A criança vitima de acidentes domésticos sob o olhar das teorias de enfermagem

Accident victim of domestic child under the look of nursing theories

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Objective: to show, from the scientific production, domestic accidents with children and relate them to Nursing Theories. Method: this is an integrative review, held in July 2013 in the databases: LILACS, SciELO, BDENF and MEDLINE. As inclusion criteria there was research working with the theme; available in its entirety; in Portuguese, Spanish or English, published between 2000 and 2013 and the exclusion criteria was monographs and abstracts. Results: domestic accidents have revealed an important cause of assistance, hospitalizations, disabilities and deaths in children, especially males, aged 1-4 years old. Nursing Theories to corroborate these findings, showing that these accidents are justified by the changes taking place in the individual at every stage of life were used. Conclusion: nursing must establish strategies to minimize the risk of accidents through protective actions and health promotion. Descriptors: Domestic accidents, Child, Nursing.

RESUMO

Objetivo: mostrar, a partir da produção científica, os acidentes domésticos com crianças e correlacioná-los às Teorias de Enfermagem. Método: trata-se de uma revisão integrativa, realizada em julho de 2013, nas bases de dados: LILACS, SCIELO, BDENF e MEDLINE. Adotaram-se como critérios de inclusão: pesquisas realizadas que trabalhassem com o tema; disponíveis na íntegra; em língua portuguesa, espanhola ou inglesa, publicadas entre 2000 e 2013, sendo excluídos: trabalhos monográficos e resumos. Resultados: os acidentes domésticos têm se revelado uma importante causa de atendimentos, internações, incapacidades e óbitos em crianças, principalmente do sexo masculino, na faixa etária de 1 a 4 anos. Utilizou-se Teorias de Enfermagem que corroborassem com esses achados para mostrar que esses acidentes são justificados pelas mudanças que acontecem no indivíduo em cada etapa da vida. Conclusão: cabe a Enfermagem estabelecer estratégias para minimizar os riscos de acidentes por meio de ações de proteção e promoção da saúde. Descritores: Acidentes domésticos, Criança, Enfermagem.

RESUMEN

Objetivo: mostrar, a partir de la producción científica, accidentes domésticos con los niños y la relación con las Teorías de Enfermería. Método: se trata de una revisión integradora, realizada en julio de 2013 en las bases de datos: LILACS, SciELO, BDENF y MEDLINE. Se han adoptado como criterios de inclusión: estudios que trabajan con el tema; disponible en su totalidad; en portugués, español o Inglés publicados entre 2000 y 2013 y fueron excluidos: monografías y resúmenes. Resultados: accidentes domésticos han revelado una causa importante de visitas, hospitalizaciones, discapacidades y muertes en los niños, especialmente los varones, con edades entre 1-4 años. Utilizamos Teorías de Enfermería para corroborar estos hallazgos para mostrar que estos accidentes se justifican por los cambios que se producen en el individuo en cada etapa de la vida. Conclusión: enfermería debe establecer estrategias para minimizar el riesgo de accidentes a través de acciones de protección y promoción de la salud. Descriptores: Accidentes domésticos, Niño, Enfermería.
INTRODUCTION

In childhood, the risk of injury is high in developing countries like Brazil, which characterizes the existing mortality rates in these countries, with an average of 50.5 per 100,000 for male children and 43.5 per 100,000 for female children. Most global amount of childhood accidents in developing countries compared to developed countries is explained by larger and younger demographically populations.¹

A study conducted in 2008 in the city of Kampala in Africa, with children under 13 years old, where they were unintentionally injured, showed that out of 556 patients who were enrolled in the hospital, 47% were children under five years old. The home environments were 54.8% of the higher incidence places of unintentional injuries in childhood.² Another research conducted in the UK revealed through recent reporting data, that between 2000 and 2002, there were about three quarters of a million on average, that is 750,000 children from 0-15 years old assisted annually in hospitals, having injuries resulting from accidents at home.³

Accidents or unintentional injuries are the leading cause of death for children from 1 to 14 years old in Brazil. In total, about 4,700 children die and 125,000 are hospitalized annually, according to the Ministry of Health, being a serious public health issue.⁴ The most common accidents are traffic, drowning, suffocation, burns, falls, poisonings, accidents with firearms and others being the leading cause of death and the third cause of hospitalization. Suffocation caused by airway obstruction is the 1st cause of death among infants accidents up to 1 year old. Drowning is the 2nd leading cause of death and the 8th in hospitalization, with nearly 4 deaths per day since we know that for a child drowning, just only 2.5 cm of water is needed.⁵

