Original Article

Risk factors in the domestic environment for falls in children under five years of age

Fatores de risco no ambiente doméstico para quedas em crianças menores de cinco anos

Factores de riesgo en el ambiente doméstico para caídas en niños menores de cinco años

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ABSTRACT

Objective: To analyze the risk factors in the domestic environment for the occurrence of falls in children under five years of age.

Method: A cross-sectional study was conducted in May and in June of 2016 with 344 caregivers of children from Northeast Brazil. A socio-economic questionnaire and a checklist for environmental observation were used. Bivariate analyzes were performed using Pearson's Chi-square test.

Results: They were associated with the risk of falls in children under 5 years of age: High net (p = 0.015), presence of stairs or steps without a handrail (p=0.003), and exits and passages kept with toys, furniture, boxes or other items that may be obstructive (p=0.002).

Conclusion: The factors in the domestic environment identified as associated with the risk of falls in children under five years of age demonstrate that there is a need to construct prevention strategies related to the structure and organization of this environment.

Keywords: Accidents caused by falls. Domestic accidents. Child. Risk factors.

RESUMO

Objetivo: Analisar os fatores de risco no ambiente doméstico para a ocorrência de quedas em crianças menores de cinco anos.

Método: Estudo transversal realizado em maio e junho de 2016 com 344 cuidadores de crianças do Nordeste do Brasil. Utilizou-se um formulário referente às questões socioeconômicas e um *check-list* para observação do ambiente. Realizaram-se análises bivariadas, utilizando-se teste Qui-quadrado de *Pearson*.

Resultados: Estiveram associados ao risco de quedas em crianças menores de cinco anos: Rede alta (p=0,015), presença de escada ou degraus sem corrimão (p=0,003) e saídas e passagens mantidas com brinquedos, móveis, caixas ou outros itens que possam ser obstrutivos (p=0,002).

Conclusão: Os fatores no ambiente doméstico identificados como associados ao risco de quedas em crianças menores de cinco anos demonstram que existe a necessidade de construir estratégias de prevenção relacionadas à estrutura e organização desse ambiente.

Palavras-chave: Acidentes por quedas. Acidentes domésticos. Criança. Fatores de risco.

RESUMEN

Objetivo: Analizar los factores de riesgo en el ambiente doméstico para la ocurrencia de caídas en niños menores de cinco años.

Método: Estudio transversal, realizado en mayo y junio de 2016 con 344 cuidadores de niños del Nordeste de Brasil. Se utilizó un formulario referente a las cuestiones socioeconómicas y un check-list para observación del ambiente. Se realizaron análisis bivariados, utilizando la prueba Chi-cuadrado de Pearson.

Resultados: Se han asociado al riesgo de caídas en niños menores de cinco años: Red alta (p=0,015), presencia de escalera o escalones sin barandilla (p=0,003) y salidas y pasajes mantenidos con juguetes, muebles, cajas u otros elementos que puedan ser obstructivos (p=0,002).

Conclusion: Los factores en el ambiente doméstico identificados como asociados al riesgo de caídas en niños menores de cinco años demuestran que existe la necesidad de construir estrategias de prevención relacionadas a la estructura y organización de ese ambiente.

Palabras clave: Accidentes por caídas. Accidentes domésticos. Niño. Factores de riesgo.

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INTRODUCTION

Currently, throughout the world, the rates related to childhood domestic accidents are alarming, becoming a serious public health problem due to the harm to the health of the children and their family. Characteristics related to development, curiosity and vulnerability predispose children to accidents. And the occurrence of these accidents is due to a series of risk factors associated with education, salary and living conditions[1]. The reason why the home environment is most at risk is due to the longer time that children spend there, but also to environmental risk factors such as: wet floors, furniture with sharp corners, unprotected cribs, high beds, and toys scattered on the floor[2].

Children are included in the risk group for falls and this is due to their physical and psychological characteristics in each phase of their development, in addition to the curiosity to know the environment and progressive independence. In addition to the family lifestyle, socioeconomic and cultural factors also contribute to the occurrence of these accidents[3].

Given this, it is expected that this study will help health professionals, especially those in the Family Health Strategy (FHS), children, family and society in general, to know the reality of these events in the children population in the city of Floriano - PI, and to reflect on this issue in order to alert to the risks and to the need of adopting safe behaviors in relation to the domestic environment and the child's developmental stage.

