventing the evolution of the clinical condition to a state of greater severity (ALFRADIQUE *et al.*, 2009). The HACSC indicator is a measure of hospital activity used indirectly to assess the effectiveness of Primary Care (MENDONÇA *et al.*, 2018a).

The care developed by PHC in the face of conditions considered sensitive to this level of care has great potential to reduce the number of hospital admissions, especially emergency hospitals, as they can prevent illnesses, treat acute conditions in a timely manner, or avoid exacerbations of chronic diseases (HODGSON; DEENY; STEVENTON, 2019).

When considering that outpatient care in Brazil is offered by the first level of health care, it is understood that if PHC is properly organized (FARIAS *et al.*, 2019) to develop its typical actions focused on health promotion, disease prevention, early diagnosis, timely treatment of acute diseases, and control and clinical follow-up of chronic conditions, HACSC can eventually be reduced and/or avoided (CASTRO *et al.*, 2015; MENDONÇA *et al.*, 2018b). Therefore, HACSC are conditions that respond well to interventions implemented in community health settings (LONGMAN *et al.*, 2015), therefore, they can be properly managed in the Family Health Strategy (FHS).

In Brazil, a list of Hospitalizations for Ambulatory Care-Sensitive Conditions was drawn up consisting of 19 groups of causes, launched in 2008 by the Ministry of Health (BRASIL, 2008). Since then, many studies on this topic have been carried out in the country. Several of these studies seek to point out the effect of the FHS on HACSC (BOING *et al.*, 2012; CAMEL; REHEM, 2019; CASTRO *et al.*, 2020; COAST; PINTO JUNIOR; SILVA, 2017).

A systematic review carried out in 2018 showed that the expansion of the Family Health Strategy coverage generally occurs concomitantly with the reduction of hospitalizations for Ambulatory Care-Sensitive Conditions. However, there is not necessarily a relationship between them (NUNES, 2018). A study with secondary data, of national scope, carried out in 2014, pointed out that the high quality of PHC services had an impact on the reduction of HACSC, even in contexts of social inequality (CASTRO *et al.*, 2020).

There are still few studies that analyze the temporal trend of HACSC in childhood, especially considering those over 5 years of age, in municipalities in Brazil, more specifically, in Bahia. However, studies that address HACSC in the different periods of childhood are important, as it is considered that the child's health-disease profile is modified at each stage of child growth and development (PREZOTTO; BRACES; MATHIAS, 2015).

The HACSC study can allow the knowledge of the disease profile of children in the municipality of Feira de Santana - BA, guiding the re(structuring) of PHC services to meet the health demands of this public and, consequently, reduce avoidable hospital admissions. Thus, this study aimed to analyze the temporal trend of Hospital Admissions for Ambulatory Care-Sensitive Conditions in children aged 0 to 9 years, considering their age components and the main causes in Feira de Santana – BA, from 2009 to 2019.

METHODOLOGY

This is an ecological study of the temporal trend of HACSC in children aged 0 to 9 years, covering the period from 2009 to 2019, in the municipality of Feira de Santana – BA.

This study included HACSC – considering the 19 groups of causes published in Ordinance No. 221, of April 17, 2008 – of children aged 0 to 9 years, living in Feira de Santana, a municipality in the interior of the state of Bahia, in the Northeast region of the country, who took place in public, private or philanthropic hospitals and provided services to the SUS in the established period.

Data on hospital admissions were collected from the Hospital Information System (SIH/SUS), the population of live births was obtained from the Information System on Live Births (SINASC), managed by the Department of Informatics of the Unified Health System (DATASUS); from the e-Manager Primary Care (PHC), the web platform of the PHC systems, data on FHS and PHC coverage were collected; Population data were obtained from the Brazilian Institute of Geography and Statistics (IBGE).

After data collection, the rates and proportions of HACSC from 0 to 9 years old and their age subgroups and sex were calculated. The rates were calculated by dividing the absolute number of HACSC by the total population of the same year, at the same age, and multiplied by 10,000. For the rates in children under one year of age, the population considered was the number of children born alive for each year.

Then, the temporal trends of the rates and proportions of HACSC in the *free* software *R Commander* (version 4.0.2) and *RStudio* were estimated. In this analysis, the simple linear regression model was used with correction by the *Prais-Winsten* method, with 5% significance (ANTUNES; CARDOSO, 2015; PRAIS; WINSTEN, 1954).

