How to cite this article:
INTRODUCTION

Domestic accidents in childhood are events with significant incidence in the reality of Brazilian families. News conveyed by the media about accidents involving young children in their own homes have become frequent in daily life. From this issue, caregivers of children, in view of their responsibilities, need constant guidance on the prevention of such accidents, thus reducing serious consequences or fatalities.1

Domestic accidents are the leading cause of mortality in children under five years of age in the United States. Although mortality is, in fact, a significant result, lesions in this population also have an effect on factors such as length of hospital stay and may affect eventually the life of the child and the family.2 They are considered also a major public health problem in both developed and developing countries. Notably, children aged between zero and 14 years old spend much time in the home and are, therefore, exposed to risks of injuries in the home environment.3

In Brazil, an study that aimed to analyze information related to 7,123 ten-years-old or younger victims of external causes assisted by services included in the survey VIVA - Violence and Accident Surveillance - for the year 2009 throughout the country showed that among the cases involving children, 6,897 (96.8%) were victims of accidents and 226 (3.2%) of violence. Most of the cases (66.6%) occurred at home; cuts were the most frequent lesions (35.7%), followed by contusions. In addition, from the total number of children, 60.5% was up to five years old.4

Children are subject to a variety of risks in the home environment. This fact can be explained by children’s limited physical and psychological development but also by the difficulty of their caregivers to reduce the risk of accidents.5

The results of a research held in Cuiabá that aimed to identify environmental, chemical, biological and cultural factors associated with deaths from accidents among children, adolescents and young adults showed that none of the houses was absolutely free from risks. It was observed that, in every house, sharp materials, tools, plastic bags and games are at the reach of children and also in all houses children had free access to kitchen, bathroom, laundry and stove. Therefore, changing the home environment is essential, combined with change in behavior of family members, focusing on prevention.6

Domestic accidents with children need to be consistently addressed, as they are considered events that may cause death or sequelae in children. Among the main types of domestic accidents with children under five years old, there is a high prevalence of accidents involving falls, burns and poisoning. Nearly 830,000 cases of deaths of children from these accidents are reported annually worldwide, what represents a considerable number.7

In this context, nurses and caregivers have convergent characteristics because the safety of the child is one of the focuses of their care. Therefore, it is up to the nurse, especially the nursing professional who develops activities in the Family Health Strategy (FHS), the role of guiding, individually, the caregiver of the child especially regarding prevention of accidents, and also collectively, the community based on educational interventions. This helps the caregiver to become efficient in this process by adjusting the environment to prevent accidents.8,9

Based on this approach, we understand that there is a need to develop research that may contribute to the recognition of this problem and, thus, guide preventive actions. Nursing plays a decisive role in issues involving children’s health and, more specifically, the prevention of accidents in this age group. Therefore, caregivers need to be alerted and informed about the risks of the home environment, making reflection an essential aspect to a possible decision making regarding change in the behavior when it comes to the way of taking care and of avoiding accidents. Given the above, this study seeks to understand the perceptions that caregivers of children under five years old have on the prevention of domestic accidents.

METODOLOGICAL ROUTE

This is an exploratory and descriptive research with qualitative approach. This approach was chosen because it is focused in considering and explaining the deepest aspects in order to describe the complexity of human behavior. It also offers...
more detailed diagnosis of the searches, customs, manners and intentions of human behavior.10

The study setting was a Basic Health Unit (BHU) in the city of Floriano, Piauí, located in the State region named Médio Parnaíba. The choice of this BHU was based on intentional criteria, according to the absolute number of children in the age group of the study and because researchers were already familiarized with the reality of the study site. The search for information of this survey took place in March 2014.

Caregivers of children under five years old participated in the investigation as they met the following inclusion criteria: be older than 18; be the caregiver of one child or more children aged at zero to four years, 11 months and 29 days for at least six months; exercise the function of caregiver for a minimum of four hours per day. The exclusion criteria were: caregiver with diagnosed mental disorder; person who took care of children with severe motor disabilities.

The sample was determined by theoretical saturation; when repetitive data were detected, the search for the information from participants was stopped.11 Thus, at the end, 16 caregivers of children under five years of age participated in the study.

Information were obtained through semistructured interviews covering the following items: socioeconomic characteristics and guiding research questions. In the interviews, besides recording the speeches of caregivers with voice recorders, the expressions, postures and other elements of the non-verbal and paraverbal communication were noted as these are essential to the analysis and understanding of the discourse of research participants, thus promoting more consistent information. The script had guiding questions, such as: in your opinion, what should be done to avoid these accidents with children? Have you been guided and/or have had access to information about how to prevent accidents with children in the house environment? Tell me how it was.