By the high rates of accidents referred to in the above studies, it can be seen the home environment has a high influence on the incidence of accidents in children, especially falls, fires and drownings occurred inside their homes. Due to minimum safety levels of the home environment, children with lower socioeconomic status have more than twice as likely to reach death from household accidents when compared with children of a higher socioeconomic status.¹

A study confirms that accidents involving children under five years old occur mostly in their houses, because is the place where they spend most of the time. Therefore, within domestic environments, children in this age group are exposed to a wide range of risks to health and daily life, and this fact justified by its restricted physical and psychological development, as the limited ability of their caregivers mitigate risks accidents.⁶

An accident is an unintentional and avoidable event, causing physical and/or emotional injuries at home or in other social scenario such as work, transit, schools, sports and leisure.⁷
For the World Health Organization (WHO) accident is a casual event that is independent of human will, caused by an external factor causing bodily or mental harm.\(^8\)

According to Ministry of Health Ordinance 737/GM, from 16 May 2001, the accident is understood as an unintentional and avoidable event, causing physical and or emotional injuries at home or in other social scenario, such as the work, traffic, school, sports and leisure. This Ordinance adopts the term accident in order to be established by custom, however, taking out the fortuitous and casual connotation that can be attributed to having deep rootedness in social, economic and political structures as well as in individual consciences, in a dynamic relationship among those involved. It is assumed that to a greater or lesser degree such events are perfectly predictable and preventable.\(^5\)

The Convention about Rights of Children and Adolescents from 1990, regulates that knowledge of Health principles should be ensured to all sectors of society, especially parents and children, especially the actions of prevention of accidents should receive the same support for the application of that knowledge, among others.\(^9\)

It is clear that the responsibility of some parents in providing a favorable environment for their child and ensure satisfactory development is neglected and disregards the recommendations in the Brazilian Constitution and the Statute of Children and Adolescents, established by Law 8.069/90, Article 227.

It is the duty of the family, society and the State to ensure children and adolescents with absolute priority, the right to life, health, food, education, leisure, professional training, culture, dignity, respect, freedom and family and community life, and put them safe from all forms of negligence, discrimination, exploitation, violence, cruelty and oppression.\(^1^0\)

Domestic accidents are related to the child’s age, psychomotor development stage, environmental, educational, socioeconomic and cultural factors, which are directly related to the behavior, lifestyle, level of awareness and education of parents and caregivers and lack care in the safety and security of children.\(^6\)

The World Health Organization in its World Report on Child Injury Prevention, states that the children injuries problem is universal, where certain countries have significantly lower rates than others, but no country tops every classification tables for the safety of children.\(^1^1\)

Policies such as “Agenda of Commitments for Comprehensive Child Health and Reduction of Infant Mortality” of 2004, prioritized the comprehensive and multidisciplinary care, with a look at the health and social needs of children and their families, focusing on the promotion of health, and the Pact for life of 2006, intensifying these strategies pointing the territory as a privileged space for performing actions that promote the health of children, allowed substantial progress in addressing the subject in the early years of life.\(^1^2\)-\(^1^3\)

According to Dr. Lincoln Freire, president of the Brazilian Society of Pediatrics (1998/2004), although Brazilian mortality from diarrhea, respiratory infections and immune-preventable diseases had decreased, the one generated by “external causes” had increased. The most important thing is that accidents are preventable and should not be regarded as inevitable. The incidence of overall accidents and childhood, in particular, has been the subject of many studies in various parts of the world.\(^1^4\)
Domestic accidents have been revealed as a major cause of assistance, hospitalizations, disabilities and deaths among children in several countries and has contributed considerably to maintain the high rate of infant morbidity and mortality.¹

In this sense, it is clear that accidents and violence constitute as a problem of prevention education and public health of great magnitude in Brazil. There is a greater or lesser incidence in all countries, thus constituting the first cause of death from the third year of life to the young adult, producing heavy burden on society and causing strong impact on morbidity and mortality of the population.