The home environment favors the occurrence of falls in children due to their physical structure, with the presence of stairs, slippery floor, furniture that can be climbed, being though more frequent the falls on the same level. However, falls from other levels, from the bed or from other furniture were also present[4]. In a study that aimed at analyzing emergency care due to external causes in children, it has been observed that: the most common type of accident was the fall, being more frequent in children up to one year old (60.9%); the same level falls are predominant in children from six to nine years old (58.4%) and from two to five years old (50.2%); among infants from zero to one year old, bed/furniture falls were more frequent (36.1%)[2].

Accidents are important threats to the health and well-being of children and, as their occurrence has serious consequences, it is essential to identify the risks in the environment[5]. Nursing professionals should develop programs for prevention, by conducting lectures to raise the awareness of risks and to reduce such accidents in society[6]. Therefore, the occurrence of accidents during childhood is due to a series of environmental risk factors, which may be closely related to family behavior, social, economic, educational and cultural aspects[7].

In addition, some protective measures should be adopted, such as educational programs that focus on reducing the number of accidents and/or minimizing the severity of the injury, preventing most of these accidents that have consequences such as psychological trauma and irreparable sequelae, such as orthopedic, requiring special attention from public authorities and from society as a whole[4].

The relevance of the study is in the presentation of a situational diagnosis, which concerns the falls, since these may have been underreported due to non-observance of Basic Attention strategies with regard to preventive measures. In addition, this study may help caregivers with educational practices in primary care when the results return.

In this context, the following guiding question emerges: what are the risk factors present in the domestic environment for falls in children under five years old? That said, the objective of this study is to analyze the risk factors in the domestic environment for the occurrence of falls in children under five years old.

METHODS

The present work is a cross-sectional study and presents data from the monography entitled "Accidents caused by falls in children under five years old"[8] carried out in the Basic Care Network of Floriano, Piauí, which operates with 24 Basic Health Units (BHU), with 17 located in the urban area and seven in the rural area. From the data available in the Basic Attention Information System (BAIS), the BHU and its assigned areas were studied, identifying the number of residences with children under five years old in the areas covered by each BHU. Due to the difficulty of accessing the rural area in a private car, the distance between the residences of the same area of the BHU and the unavailability of the Community Health Agents (CHA) of the rural area to accompany the researcher in the visits, the rural residences were excluded from this investigation.

Data collection was carried out in May and June of 2016. In order to compose the sample of this study, the average of the prevalence of two studies found in the literature was calculated to obtain the presumed prevalence of this event. Therefore, a 54% proportion, considering the averages and standard deviations of the averages for finite population, as well as the respective intervals for the true averages, with 95% confidence and sample error tolerance of up to 5%, a sample of 344 child caregivers was obtained.

The sample was distributed using the stratification that determined the exact number of residences that were visited in each Basic Health Unit, according to the number of caregivers whose residences had children under five years old.

After being collected, the data were submitted to randomization, in which the houses were identified and numbered according to the table of random numbers, and then drawn. Regardless of the residence having more than one child, only one visit was counted, therefore, the number of children in the residence did not influence the number of houses that were visited. There have been included in the sample those residences that had children under five years old affected by falls at home, caregivers who were registered in the BHU of their assigned area and who were present at home at the time of the visit, besides being aged greater or equal to 18 years old.

Residences with children under five years old were excluded from the study, in which caregivers were not present at three consecutive visits, and residences in which children under five years old had some type of neurological pathology, since this condition influences the reduction of falls, because the child is, for the most part of the time, dependent on his or her caregiver.

The research used as a method of data collection the form that approached information regarding socioeconomic and demographic factors, besides the characteristics of the accident. A check-list was also used to request the caregiver's permission to check the rooms of the residences where the risks for falls in the home environment could be observed. The approach to caregivers of children under five years old was made through an interview. The interviewees were presented with the Free and Informed Consent Term - FICT, written in the form of an invitation and in a language accessible to the research subjects and, upon acceptance, the signature of the FICT was requested, and which dealt with the anonymity of the participants. The home visits were carried out following the inclusion and exclusion criteria and explaining the research objectives.

After the instruments were collected and checked, the data was entered into an Excel® 2010 spreadsheet. The statistical analysis was started by listing the absolute and relative frequencies of each variable and then using bivariate analytical statistics. In the bivariate analysis, Pearson's Chi-square test was performed for the categorical variables, considering in all tests the statistical significance level of 5%. To estimate the strength of association of risk factors for the occurrence of accidents, the Odds Ratio (OR) was calculated, with a 95% confidence interval.