The present study did not present a risk to humans because it was a study carried out with secondary data and in the public domain, which makes it impossible to identify the individual and expose the population studied. Therefore, this study was not submitted to the evaluation of the Research Ethics Committee, which is waived, in these cases, according to Resolution No. 510, of April 7, 2016 (BRASIL, 2016).

RESULTS

In the period from 2009 to 2019, 40,375 hospitalizations of children living in Feira de Santana were recorded, of which 23.6% were due to Ambulatory Care-Sensitive Conditions. Of the total hospitalizations recorded monthly, HACSC stood out in June and July (25.6% and 28.1%, respectively).

Of the set of HACSC, 38.9% were children under 1 year of age, 42.7% were from 1 to 4 years of age, and 18.4% were from 5 to 9 years of age. The majority (53.7%) occurred in males. About race/skin color, brown color predominated (95.9%). The third quarter of the period, between July and September, was marked by an increase in the occurrence of hospitalizations for Ambulatory Care-Sensitive Conditions (27.1%) (Table 1).

Table 1. Sociodemographic characterization of hospital admissions for ambulatory care-sensitive conditions in children aged 0 to 9 years. Feira de Santana, Bahia, Brazil, 2009-2019.

Features	N	%
Age group	9.536	100,0
< 1	3.714	38,9
1 - 4	4.068	42,7
5 - 9	1.754	18,4
Sex	9.536	100,0
Male	5.121	53,7
Female	4.415	46,3
Race/skin color	7.012	100,0
Brown	6.723	95,9
White	178	2,5
Black	111	1,6
Yellow	0	0,0
Indigenous	0	0,0
Hospitalization period	9.536	100,0
January to March	2.240	23,5
April to June	2.405	25,2
July to September	2.587	27,1

Source: SIH/SUS/DATASUS. Data processed by the authors. **Note:** Ignored data were not considered (2,524).

The analysis of the 19 groups of causes of HACSC in children up to 9 years of age indicated that the five most frequent were infectious gastroenteritis and complications (16.9%), infection of the skin and subcutaneous tissue (14.8%), pulmonary diseases (12.9%), epilepsies (10.6%) and bacterial pneumonia (9.2%) (Table 2).

Table 2. Hospital admissions for ambulatory care-sensitive conditions in children aged 0 to 9 years, by age group, according to groups of causes, according to the ICD-10. Feira de Santana, Bahia, Brazil, 2009-2019.