The collected responses were organized following the themes originating the guiding questions of the study and, in the analysis, the perceptions that caregivers have on the prevention of accidents with children under five years old were interpreted. To start the analysis of information collected from caregivers, the speeches were heard and transcribed by the researchers themselves, and the content was analyzed in three stages, according to the thematic content analysis of Bardin. First, pre-analysis was made from a brief reading of the material. Next, material was explored to define the categories. Finally, information were condensed for a reflective and critical interpretation.12

As for the ethical and legal aspects of the research, this was done with the approval of the Ethics Committee of the UFPI under Opinion nº 466/12. In order assure anonymity, participants were identified by “C” followed by the Arabic numeral correspondent to the order of the data collection instrument. Interviews were conducted after participants signed the Informed Consent. The guiding principles of bioethics, namely, autonomy, beneficence, non-maleficence, justice and equity, were followed.13

RESULTS AND DISCUSSION

Sixteen caregivers of children under five years of age, among them two grandmothers, one father and thirteen mothers, participated in this study. All were considered informal caregivers, as they were family members providing care for dependents, in this case, children under five years of age, according to the specific needs for each age. The most prevalent age group was between 25 and 31 years. As for schooling, incomplete secondary education prevailed. Family income ranged from less than one to six minimum wages, with the most reported family income below one minimum wage.

The informal caregivers cited above rendered non-professional care to children under five years in the homes of the children themselves, and these were their children or grandchildren. The name given to study participants was justified by the fact that all are relatives of the children. Notably, these informal caregivers normally have a very close relationship with the child or can also be friends and/or neighbors and usually the responsibility lies only on this one person, called the “primary caregiver.” This primary caregiver also has the function of the one person who performs most of the activities.14,15

Results were grouped into three categories: perceptions of the caregiver on the childcare and the relation with domestic accidents; perceptions on the child’s development and the relation with domestic accidents; and perceptions on the prevention of the accident through the supervision and guidance to the child.

PERCEPTIONS OF THE CAREGIVER ON THE CHILDCARE AND THE RELATION WITH DOMESTIC ACCIDENTS

We sought to know how caregivers - mostly mothers who spend most of the day with the child under five years old, providing essential care, including aspects related to the protection of these subjects - perceived domestic accidents, from a preventive approach. It was observed, through the units of meaning extracted from speeches, that, despite constituting a complex and multifactorial phenomenon, domestic accidents can be explained by the presence or absence of certain risk factors.16 The perception of child caregivers in this study was determined by a multitude of factors, but that, in short, were all linked to the role of the primary caregiver/family or to aspects relating to the child.
With regard to the dimension caregiver, the category with more emphasis on the perspective of these caregivers for the prevention of accidents was related to the care. Based on the speeches, it was possible to find allusions to the theme prevention of accidents associated with the care or the lack of care:

Ah, I care like this, attention for not to let him fall from the hammock, bed, also, with fire, with those things I am careful [...] (C05).

It is about being very careful [...] because we can not be reckless, because any little thing may become an accident [...] (C07).

I think that if we have enough care, we can avoid [...] (C08).

It is lack of care, parents lack care with children, especially with the products [...] because they have no care with chemicals (C03).

This reference to care in order to prevent accidents comes possibly from gender relations involved in the act of caring for the family, as from the 16 participants, 15 were women. It is known that, culturally and historically, this function has always been linked to the female figure. In addition to that, when faced with the role of mother, the woman takes on the responsibility for the family, as from the 16 participants, 15 were women. It is known that, culturally and historically, this function has always been linked to the female figure. In addition to that, when faced with the role of mother, the woman takes on the responsibility for the child and she is concerned with providing care, and for this, she needs to keep attention directed to the child.17

Truly, the caregivers admitted in their speeches to believe that the maternal responsibility of providing care is fundamental to protect the child from the consequences brought about by accidents. The feminine care is a fact, although this does not mean to say that care is provided exclusively by women. It is noticeable the reference to parents-men as also responsible for providing care in one of the speeches.

[...] thinks that is only about putting food in the table that means to be responsible, no, to be responsible really means to care for your child (C03).

Although the reference to care is deeply rooted in the female function, it is interesting to note that there is some annoyance related to this assignment be seen socially as an exclusive activity of women, especially when that speech comes from a male figure, as in speech above. However, it is clear that there is still reduction in the personal involvement of the father with the child. Some fathers suggest that this fact is due to the lack of time or opportunity to learn to “be a father” or a lack of confidence to take on the role. Many fathers reveal the negative expectations of society seen in the media, reinforcing the image of “supermom” to the detriment of the figure of the father.18

Thus, there is the possibility and the need for changing habits and customs of society aiming in order that men and women may share their responsibilities in caring for children. Reflections on the participation of men in the context of caring and showing affection in this process are necessary.19

Moreover, the involvement of fathers in child care may be considered a protective factor in the context of domestic accidents involving children. In a research conducted in Japan that investigated the impact of paternal involvement in child care to reduce the likelihood of childhood injury found that children under high degree of involvement of fathers in their care were less likely to suffer unintentional injuries compared to those who had low father’s involvement in the education of children.20

With regard to accidents in the home environment, participants reported the neglect as a possible reason. The unrest in protecting the lives of children from accidents can be abstracted from the speeches. These hinted that the accident is the result of neglect of the adult caregiver.