For the OR, the highest risk factors found in the literature were taken into account, considering the fact that the present study obtained the predominance of the nominal variables. The data was presented in tables in order to make clear the dissemination and organization of the information regarding the proposed in the objectives.

The project was approved by the Research Ethics Committee of the Universidade Federal do Piauí, under the Opinion No. 1,502,339 on April 15, 2016, obeying the ethical and legal aspects of research involving human beings, as recommended by the Resolution No. 466 of 12 December of 2012 of the National Health Council[9].

RESULTS

A total of 344 caregivers of children under five years old participated in the study. The characteristics of the sample are presented in Table 1.

Of the participants, 91.9% were women, young adults, between 20 and 39 years old (68.4%), with a more prevalent level of education of a high school level (35.5%). When investigating the occupation, it was verified that the majority of caregivers were housewives (68.6%). As for the family income, it can be observed that the families are part of a scenario of low purchasing power, with the majority of the respondents (86.9%) receiving an income less than two minimum wages.

Regarding the housing environment, it was evidenced that the residences had four to five people (52.9%) and that the number of children was predominantly two in 36.6% of the residences, followed by one in 32, 6% of the residences.

Regarding the marital status, the interviewees were predominantly married (59.9%), followed by a stable union (17.7%). And the majority of the caregivers carries out another activity, besides taking care of the child, representing this portion a total of 79.7%. In the absence of the usual caregivers of children, most prefer to take the child with them when they need to perform activities outside the home environment (33.1%). And when they leave them at home, the children stay with their grandmothers (31.7%). The people who replace the caregiver of the child are predominantly aged between 50 and 59 years old (15.3%), followed by 60 years old or more (11.8%).

The highest occurrence of falls was in the afternoon shift (46.8%), regarding the place of the house where the most falls occurred, the living room and the backyard were the most prevalent (27.9% each), followed by the balcony (16.6%) and the bedroom (16.3%). With regard to the type of fall, falls of the same level or height (40.7%) predominated, followed by bed falls (16%) and cycling (14.8%). As for the part of the body affected at the time of the fall, 37.8%

Table 1 – Profile of the caregivers of children under five years old and characteristics of the accident, Floriano-Piauí, 2016. (n=344) (continue)

Variables	F	%
Gender of the caregiver		
Male	28	8.1
Female	316	91.9
Age of the caregiver		
< 20 years old	18	5.2
20 to 29 years old	122	35.5
30 to 39 years old	113	32.9
40 to 49 years old	42	12.1
> 50 years old	49	14.6
Schooling		
Illiterate	13	3.8
Incomplete Elementary School	112	32.6
Complete Elementary School	23	6.7
Incomplete High School	53	15.4
Complete High School	122	35.5
Higher Education	21	6.1
Ocuppation		
Housewife	236	68.6
Autonomous	12	3.5
Student	14	4.1
Others	82	23.8
Income		
< 1 minimum wage	137	39.8
>1 wages < 2 wages	162	47.1
> 2 wages < 3 wages	31	9.0
> 3 wages < 4 wages	10	2.9
> 4 wages or more	4	1.2
Nº people residing in the house		
< 4 people	73	21.3
4 to 5 people	182	52.9
6 to 7 people	62	18.0
> 7 people	27	7.8
Nº children residing in the house		
One	112	32.6
Two	126	36.6
Three	66	19.2
>4	40	11.6

Table 1 – Profile of the caregivers of children under five years old and characteristics of the accident, Floriano-Piauí, 2016. (n=344) (continuation)

Variables	F	%
Marital Status		
Married	216	59.9
Single	57	16.6
Widow/er	13	3.8
Divorced/Separated	7	2.0
Stable Union	61	17.7
Exercise other activity than taking care of the child		
Yes	274	79.7
No	70	20.3
Who stays with the child		
Grandparents	109	31.7
Siblings	23	6.7
Uncle	26	7.6
Another relative	50	14.5
Neighbor	8	2.3
Private caregiver	14	4.1
Takes the child	114	33.1
Age of the one taking care of the child* (n=230)		
< 20 years old	36	10.7
20 a 29 years old	29	8.6
30 a 39 years old	31	9.1
40 a 49 years old	40	11,4
50 a 59 years old	52	15.3
>60 years old	42	11.8

Source: Research data, 2016
* It corresponds to the total number of caregivers who leave the child with someone else.

affected the lower limbs (LL) and 34% the face. Regarding the nature of the lesion, most of the falls caused a cut or laceration (39.5%); and on the evolution of the victim by falls, all the children obtained the cure.