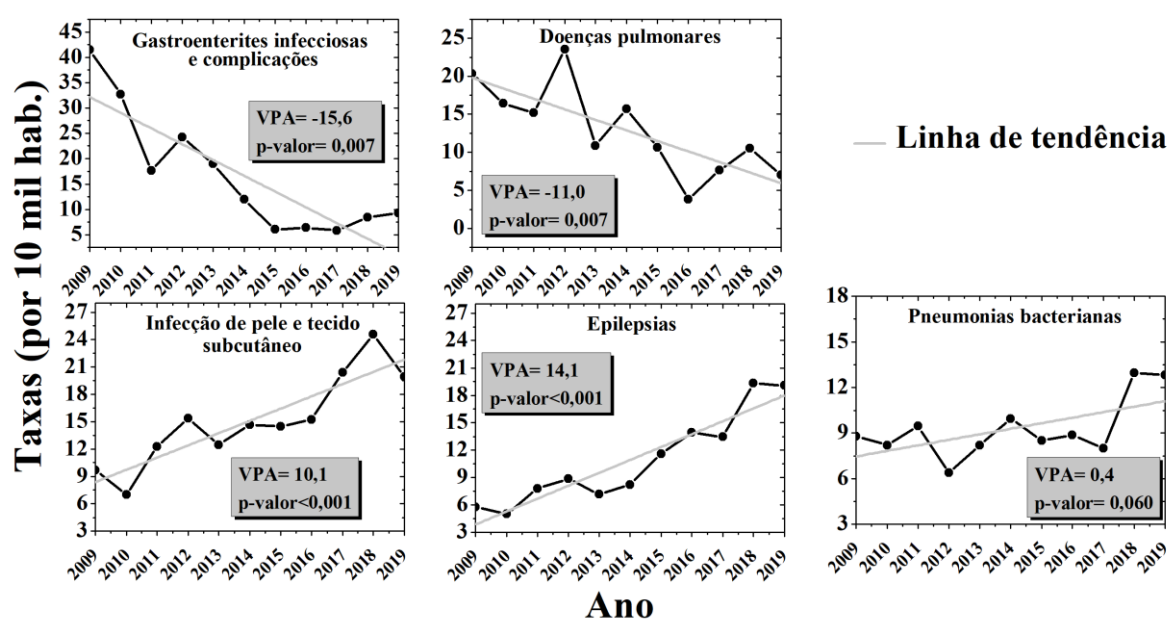
Groups of causes of hospitalizations for Ambulatory Care Sensitive Conditions	Age groups							
	0 - 9		<1		1 - 4		5 - 9	
	N	%	N	%	N	%	N	%
Infectious gastroenteritis and complications	1.608	16,9	487	13,1	863	21,2	258	14,7
Infection of the skin and subcutaneous tissue	1.409	14,8	241	6,5	783	19,3	385	21,9
Lung diseases	1.233	12,9	911	24,5	280	6,9	42	2,4
Epilepsies	1.015	10,6	225	6,1	512	12,6	278	15,8
Bacterial pneumonias	873	9,2	206	5,6	519	12,8	150	8,6
Kidney and urinary tract infection	749	7,9	299	8,0	300	7,4	148	8,4
Asthma	614	6,4	80	2,1	336	8,3	198	12,3
Diseases related to prenatal care and childbirth	605	6,3	605	16,3	0	0,0	0	0,00
Ear, nose, and throat infections	498	5,2	126	3,4	261	6,4	111	6,3
Immunization-preventable diseases and sensitive conditions	471	4,9	375	10,1	61	1,5	35	1,1
Heart failure	157	1,7	70	1,9	53	1,3	34	1,9
Diabetes mellitus	122	1,3	7	0,2	34	0,8	81	4,6
Nutritional deficiencies	113	1,2	64	1,7	37	0,9	12	0,7
Gastrointestinal ulcer	33	0,4	7	0,2	19	0,5	7	0,4
Anaemia	13	0,1	7	0,2	4	0,1	2	0,1
Cerebrovascular diseases	12	0,1	3	0,1	2	0,0	7	0,4
Inflammatory disease female pelvic organs	5	0,1	0	0,0	2	0,0	3	0,2
Hypertension	4	0,0	0	0,0	2	0,0	2	0,1
Angina	2	0,0	1	0,0	0	0,00	1	0,1

Source: SIH/SUS/DATASUS. Data processed by the authors. **Note:** ICD-10 - Tenth Revision of the International Classification of Diseases.

In the age group of children under 1 year of age, the most frequent groups of causes were pulmonary diseases (24.5%), diseases related to prenatal care and childbirth (16.3%), infectious gastroenteritis and complications (13.1%), diseases preventable by immunization and sensitive conditions (10.1%) and kidney and urinary tract infection (8.0%). In the age group from 1 to 4 years, infectious gastroenteritis and complications (21.2%), infection of the skin and subcutaneous tissue (19.3%), bacterial pneumonia (12.8%), epilepsy (12.6%) and asthma (8.3%) stood out. In the 5 to 9 year age group, skin infection and subcutaneous tissue (21.9%), epilepsies (15.8%), infectious gastroenteritis and complications (14.7%), asthma (12.3%), and bacterial pneumonia (8.6%) dominated (Table 2).

Regarding the temporal trend in HACSC rates in children up to 9 years of age, considering the five most frequent groups of causes, there was a decreasing and statistically significant trend ($p\text{-value} < 0.050$) for the diagnoses of infectious gastroenteritis and complications ($APC = -15.6\%$) and lung diseases ($APC = -11.0\%$); increasing and statistically significant trend for the group of skin and subcutaneous tissue infection ($APC = 10.1\%$) and epilepsy ($APC = 14.1\%$) and; An increasing trend, but without statistical significance ($p\text{-value} = 0.060$) for bacterial pneumonia ($APC = 0.4\%$) (Figure 1).