However, there is a great need for studies that invest so much in changing behavior on the concept that accidents are related to randomness and unpredictability as the awareness of family members and health professionals in the search for preventive measures.¹

The professional must seek to rescue the practices of care of mothers and differentiates them from careless practices, seeking concepts that mothers bring with them, and discussing the process of building inherent awareness of the accident situation, being considered causes of damage or even death.⁵

As the nurse educator, he is able to carry out educational programs involving parents or caregivers of the childcare, promoting actions concerning the prevention of accidents and the actions to be taken in these cases.

It is important to highlight the process of maturation and development experiences of traumatic and striking situations, which may cause the family, and even the mother feel guilty for failing to take precautions or delegated that responsibility to others, which weakens the family to face the consequences of the accident.¹

In this perspective, nursing and other members of the Family Health Strategy team (ESF), in child care, can work to increase access to education and health promotion actions and, thus, contributing to the reduction of social inequalities and improving the quality of life of families and children, with possibilities to increase health indicators in childhood. The Nursing in ESF has had activities besides acting in care, management, teaching, research and social control assuming other social demands as articulation, organization, mobilization and community life. Among these demands, there are cases of injuries from external causes.¹

To support this study, some nursing theories as theoretical frameworks will address, providing opportunities for critical reflection about the theoretical and conceptual elements that guide to be, to know and to do nursing based on values and principles, and the application of theoretical frameworks in practice assistance from reflections on the paradigmatic origins, central concepts, assumptions and propositions of the main nursing theories.

These theories have influenced practices in nursing by identifying scenarios where this practice must take place and the characteristics of the recipients of care in nursing.

The theory has been described as the systematic explanation of a phenomenon in which the components and concepts are identified, relationships are proposed and previsions are made.¹⁸

Therefore, nursing will work in the perspective to help the family in preventing household accidents, including the vulnerabilities and thus forwarding, assisting and encouraging the children to a better quality of life.
Given the importance of the theme, it aimed to show domestic accidents with children and relate them to Nursing Theories from the scientific production.

METHOD

This is an integrative review, term used to indicate a method which provides a synthesis of knowledge and incorporation of the applicability of results and significant studies in practice.¹⁹

The methodological process carefully fulfilled the following steps: selection of the hypotheses or questions for review; property establishment of sample selection criteria; categorization of studies and synthesis of knowledge produced; data analysis and results; and interpretation of results, providing the critical examination of the findings.

The analysis of the selected studies was conducted, guided by the research question:

How the home environment influences the increase of accidents involving children?

The bibliographic survey was carried out in July 2013 in the databases: LILACS, SciELO, BDENF and MEDLINE.

Inclusion criteria were studies that work with the theme; available in its entirety; in Portuguese, Spanish or English published between 2000 and 2013. Monographs and abstracts will be excluded. In the selection of keywords, the terminology in health consulted on Health Sciences Keywords (DeCS) were used, from the following words: domestic accidents; children; nursing. Based on this, 70 references were found in the databases (10 LILACS, 15 BDENF, 10 SciELO, 35 MEDLINE).

From them, 16 articles were excluded because they were duplicated, 13 because they were abstracts, one was not about the theme of this research and 30 articles were not available. Thus, after the completion of reading the abstracts, there was a screening for relevance and property that answered the purpose of the study reaching a selected sample of 10 works to compile the results of this article, with 6 LILACS, 2 BDENF and 2 SCIELO.

Among the remaining ten studies, 4 were exploratory articles described with a quantitative approach, 2 descriptive transversal, 1 exploratory document, one ethnographic study with a qualitative approach, one using social constructionism and one prospective descriptive epidemiological. Three research were conducted in Fortaleza-CE, one in Patos-PB, Cascavel-PR, Cuba, Recife-PE, Maringá-PR, Vale do Rio Pardo-RS and Londrina-PR. The period of execution of the works ranged between 1999 and 2013.
RESULTS AND DISCUSSION

In a study, authors showed there were 13,809 occurrences at the Children’s Hospital Noaldo Leite in the period from 2003 to 2006, where 897 cases (6.49%) were related to domestic accidents.²⁰ The total cases of domestic accidents found in this research is similar to other study performed in the Children emergency department of a general hospital in São Paulo, where in 9,686 cases were treated between January to March 1999, 942 (9.72%) were domestic accidents.²¹ In both research the events caused by accidents were close to 10% of all assistance, which is considered very representative front the various possibilities of diseases in childhood. Domestic accidents have been shown to be an important cause of assistance, hospitalizations, disabilities and deaths in children, and has contributed considerably to maintain the high rate of infant morbidity and mortality.²²