Association between risk factors related to the home environment and occurrence of falls in children under five years old

The relationship between risk factors related to the physical structure and organization/arrangement of ob-

jects or furniture at home with the occurrence of falls in children younger than five years old found three statistically significant variables (p<0.05): **High net** (p=0.015), **presence of stairs or steps without handrails** (p=0.003) and **exits and passages kept with toys, furniture, boxes or other items that may be obstructive** (p=0.002), as presented in Table 2.

DISCUSSION

The risk factors for occurrence of falls in the domestic environment are multifactorial. It is not just the age or gender of the child. Housing, space, floor, type and size of the furniture, family members, working mothers and time spent by children inside the house, influence the incidence and pattern of unintentional domestic injuries[10].

It was identified that the female gender, especially the maternal figure that had as main functions the accomplishment of domestic activities and care of the child, predominated among caregivers of children under five years old. This evidence is already widely discussed in the literature and is related to cultural issues justified by the fact that mothers consider their children in this age group to require greater care and attention. A study with the objective of analyzing the accidents in children under ten years old in Public Emergency Rooms in São Luís, MA, observed that of 166 children who were injured, 60.9% were cared for by their parents, and the mother was the main caretaker. During the accident period, 30.1% of the mothers were out of the labor market, however, performing household tasks concomitant with the child care[11].

In a study about the mothers' knowledge about the prevention of domestic accidents in Baghdad, it was verified that the age of mothers caring for children ranged from less than 20 to 50 years old, and the age group was more prevalent among 21-40 years old (78,7%). Regarding schooling, the complete high school (38%) stood out, and in relation to the marital status, 90.6% were married[12]. These data converge with the findings of this research regarding the age, schooling and marital status of the caregivers, and it can be explained by the fact that the children are younger than five years old, generally daughters of women in a reproductive age, young adults, married or in a stable union, and who also had access to education.

In a study with the objective of identifying and describing childhood home-based accidents in the area covered by a Community Health Agent Strategy (CHAS) of Montes Claros-MG, Brazil, with a predominance of falls, it was verified that 26 families had monthly income greater than one minimum wage and less than two (52%), and 24 families with monthly income less than one minimum wage (42%); in accordance with this study, whose prevalence was of income greater than one and less than two minimum wages[6].

Scientific researches on the subject affirm the direct relationship between the economic profile of families living in areas of socio-environmental vulnerability and the occurrence of domestic accidents. In a study that aimed to identify the associated factors for the occurrence of unintentional injuries in children in the domestic environment, it was evidenced that 92.8% of the families survived with less than one to two minimum wages[13]. It is inferred that the lack of resources may be related to the risk of accident in the domestic environment because it makes it difficult or impossible to install protective structures, such as bars on stairs. That said, it is reflected that structural changes, but that demand financial resources, such as installing non-slip rubber on the bathroom floor, placing handrails and security gates on the stairs and putting protective bars on the windows, are able to contribute to the reduction of falls in children.

Nonetheless, other cultural and organizational changes that are not costly, such as keeping toys off the stairs, drying the floor immediately when wet, avoiding playing on the bed, and especially constant supervision of children, are also attitudes that can modify the high morbidity and mortality rates due to falls in the domestic environment among children[14]. From this perspective, it is possible to affirm that, in addition to environmental risks, the socioeconomic factors contribute to the occurrence of injuries in children that include, besides poverty, large families, number of people living in the same residence, small number of rooms in residences, and low educational level[15].

In this sense, the number of family members is directly proportional to the occurrence of accidents, as verified in the research in question, in which the majority of the family nuclei had more than four members. However, differing from the literature, the reduced number of children living in the residence did not decrease the episodes of falls among children in this study, as most caregivers reported having only one or two children under their supervision, and the number of children in the family is also proportional to the risk of injury[10].

Presenting similar results, in the study[11], the afternoon shift was the time that, according to the caregivers, totaled the highest number of accidents in the study (46.8%). A similar result was also found regarding the period of the accident being in the afternoon (53.6%). In the research in question, the afternoon shift was prevalent for the occurrence of falls due to the majority of these

Table 2 – Association between risk factors related to the home environment and occurrence of falls in children under five years old. Floriano-PI, 2016