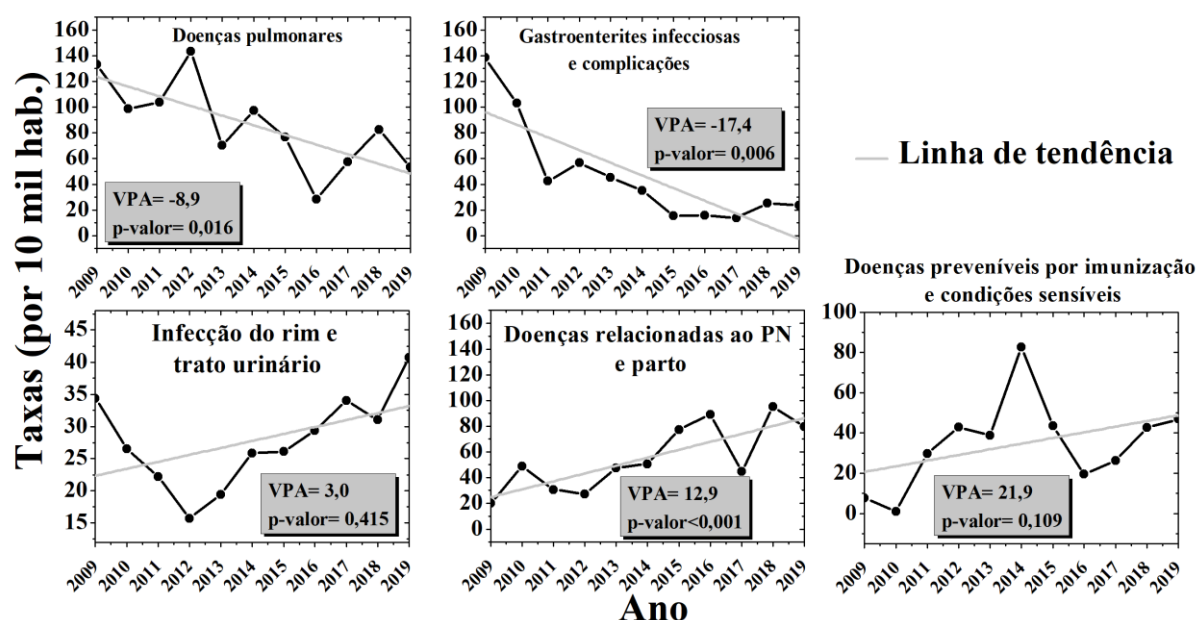
Figure 1. Temporal trend of rates (per 10 thousand inhabitants) of hospital admissions for ambulatory care-sensitive conditions in children aged 0 to 9 years, according to groups of most frequent causes. Feira de Santana, Bahia, Brazil, 2009-2019.



Source: IBGE and SIH/SUS/DATASUS. Data processed by the authors. **Note:** APC – Annual Percentage Change; $p\text{-value} < 0.050$ – significant trend.

In the age group of children under 1 year of age, pulmonary diseases and infectious gastroenteritis and complications showed a decreasing temporal trend (APC=-8.9%, APC=-17.4%, respectively). For the other groups (diseases related to prenatal care and childbirth, kidney and urinary tract infection, and immunization-preventable diseases and sensitive conditions), the temporal trend was increasing (APC=12.9%, APC=3.0%, and APC=21.9%, respectively), but only for the former there was statistical significance (Figure 2).

Figure 2. Temporal trend of rates (per 10 thousand inhabitants) of hospital admissions for ambulatory care-sensitive conditions in children <1 year, according to groups of most frequent causes. Feira de Santana, Bahia, Brazil, 2009-2019.



Source: SIH/SUS/DATASUS and SINASC/DATASUS. Data processed by the authors. **Note:** PN – Prenatal care. VPA – Annual Percentage Change; p-value<0.050 - significant trend.

The age subgroups of 1 to 4 years and 5 to 9 years are similar about the groups of most frequent causes and temporal trend. Infectious gastroenteritis and complications and asthma showed a decreasing trend; On the other hand, infection of the skin and subcutaneous tissue, epilepsy and bacterial pneumonia suggest an increasing trend. These groups were statistically significant for both age groups (Table 3).

Table 3. Temporal trend of the rates (per 10 thousand inhabitants) of hospital admissions for ambulatory care-sensitive conditions in children aged 1 - 4 years and 5 - 9 years, according to groups of most frequent causes. Feira de Santana, Bahia, Brazil, 2009-2019.