It is noteworthy that most domestic accident victims were male with 520 cases (58%) of the total surveyed and 377 occurrences (42%) were female. These data are similar to those found by other researchers as a research conducted with 942 children, 56.1% were male and 43.1% female;²¹ other research conducted with 260 children, 55.4% were male and 44.6% were female;²³ and one another conducted with 270 children, 67% were male and 43% were female.²⁴

In study analyzing the most common types of accident, the biggest incident were in the transit (63.6%), followed by falls (20.3%), other causes (9%), burns (2.9%), clinical problems (2.6%), drowning (0.8%), aggression (0.5%) and injury caused by firearms (0.5%).²⁶ In these types of occurrences, boys were most assisted. Accidents characterized by “others” were objects falling on the person (4%) followed by the dog bite (1.6%). The objects falling on boys had the highest number of assistance (2.4%). This result differs from the one found in a study conducted in São Paulo, where the falls were the most common accidents (54.1%), being predominant among girls with 70% of cases in different age groups (older and younger than five years old), and for boys was only 45.4%.²⁷

Other authors in their study reported that all accidents occurred among children aged 1-4 years old, mainly in males (80.0%).²⁸ The places where these accidents occurred were in the kitchen (50.0%), bedroom (27.0%), the yard (14.0%) and other environments (10.0%), especially in the morning (66.6%), which differs from some data found the afternoon as the shift of most frequent occurrence of accidents (42.3%), followed by the night (38.5%).²⁹

Regarding the higher prevalence of accidents involving children, it was realized that this happens in male (72.28%) and 27.72% of female children, aged one to five years old, having as potential environment such accidents at home and major accidents groups are falls, poisonings, pedestrian accidents and burns, justifying this fact by great pride and curiosity of the child and his long stay at home.³⁰

A research found that out of 108 children aged between 01 and 06 years old, 57 were male and 51 of feminino.³¹ Out of the 57 (52.78%) children who experienced accidents, 37
(64.9%) were male and 20 (35.1%) were female. In relation to children who have not experienced accidents, it is observed that 20 (39.2%) were male and 31 (60.8%) were female, that is, the highest percentage of children who suffered no accidental injury was female.

This male predominance may be related probably to the behavioral differences of each gender and cultural factors that determine greater freedom to the children and increased vigilance of girls. The boys play and do other more dynamic activities with greater physical contact, while girls develop milder activities. Another fact is that culturally boys gain freedom sooner and play without much adult supervision.

Corroborating this thinking it is essential to introduce the theory of Medeleine Leininger (1980), an American nurse who developed in the 60s the Transcultural Theory, also known by the terms ethnonursing or cross-cultural nursing. The Transcultural theory was defined by Leininger as “the study of beliefs, values and practices of nursing care, as perceived and cognitively known by a particular culture, through their direct experience, beliefs and value system”.

While working as a clinical nurse with disturbed children and their parents, she observed recurring behavioral differences between children and concluded that these differences had a cultural basis, a fact that deserves to be understood by nurses to cope with the variations of care for clients. For her, different cultures perceive, know and practice care in different ways, although there are common things in the care of all world cultures. Therefore, male and female groups have culturally manifestations, behaviors and modes of life that should be perceived both in the home environment as by health professionals to be able, from that aspect, implementing accident prevention actions in accordance with each age group.

As for the age of the children, it was found that 21.18% of cases had age ranges above 1 to 2 years old and 11 months, 21.29% in the age groups 3-4 years old and 57.53% between 5 and 11 years old. The Toddler phase (1-2 years and 11 months) and preschool (3-5 years old) accounted a significant proportion of the age group of domestic accidents. These findings are approached in a research with 942 children, in which 27.1% were in Toddler phase and 21.8% were in school phase.²¹

For being in maturing of the organic systems acquiring locomotor and manual skills, they become more prone to contracting diseases and to be victims of accidents, that is, becoming more vulnerable to the environment conditions.³