Variables	Accident		Total	p*	OR (IC 95%)
	Yes	No			
Slippery carpets					
Yes	159 (46.2%)	1 (2.2%)	46	0.703	1,473 (0.182 – 11.906)
No	185 (53.8%)	9 (3.2%)	284		1
High net					
Yes	219 (63.7%)	4 (11.1%)	36	**0.015**	0.167 (0.045 – 0.622)
No	125 (36.3%)	6 (2.0%)	294		1
Safe crib (with high bars and close proximity to the floor)					
Yes	159 (46.2%)	1 (2.0%)	49	0.645	1,588 (0.197 – 12.823)
No	185 (53.8%)	9 (3.2%)	281		1
Presence of lamps, cables, frames framed with glass within the reach of the child					
Yes	222 (64.5%)	1 (1.5%)	66	0.385	2.294 (0.286 – 18.434)
No	122 (35.5%)	9 (3.4%)	264		1
Presence of stairs or steps without handrails					
Yes	218 (63.4%)	2 (0.9%)	216	**0.003**	8.075 (1.685 – 38.695)
No	126 (36.6%)	8 (7.0%)	114		1
Presence of windows with bars					
Yes	190 (55.2%)	2 (1.1%)	180	0.057	5.014 (1.048 – 23.983)
No	154 (44.8%)	8 (5.3%)	150		1
Presence of furniture or objects near window					
Yes	237 (68.9%)	0 (0.0%)	97	-	-
No	107 (30.8%)	10 (4.3%)	233		
Exits and passages kept with toys, furniture, boxes or other items that may be obstructive					
Yes	190 (55.2%)	1 (0.5%)	182	**0.002**	11.719 (1.467– 93.599)
No	154 (44,8%)	9 (6.1%)	148		1
Can open doors and some windows					
Yes	210 (61%)	2 (1.9%)	108	0.364	1.981 (0.413 – 9.494)
No	134 (39%)	8 (3.6%)	222		1
Has unrefined depth perception					
Yes	141 (41%)	0 (0.0%)	59	-	-
No	203 (59%)	10 (3.7%)	271		
High chairs					
Yes	235 (68.3%)	0 (0.0%)	126	-	
No	109 (31.7%)	10 (4.9%)	204		
Presence of a baby stroller					
Yes	144 (41.9%)	0 (0.0%)	69	-	
No	200 (50.1%)	10 (3.8%)	261		
Presence of unprotected high bed					
Yes	268 (77.9%)	0 (0.0%)	35	-	
No	76 (22.1)	10 (3.4%)	295		

Source: Research data, 2016.

children spend the morning shift in day care centers or schools and during the afternoon they are at home, performing children's games and practicing some sports such as football and cycling.

In agreement with this study, a study conducted in Fortaleza, CE, 2004-2005, on falls in children found that the place of occurrence of falls in children was the living room (34.15%), followed by bedroom (24.39%), kitchen (14.63%), bathroom (9.75%), laundry area (7.32%), yard (4.88%)[13]. Most of the houses may present significant risks for falls, such as the presence of ladders without a handrail and the absence of gates and barriers that prevent children from accessing certain environments[16].

It was also evidenced that the most frequent type of fall was on the same level (55.2%), corroborating with the findings of a study that analyzed the data of 6,897 children victims of accidents. It is inferred that these data maintain a correlation with the types of games performed by the children under the age of five years old, and with the characteristics of the development at this age range, which involves curiosity, immaturity and lack of motor coordination, which tends to put them in dangerous situations[2].

Regarding the part of the body of the child reached at the moment of the fall, 37.8% reached the LL, followed by the face. With results similar to those of this study, in a study with the purpose of analyzing the accidents in children under ten years old hospitalized in Public Emergency Rooms in the city of São Luís, MA, it was observed that hospitalizations due to falls predominated in children aged two to five years old (41.3%), and the most affected regions of the body were upper limbs (42.2%), lower limbs (22.9%) and head/face (12.7%)[10].

Regarding the nature of the injury, the falls caused a cut or laceration (39.5%), and in some cases there was no injury (28.8%). A research that sought to know the epidemiological profile of children and adolescents affected by falls, in order to contribute to the construction of strategies for educational actions at school level on prevention of this events in childhood, done with 68 children in an Emergency Room of a philanthropic institution, general of regional scope, reference for 13 cities of the region of the western border of Rio Grande do Sul, Brazil, also identified the cutting injuries (36.7%) as the morbidity which caused more lesions among the children cared[7].

The multivariate analysis showed some significant associations between the home environment and the occurrence of falls in children under five years old. The relation of cultural aspects, such as the use of high nets; and structural, such as the presence of ladders or steps without a handrail; and organizational, such as exits and passages kept with toys, furniture, boxes or other items that may be obstructive, were factors that had significant effects when analyzed in conjunction with the occurrence of falls.