Groups of causes of hospitalizations for Ambulatory Care Sensitive Conditions	Age groups					
	1 - 4			5 - 9		
	VPA	p-value	Tendency	VPA	p-value	Tendency
Infectious gastroenteritis and complications	-14,9	0,012	Descending	-16,5	0,001	Descending
Asthma	-14,1	0,012	Descending	-12,3	0,022	Descending
Infection of the skin and subcutaneous tissue	10,7	<0.001	Crescent	12,1	<0.001	Crescent
Epilepsies	14,7	<0.001	Crescent	14,3	<0.001	Crescent
Bacterial pneumonias	4,8	0,005	Crescent	5,6	0,008	Crescent

Source: IBGE and SIH/SUS/DATASUS. Data processed by the authors. **Note:** APC – Annual Percentage Change; p-value<0.050 – significant trend.

The scenario presented showed that of the HACSC in children in the period from 2009 to 2019 in the municipality of Feira de Santana – Bahia, most were in the age group of 1 to 4 years and males; Infectious gastroenteritis and complications appeared as one of the most frequent causes in all age subgroups, showing a decreasing and statistically significant trend.

DISCUSSION

Most HACSC in children was recorded in the winter period - a season of the year characterized by lower temperatures, a condition that can favor children's exposure to risk factors for diseases such as respiratory diseases (PINTO; GIOVANELLA, 2018), in the age group of 1 to 4 years, males, belonging to brown race/skin color.

The age group from 1 to 4 years is the one that represents the highest risk for HACSC (LENZ *et al.*, 2008), which points to greater difficulty in this public's access to Primary Care services, which can be attributed, among other aspects, to the model of organization of the agenda or opening hours of health units (LIMA; NICHATA; BONFIM, 2019). Another aspect is the conduct of health professionals about actions aimed at children's health, which, for the most part, are performed with a focus only on children under 1 year of age (PREZOTTO; BRACES; MATHIAS, 2015). This alerts to the need to reorganize PHC services and invest in continuing education for the FHS team, to broaden the view of the peculiarities/health needs of children at each stage of development,

responding adequately to the attributes of Primary Care and the precepts of the National Policy for Comprehensive Child Health Care (PNAISC).

Regardless of the main cause, boys are more hospitalized than girls at all ages, and not exclusively in childhood (LENZ *et al.*, 2008). No studies on HACSC in children were found that presented analyses by race/skin color to compare the findings of this study.

Race/skin color was the only variable studied that showed incompleteness of the data (26% of the missing data). To minimize potential distortions in the interpretation, the ignored data were not considered in the calculation method. The incomplete completion of this variable in the health systems is also an expression of the socioeconomic inequality in our country (FARIAS *et al.*, 2019).

Among all the causes of avoidable hospitalizations, the groups of infectious gastroenteritis and complications, pulmonary diseases, skin and subcutaneous tissue infection, epilepsies and bacterial pneumonia stood out as the most frequent for children. From a temporal perspective, a downward trend was identified for the first two groups and an upward trend for the others, and bacterial pneumonia this increase was not statistically significant.

As in this investigation, a study carried out in Brazil, with children under 20 years of age, from 1999 to 2006, showed infectious gastroenteritis and complications and bacterial pneumonia as the most frequent causes of HACSAPH, with the first showing a reduction in its rates and the second, an increase. This same study presented a similar scenario for the age groups of children under 1 year, 1 to 4 years and 5 to 9 years; the highest rates of infectious gastroenteritis and complications were identified in the Northeast region, suggesting an association with the sociodemographic and economic profile of the population at the time (lower Gross Domestic Product *per capita*, higher illiteracy rate, lower sewage coverage and higher infant mortality rate) (MOURA *et al.*, 2010).

A study carried out in public hospitals in Paraíba with children under 5 years of age, in 2013, highlighted, among the main causes of HACSAPH, infectious gastroenteritis and bacterial complications and pneumonia. The occurrence of these clinical conditions in childhood is associated with age-specific frailty and related to the environmental and socioeconomic conditions of the population (ARAUJO; COAST; PEDRAZA, 2017).