In Toddler phase, biological development is characterized by the acquisition of gross and fine motor skills, locomotion being the main gross motor skill acquired, allowing children to master a wider range of activities. The unrestricted freedom acquired through mobility, together with a lack of attention to the dangers of the environment is an important factor to accidents in early childhood which can also occur in preschool (4-6 years old). The difference in the occurrence of accidents between the two groups (Toddler and pre-school) may be that in the preschool, the gross and fine motor skills are already better established, as well as coordination and balance, making less prone to falls than younger children do. They are more attentive than younger children, more respectful of the rules established by parents, being aware of some situations of danger for accidents, such as contact with sharp instruments and hot objects.³²
According to the theory of Callista Roy (1976), the physical-physiological mode adaptation model corroborate the above. There are physical and chemical processes involved in the function and activities of living organisms, so that each age group has diversified behaviors. In this circumstance, each age group will manifest adaptation according to each stage of life related to the situations experienced in day-to-day and social relations, since this incidence is possibly linked to the characteristics of child development in these phases, whose curiosity, immaturity and incoordination put them in danger.

Regarding the types of accidents, authors report that the majority was due to fall (69.15%). Domestic accidents caused by exogenous intoxication represented 20.28% of the total. The other reported cases were choking (1%), burns (7.13%), injuries by sharp objects (1.78%), firearm projectile (0.33%) and electric shocks (0.33%). It is argued that other authors also point falls as the main cause of domestic accidents in children.

Regarding the age group of 1-5 years old, the major cases occurred at home, according to a research, represented by the falls, burns, aspirations or introductions of foreign bodies and exogenous intoxication. Exogenous intoxication are included in frequent domestic accidents in children, especially in children under 5 years old. For the most part, it is accidental, however, arising from facilitating situations, the peculiar characteristics to the phases of the child’s inappropriate behavior of family and little incentive measures and preventive behaviors.

According to the National Information Toxic-Pharmacological System of Oswaldo Cruz Foundation in Brazil in 2005 were reported 84,356 cases of human poisoning, with the age group of zero to five years old as the most affected, with 17,238 (22.3%) and records of 30 deaths. Among the main toxic agents that have caused poisoning in children in this age group were medicines (35%), the household cleaning (18%) and industrial chemicals (9%).

Poisonings are facilitated because the products have attractive packaging to childish curiosity, are easy to handle, stored in improper places, like also present the adult’s failure to adequately monitoring the child. They are also potentiated by the habit of raising children with certain freedom in the home by supposing they know them very well and also to the culturally habit to pack chemicals in soft drink containers.

The feelings experienced by family members before the occurrence of intoxication manifested in different ways and at various levels of intensity. Most common are anxiety, worry, despair and nervousness. In some cases it is the impression that the family had not fully aware of the existence of such feelings.

It is worth mentioning the need for health professionals to provide care in cases of poisoning among children, hearken to the situation of the parents, not only in order to reassure them, but also to understand them forward to a new situation they are going through, and causes them stress and requires decisions.

In this respect, the theory of Dorothéa Orem (1971) cannot be applied to children, as self-care is configured as an assistance strategy to meet the needs of the family and not the child victim of domestic accident. For Orem, self-care is the practice of activities that the individual starts and runs for their own benefit in sustaining life, health and well-being. It aims at actions that following a model, contributes in a specific way, integrity, functions and human development.
Self-care is being understood in the literature in health, specifically with regard to studies on the prevention of accidents, fragmented and limited way, being restricted to the treatment arising from an accident situation or the preventive nature only in certain situations specific, such as the use of non-slip flooring, packaging of chemicals and medicine in places out of reach of children, the opposite directions to the positioning of the pot handles on the stove, etc. The definition of self-care addressed, therefore, is guided in a wide consciousness of the individual, which includes their preservation and recognition as a subject of law. As the child is very dependent on adults it is the responsibility of them (adults) control of their life activities.

The risk factors in the home environment can compromise the child’s development, contributing to trigger several types of accidents, in certain cases can cause serious injury and irreversible consequences.

Home accidents are closely related to the family’s behavior and social network with the lifestyle, with educational, economic, social and cultural factors, but also to the specific stages of children, characterized by sharp and continuous learning curiosity of children in the age group of 1-5 years old. In this age group which could explain the predominance of occurrences of accidents is that the child does not have complete control of notions of distance, speed, space and time, and also the inadequate supervision of the responsible adult, which can foster greater exposure to such occurrences.