The practice of maternal care in certain regions of the Northeast is peculiar and secular when compared to other regions of Brazil. Peculiar, since many families in this region still use the rest net as the only resource for the positioning of the baby during sleep, while the other regions arm the nets only as an object of decoration. Secular, since the use of the net was a custom inherited from the Brazilian natives. It has been used since the time of the discovery by farmers and Jesuits. The use of the net is a present and indispensable element in Northeastern life, especially in the poorest areas of the Northeast region, such as the state of Piauí[17].

The literature is still scarce regarding the association between the use of the rest net, also called sleeping net, and the occurrence of falls in young children. However, its widespread use in the national reality requires that this risk factor be considered. Taking a closer look at the risk of falling furniture overall, this type of accident is prevalent, especially among children under one year old. In a study that aimed to analyze the profile of domestic accidents in the first six months of life, among children considered at risk at birth in a sample of 113 children, it was identified that the bed fall occurred in 80.0 % of the cases and is closely related to the lack of protection by the family, as well as the lack of knowledge about the various risk factors that contribute to the occurrence of the event[18].

The risk factor "presence of ladders or steps without handrails" is related to the structural aspects of the domestic environment and has a direct correlation with the family socioeconomic level, which has already been determined to be low income. Some authors[19] believe that the family income represents, among other elements already discussed, a predisposition to the risk of falls. In this sense, the construction of housing environments without following the minimum safety standards, such as the installation of handrails on stairs, is a reality in a significant part of Brazilian families. It is possible to affirm, in this sense, that the housing conditions have an influence on individual and collective health, with emphasis on the presence of weak infrastructures[20]. Thus, the identification of these factors and the control of environmental conditions may be useful in modifying or avoiding risks and thus reducing the incidence and severity of these lesions.

The risk factor "exits and passages kept with toys, furniture, boxes or other items that may be obstructive", related to the organization of the domestic environment also evidenced an association with the occurrence of falls. This

factor, which does not demand high financial investments, can be more easily modified, contributing to the prevention of accidents. This fact is confirmed by the systematic review[20] with the objective of knowing the risk factors of unintentional injury in domestic/family environment in children up to the age of four years old, that mentioned among risk factors the organization of the house .

CONCLUSIONS

The study identified high quantitative risk factors in the home environment that may predispose children to falls in children under five years old, as well as the sociodemographic profile of those responsible for the care of children. It was evidenced that the majority of the caregivers were female, married or in stable union and who was dedicated to the services of the home.

As a consequence of the accidents suffered by the children, the most prevalent lesions were cuts or lacerations and the area of the body most affected were the lower limbs, related to the fall of the same level or height, which was the main type of fall occurred. Regarding the period, the predominance in the afternoon shift was observed in this study, and the places where there were more falls were the living room and the yard.

Regarding the risk factors identified in the domestic environment, the relation with the cultural aspects, such as high net usage; the presence of stairs or steps without a handrail; and organizational, such as exits and passages kept with toys, furniture, boxes or other items that may be obstructive, have proved to be significant and reveal the multifactors involved in the occurrence of falls during childhood. In this sense, the approach to this problem must consider the complexity of the phenomenon, which involves, among other aspects, awareness of its epidemiology and identification of risk factors, in order to reduce the occurrence of this event.

It was observed that the home environment causes the occurrence of falls and this requires that the caregivers are aware of the risks of the environment, taking measures to avoid or prevent them. Nursing can develop strategies from the data exposed, such as extension programs, focusing on risk factors, taking safety measures and prevention of domestic accidents involving the child, the caregiver and the nursing professionals.

In a perspective that involves healthcare in Primary Care, nursing professionals should establish strategies that can guide the reduction of falls, focusing on preventive measures that increase safety. In the management area, the planning of educational programs involving parents and caregivers of children should aim to raise the awareness about the modification of the environment to make it safer from the risks identified in this study.

The consequences of morbidity and mortality due to falls in children cause damage to health, and social and economic impact on society. In this regard, it is necessary to expand action beyond the health area, betting on a set of initiatives that can be developed in a joint action of the community with health facilities.

Thus, the theme needs to be widely discussed in society, and especially in undergraduate courses in health areas, contributing to the reflection on the need to adopt preventive behavior to minimize cases of falls in children.

As a limitation of the study, it has been that the data was collected by self-report of the main caregivers of the children. In addition, falls are very common in this age group and because of this characteristic; caregivers may not perceive their occurrence as a type of domestic accident, which may decrease the estimates of the event being investigated.

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