[...] there are parents who go out to work, leaving children with other older children, they leave chemicals under the sink, at the reach of the child (C03).

[...] a while ago, there was a father that left the children alone, in the countryside, there was a fire and the kids got burned, all died completely burned, why? Because he left the two children alone, then, how would they open the door to be able to leave? they didn’t even have how to climb in something, they stayed there, in the very same place, it was very [...] we feel so so sorry, it was very painful [emotional] (C15).

It is lack of care, that parents have care with children, especially with the products [...] the little child takes the product, if the child inhales it [...] if not taken straight to the hospital, that can cause damage, right? some irreversible (C03).

Speeches reveal also the concern of participants in relation to parents who leave their children in the care of another child. This argument reminds the recommendation of the Ministry of Health to never leave a child under the care of another child.21

In the opinion of caregivers in this study, a act of neglect like this and others may bring very serious consequences, from irreversible damage to death. Amid this, some caregivers of this study bring to light the opinion that the “well looked after child” never has accidents.

I do my best, I take good care [...] (C02).
I think I am a good mother, I watch very well my children, I take good care of them, I pay close attention to them [...] (C13).

[...] I consider myself caring, because I never let anything happen to my children, they come first [...] (C09).

It is understood through the above lines the notable concern of parents and grandparents in provide good care. This is revealed in the lines “I do my best”, allowing infer that, for participants, the responsibility of mothers is huge, to the point that they find themselves to be blamed if an accident with the child happens, if this care is not well provided. This can not be said, because although the care is in fact a safe and important prophylaxis, assigning accidents only to this aspect shows a simplistic and superficial view of the facts, one that ignores emotional, environmental and social aspects.22

PERCEPTIONS ON THE CHILD’S DEVELOPMENT AND THE RELATION WITH DOMESTIC ACCIDENTS

Another aspect involved in accidents was noted in the speeches of caregivers, namely, the recognition (or not) of the process of development of the child, which explains why children, depending on the age, like to put objects into their mouth or fall so frequently, for example:

The accident that happens more often, sometimes, is the child put something in the mouth, such a coin, these things [...] (C05).

What happens mostly is children who like to pick up things that should not pick, climb on top of things and fall, then they get hurt [...] (C04).

[...] he wants always to be there hanging in the desk (C16).

[...] we have to keep an eye out for he not slip, fall, not to pick up a stone, not to pick a bean seed (C03).

When caregivers reported their experiences about accidents, it was possible to extract their perceptions about the accident correlated to the stage of development of the child, even if implicitly, since no participant clearly referred to the development phase in which the child was. However, attitudes and postures presented by the children and reported in the speeches of caregivers revealed that relationship. For example, as stated in one speech, a child under one year of age runs the risk of aspirating foreign bodies because in that age the child acquires the ability to find its mouth and take small objects left around or removable parts of objects to the mouth.23

In a survey conducted in Hawke Bay, New Zealand, that aimed to investigate the perception of parents and paid caregivers about the risk of injury in young children in the home environment, it was observed that mothers establish a direct relationship between affection and understanding the development of the child in order to understand and respond appropriately to the risk of injury. According to the study, repeated high-risk patterns can be identified when parents do not understand the development phase in which the child is or when they believe that their children may be more capable than they actually are and expect them to do what they were directed to do, or that they remember instructions and comply with the rules (often a set of “family rules” that many adults would find it difficult to comply).18

The child aged from one to three years, for example, get the sense of autonomy that causes often environmental disturbance and twist around typical negativism. This results in that, often, when the child tries to express his will, he may clash with everything around, thereby facilitating accidents. Moreover, it is not difficult to find in the perception of caregivers some activities and characteristics proper of the age in which children from zero to five years are, including in the assessment the child size as a risk factor to the accident.23

[...] We have to be very careful, always keep an eye open, because they are suddenly doing it [...] yesterday, for example, I’m taking care, I go there, and there, when I thought they were inside, no, they were all in the street, the two of them are small, in the twinkling of an eye, they mess up (C08).

Pay attention to everything, because they blind us [...] (C06).