Infectious gastroenteritis and complications as the main cause of HACSC in this study points to negligence in recognizing the common clinical symptoms of these conditions (SANTOS *et al.*, 2023), failures in care at the first level of health care, since

health education measures, vaccination against rotavirus, distribution of oral rehydration serum, and therapeutic approach to children in dehydration are actions that are the competence of the first level of health care and that show great effectiveness in the face of these infections (MARIANO; NEDEL, 2018).

Pulmonary diseases, also as one of the main groups of HACSC, may be due to the higher occurrence of hospitalizations for this cause in the autumn and winter periods. A study carried out in Feira de Santana, in a historical series of 20 years (1997 to 2017), showed that average minimum temperatures are becoming lower and lower in these two seasons of the year, making the weather colder and wetter (COSTA *et al.*, 2018), which favors the occurrence of lung diseases.

The downward trend suggests that measures capable of improving this scenario are being adopted. The expansion of FHS coverage and the registration of families in the Bolsa Família Program, a federal program aimed at families in poverty and linked to the fulfillment of conditionalities in the educational and health areas (BRASIL, 2021a), can be mentioned. The actions in the field of health linked to this program result in improvements, mainly, in children's nutritional conditions and the intra-household environment, reflecting in the prevention and/or early treatment of diseases such as gastroenteritis and pulmonary diseases.

The increase in hospitalization rates due to skin and subcutaneous tissue infection showed an increasing trend. It is known that these infections often reflect the general condition of the individual and are common in children who live in poor hygiene and nutrition conditions (SMELTZER *et al.*, 2009). This suggests the need to develop intersectoral actions to solve this problem.

Epilepsies showed an increase in their rates throughout the time series, with a temporal trend of growth. In studies focused on the childhood period, it is not common for epilepsies to appear in a prominent position among HACSCs. This diagnosis was identified as the first cause of HACSC in the 10 to 14 year old group and the third in the 15 to 19 year old age group, in a study carried out in Paraná, from 2013 to 2017, considering the adolescent phase (from 10 to 19 years old) (FREITAS; BRACES; LOURENÇO, 2023).

It is believed that, because the neurological examination of children is complex, there is a lack of knowledge and resistance of non-specialists in the area – professionals who work in PHC – to perform it (SILVA, 2009). This suggests that the investigation,

diagnosis and follow-up/control of neurological diseases are not done early, which contributes to recurrent seizures, which leads to the search for hospital services.

The findings point to the need to invest in continuing education activities to qualify PHC professionals to serve this public, preventing possible causes, controlling the factors that predispose to the occurrence of epileptic seizures, conducting the mechanisms for psychosocial coping with this situation, providing instructions for home care, monitoring and treating potential complications.

The temporal trend in bacterial pneumonia rates was increasing, with no statistical significance. Many studies on HACSC carried out with children have also shown bacterial pneumonia as one of the main causes of hospitalization (AMARAL; ARAUJO FILHO; ROCHA, 2020; AHMAD; COAST; PEDRAZA, 2017; CAMEL; REHEM, 2019; MARIANO; NEDEL, 2018; BROOK; ARAUJO FILHO; ROCHA, 2019).

It is known that the 10-valent pneumococcal vaccine is an effective strategy to prevent and control the occurrence of bacterial pneumonia in children (CALDART *et al.*, 2016). When observing the vaccination coverage of this immunobiological in the municipality and period studied, considering the complete vaccination schedule, except 2010 (when the 10-valent pneumococcal vaccine was included in the basic vaccination schedule), the lowest values of vaccination coverage were in 2018 and 2019 (57.6% and 65.1%, respectively) (BRASIL, 2021b), at the same time, the rates of hospitalizations for bacterial pneumonia increased (13.0 and 12.8 per 10,000 population, respectively). This points to the need to optimize strategies for immunizing children and, consequently, improve vaccination coverage and reduce hospitalizations for this cause.

It is necessary to be alert to the behavior of hospitalization rates for diseases related to prenatal care and childbirth, which showed increasing and statistically significant temporal trends in children under 1 year of age. It is noteworthy that congenital syphilis was the most important single cause. It would be expected that these rates would decrease and/or a downward trend in hospitalizations due to this diagnosis in the period studied, since there was an expansion in FHS and PHC coverage, which suggests that the care provided to pregnant women and their babies at this level of health care has improved.