In the theory of Roper, Logan and Tierney (1970), in their assumptions for the Model of Life Activities, they report that throughout the life cycle to adulthood, most people tend to become increasingly independent in their activities. While independence is valued, reliance should not diminish the dignity of the individual. The way in which each individual carries out life activities varies from person to person and according to the development phase, thus, younger children will experience accidents that can be much more complex than older children, by the level of knowledge, attitudes and behavior inherent in every phase of the life cycle.

Actually, the home environment is hostile to small inhabitants and only under the close protection of parents is that they can avoid serious accidents. The small child, ignoring these dangers, left to its own, certainly not survive at their own home. Thus, the lack of information, the carelessness and negligence of parents or caregivers are an important factor that allows the exposure of children to accidents in their own environment. In a study, it was found that 57% of injuries occurred in their own houses and, of those, 43% in the presence of an adult or family member.

The family has been the hierarchical space of subordination, violence and intra-family neglect, causing suffering to their members, particularly women and children, who are the most vulnerable. It is important that the family take its role as primary socializing agent, as it is within the family that the child learns to live, love, tolerate frustrate, defend, fight, compete, survive and believe.

The knowledge derived meanings and practices of the world view, of factors of social structure, cultural values, environmental context and uses of language are essential to guide decisions and nursing actions in promoting cultural congruent care.
The assumptions related to Transcultural theory of Leininger include that nursing as a discipline and a transcultural care profession, has the central purpose of meeting human beings in all areas of the world. The culturally based nursing care being beneficial and healthy contributes to the client’s well-being - individual, group, family, community or institution - as work in the context of their environment.

In this respect, the Transcultural Theory supports us to acquire knowledge and traditional, popular skills, culturally learned and transmitted used to provide charitable acts, when in the event of an accident supporters to other individuals or groups with obvious needs, in order to improve their health condition.

CONCLUSION

Children, in different stages of development have different traumas, and this is fundamental to the definition of efficient prevention programs. The child behavior development concept and the characteristics of each stage can be extremely useful for parents and for doctors.

Children who are in the age group of 1-5 years old need greater protection and vigilance by those responsible, because the notion of danger is not yet realized. However, they have fluent imagination, playfulness, curiosity, longing for the unknown, child behavior characteristics that, if unchecked, can lead to serious accidents.

In addition, communication with parents as to the specific physical and cognitive limitations of these age groups can help in the development of clear safety rules that would prevent many unnecessary risks.

Therefore, it should be taken into account the peculiar characteristics of the child’s personality (hyperactivity, aggressiveness, impulsivity and distraction), as well as different cognitive, perceptual, motor and language also providing a better understanding of the child’s contributions in the event of accidents.

The reduction in the incidence of injuries in children can be achieved by regionally studies and the development of specific prevention programs. The main area to reduce this incidence should be focused on education, which requires the involvement of many segments of the population, aiming to ensure that children and families to provide information and treatment needed to minimize this problem.

Given the great importance of this issue, the development of educational activities are fundamental in reducing domestic accident rates in childhood. Preventive attitude of childhood accidents is one of the nurse appointments, guiding and stimulating the adoption of child protection measures in health services, as well as the guidance of parents or caregivers as to these measures.
Considering it is only possible to plan prevention and intervention from the specific knowledge of the causes, improving the quality of information on external causes, as its intention, can direct, more effectively, specific measures to reduce them.

A research seeking to unravel the family context of children and family dynamics, tend to allow nursing to continue working with families, from health education strategies, respecting their way of life, seeking alternatives so that everyone can each day live in a healthier way, minimizing the occurrence, especially, domestic accidents that have significant rates of infant morbidity and mortality, in order to avoid hospitalization, overspending and preventable deaths.

Thus, it is up to Nursing establish strategies to minimize the risk of accidents through protective actions and health promotion. However, it is noteworthy that the effectiveness of these strategies will depend on working in partnership with the families of the children, educators and health professionals.

Prevention really needs to be directed to each child’s developmental stage and individual guidance in childcare activities, or collective in schools and communities, giving parents and caregivers the knowledge to the prevention of accidents in childhood.

Prevent such accidents becomes a challenge for agencies and professionals who are involved in monitoring the growth and development of children, having an urgent need for educational guidance for specific population and community as schools, formal and informal groups in children/adolescent range, aimed at awakening behavioral changes, which can contribute to a reduction in accidents.
REFERENCES