It is difficult, we may have that care, but it is never enough because the child blinds us [...] (C16).

The view that children “mess up” (C08) or “blind us” (C06) demonstrated in these expressions clarifies that caregivers do not allow the child the act of exploring the environment, as a desire proper to the development phase in which the child is. These same opinions were found in the lines of relatives of children that are burn victims in a national study when they cite the “unease” of children as a determining factor for the accident.24

The need to recognize that, in fact, some child’s own characteristics contribute to the increased risk of accidents is undeniable. However, it is necessary to reflect, from the recognition of the variety of factors from different dimensions and that interact, on that other shades can be grouped as risk factors for accidents in children.
A qualitative research on parents’ perceptions of barriers and facilitators to prevent unintentional injuries in children at the home environment done in four study centers in England (Nottingham, Bristol, Norwich and Newcastle) suggested that the provision of information on adequate safety to the child’s age and development may be a way to provide assistance in order to avoid domestic accidents with children.25

Perceptions on the Prevention of the Accident from the Supervision and Guidance to the Child

The act of overseeing and guiding the child was shown by participants as a tool for the prevention of domestic accidents with children, reducing their frequency.

[…] It is to be twenty-four hours a day watching […] (C13).

[…] I do not leave him alone, I do not trust even to leave him here alone sleeping […] when I leave him sleeping, every time I’m looking (C11).

[…] I’m always watching […] only one take a little rest when they are sleeping, because I know they’re quiet, but when he’s awake I’m always watching (C09).

[…] I do my other obligations, but always watching the two of them there (C14).

I try to guide her, a little, you can not [laughs] […] (C14).

[…] but she is already […] already understands more, then I’m always explaining to her [referring to the eldest daughter, around four years] what is dangerous and what is not, I always I tell her not to touch (C09).

The supervision of the child by the caregiver and the guidance provided to the child about preventing accidents emerged as interfaces for the promotion of a safe home environment. The statements revealed the need for constant observation of the child by the caregiver, reflecting the children’s inability to remain safe at different moments. In this sense, the adult supervision is essential to the prevention of injuries. In turn, guidance on accident prevention was described as impact factor in the personal development of the child, when home accidents are shown as unpleasant and painful situations.

In fact, the direct supervision of the child and the accident as the result of risk factors involving the child. In this sense, they emphasized proper care or lack of care and supervision and child guidance as strategies involved in the occurrence and prevention of domestic accidents with children.18

It is essential to clarify that domestic accidents involving children have complex causes and consequences. They involve the caregiver, the child, the family and the environment, and everyone involved can have participation in the grievance and also in the mitigation of the accident. It is known that although mothers believe that supervising the child is an appropriate means of prevention, a significant part of childhood accidents occur with children who are accompanied by their own mother. Still, it is undeniable that, when the adult remains closer to the person who needs care, protecting in the various situations that constitute risk factors, many accidents can potentially be foreseen and avoided.27

The interaction of several factors – including the behavior of the child and the adult, physical and social environments, neighborhoods, family patterns, cultural differences and expectations of society – shows a complex context that can directly and indirectly affect the safety of children. The influence is not necessarily consistent, and, therefore, it can be difficult to predict the specific risk or protective factors to prevent accidents in childhood.18

Final Considerations

This research has allowed us to understand that the participants perceive the domestic accident involving children from two main dimensions: the accident as a result of the conduct and ways of confronting of the person who looks after the child and the accident as the result of risk factors involving the child. In this sense, they emphasized proper care or lack of care and supervision and child guidance as strategies involved in the occurrence and prevention of domestic accidents with children under five years old. Concerning the children, they implicitly added that age and characteristics of the child development are predisposing factors to domestic accident.

It was possible to perceive the value of gender relations in the provision of care to the child when the mother is singled out as responsible for this task, and the discomfort of one of the interviewees – for being male – to assume the function of caregiver, which is socially viewed as a female function.

It is reasonable to consider that the study of the thematic perceptions of caregivers on the prevention of domestic accidents involving children under five years of age is still deficient in the context of Brazilian nursing, given the paucity in disseminating information on accidents at the home environment and their peculiarities. Furthermore, we experienced a difficulty in finding specific investigations on the theme. In this sense, the approach to the prevention of domestic accidents in the perspective of caregivers
provides important assets to nursing for discussing the attention to children under five years of age and those involved in their care.

It is worth mentioning as a limiting factor of this study the homogeneity of participants, resulting in little power of generalization of the information in a small context of study. Thus, it is suggested the realization of studies involving further investigation of feelings and ways of thinking of caregivers regarding the prevention of accidents in the home environment, addressing domestic accident as a risk factor and harm to child health, including nurses as disseminators of information and effective strategies to face this problem.

REFERENCES