A study carried out in the state of Ceará, in the period from 2000 to 2012, also pointed to an increase in the rates of hospital admissions due to diseases related to prenatal care and childbirth in the age group of children under 1 year old, showing great

concern about this scenario, since syphilis is a preventable disease that, if not treated, can cause serious damage to the affected children (COSTA; PINTO JUNIOR; SILVA, 2017).

The significant growth of HACSC due to diseases related to prenatal care and childbirth can be explained by the ineffectiveness of the actions developed by the professionals who work in PHC services, which involves the delay in scheduling the subsequent prenatal consultation, the lack of preparation of the team to adequately respond to the needs presented by the pregnant woman, the lack of qualification for early and adequate diagnosis and treatment of syphilis, and even the failure to in sensitizing the pregnant woman and her partner to follow the indicated treatment (LÔBO *et al.*, 2019).

Despite the expansion of FHS and PHC coverage, given the results listed, it is plausible to think that there are problems in health actions aimed at pregnant women and that the bureaucratic passage of this population in Primary Care services alone does not guarantee the quality of care provided by professionals (PITILIN; PELLOSO, 2017).

For the population aged 1 to 4 years and 5 to 9 years, the group of causes of HACSC that differed from those already evidenced was asthma, which showed a reduction in its rates and a downward trend. In a study conducted by age group and regions of Brazil, from 1999 to 2006, asthma was also among the main causes of HACSC in these same age groups, with a reduction in its rates, and the percentage of reduction was lower in the Northeast region (MOURA *et al.*, 2010).

It is not known for sure which immunological, genetic and environmental mechanisms are linked to asthma, but it is recognized that the risk factors associated with this cause can be effectively addressed by Primary Care services (MOURA *et al.*, 2010), this is because the performance of this level of health care takes place close to the families, improving treatment adherence, achieving success in the management of mild and moderate cases, and monitoring and referring severe and difficult-to-control cases to specialized services (CAMELO; REHEM, 2019).

In Brazil, non-standardized initiatives for the management and control of asthma are being developed. In the capital of Bahia, in 2002, the Asthma and Allergic Rhinitis Control Program was implemented. In 2004, a reference center for this program was established in Feira de Santana to control these health problems, reduce the number of emergency visits, hospital admissions and deaths (BRANDÃO *et al.*, 2009).

In this context, it is possible to point out that the expansion of FHS and PHC coverage, in addition to the interventions developed by the Asthma and Allergic Rhinitis

Control Program, seem to be assertive strategies for the management of asthma in the child population of Feira de Santana, since hospitalization rates have shown a significant decrease.

Given the above, it is believed that in the municipality, children's programs and public policies are being demonstrated in Primary Care strategies that respond punctually to children's health needs (translated into a reduction in rates and a downward trend in HACSAF). However, it is still necessary to implement comprehensive actions in the individual's first contact services, focusing on health promotion and disease prevention, covering all stages of the child cycle and the peculiarities of this population.

It is recognized that this study, as it is a univariate time series study, has limitations, since it was not possible to investigate associations and, in addition, secondary data that are administrative records in the public domain were used, which may include underreporting, obliquities or typing errors, among other aspects. However, these limitations do not cancel out the confidence of the data, since they were collected from official sources of information, considered valid and used by the government itself for the production of knowledge and decision-making.

The importance of investigating the aspects listed from the temporal point of view lies in the fact that the year-by-year data analysis allowed the establishment of an overview of the situation of avoidable hospitalizations, which can support the prediction of eventualities and the planning of interventions in the face of the reality of Primary Care services through programs and public policies aimed at the child population that can contribute to reducing the occurrence of these hospitalizations and increasing the quality of life of this group.

CONCLUSION

Trend analysis was fundamental to reflect on the critical points of the performance of PHC services in relation to child health in the municipality. It has become evident that the financial investments and actions of the ESF need to encompass, even more, the child public.

The uniqueness of this study on the theme with the child population in Feira de Santana and its relevance to direct and structure primary health services with a focus on reducing morbidity and mortality and avoidable hospitalizations in this public is highlighted, and other investigations on the association of socioeconomic and demographic factors with

the occurrence of childhood HACSC in the municipality are suggested. taking into account the variables sex and race/skin color, since they also do not appear frequently in studies published in the literature.

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