KNOWLEDGE OF PROFESSIONALS WHO WORK IN EARLY CHILDHOOD EDUCATION: PREVENTION AND MANAGEMENT OF TRAUMA

CONOCIMIENTO DE LOS PROFESIONALES QUE TRABAJAN EN LA EDUCACIÓN DE LA PRIMERA INFANCIA: LA PREVENCIÓN Y GESTIÓN DE TRAUMA

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ABSTRACT

Objective: to identify the knowledge of the professionals who work in early childhood education on the prevention and management of trauma. Method: a descriptive, quantitative and transverse study. 55 subjects of daycare work participated in the city of João Pessoa/Paralba/Northeastern Brazil, of 32±8 years old, being 45 women. They underwent a questionnaire with nine objective questions and one subjective. The data were analyzed using SPSS software. 16.0 and of Prism 3.0, presented in figures. This research project was approved by the Ethics Committee in Research, Protocol 2009/112093. Results: it was found no health professional; deficit of management of the trauma, being the most frequent: falls (100%), choking (18%), poisoning (7%), cardiac arrest (1,8%). Conclusion: the accidents occurred in daycare are important because they can cause: family maladjustment and social and economic troubles. The absence of health professionals as part of the multidisciplinary team decreases the quality of care, especially when dealing with health promotion, prevention and management of childhood trauma. Descriptors: Trauma; Child; Conduct.

RESUMO

Objetivo: identificar o conhecimento dos profissionais que trabalham na educação infantil, sobre prevenção e manejo do trauma. Método: estudo descritivo, quantitativo, transversal. Participaram 55 sujeitos funcionários de creches na cidade de João Pessoa/Paralba/Nordeste do Brasil, de 32±8 anos, sendo 45 mulheres. Foram submetidos a um questionário com nove perguntas objetivas e uma subjetiva. Os dados foram analisados no software SPSS. 16.0 e do Prism 3.0, apresentados em figuras. Esta pesquisa teve o projeto aprovado pelo Comitê de Ética em Pesquisa, Protocolo 2009/112093. Resultados: detectou-se ausência profissional de saúde; déficit do manejo do trauma, sendo as mais frequentes: quedas (100%); engasgo (18%); intoxicação (7%); parada cardiorrespiratória (1,8%). Conclusão: os acidentes ocorridos em creches são importantes, pois podem acarretar: desajustes familiares e apuros econômicos e sociais. A ausência do profissional de saúde como parte da equipe multidisciplinar diminui a qualidade da assistência prestada, principalmente se tratando da promoção da saúde, prevenção e manejo do trauma infantil. Descriptores: Trauma; Criança; Conduta.

RESUMEN

Objetivo: identificar el conocimiento de los profesionales que trabajan en la educación de la primera infancia en la prevención y el tratamiento de los traumáticos. Método: un estudio descriptivo, cuantitativo, transversal. Participaron 55 trabajadores de la guardería infantil en la ciudad de João Pessoa/Paralba/Noreste de Brasil, con 32±8 años, siendo 45 mujeres. Se sometieron a un cuestionario con nueve preguntas objetivas y una subjetiva. Los datos fueron analizados utilizando el software SPSS. 16.0 y Prism 3.0, presentados en figuras. Este proyecto de investigación fue aprobado por el Comité de Ética en Investigación, Protocolo 2009/112093. Resultados: se encontró ningún profesional de la salud, el déficit de la gestión del trauma, siendo los más frecuentes: caídas (100%), asfixia (18%), envenenamiento (7%), paro cardíaco-respiratorio (1,8%). Conclusión: los accidentes ocurridos en las guarderías son importantes, ya que pueden causar: inadaptación familiar y problemas sociales y económicos. La falta de profesionales de la salud como parte del equipo multidisciplinar disminuye la calidad de la atención, sobre todo cuando se trata de la promoción de salud, prevención y manejo de trauma infantil. Descriptores: Trauma; Niño; Conducta.
INTRODUCTION

The evolution of scientific and technological advances in medicine run continuously in an attempt to improve the conditions of human life, however, accidents represent increasingly, a significant cause of morbidity and mortality worldwide.¹ ²

Among the accidents, children also become victims. The initial care provided to the child are first aid, requiring knowledge of specific techniques and procedures, however these devices often do not exist in the training of educators of children. Therefore, the lack of such knowledge often ends up compromising the clinical picture of the same.³

Studies confirm that the double workday of the mother hinders the council of their professional activities to the home, pointing out the need for day care for children of working mothers.⁴ Early childhood education aims at the integral development of children up to six years old, in the aspects: physical, psychological, intellectual and social, complementing the action of the family and the community.⁵

The daycare is, or should be a healthy social and educational space for small children, for both must have, among its functions, the health care of its user and incorporate this concept to the same.⁶ A study conducted in a Municipal daycare of São Paulo detected the average mortality rate of 36,4 per hundred thousand children. Of the total deaths, 32,7% occurred in children younger than one year old and 78,4% in children up to three years old. External causes accounted for 13,5%, due to falls, pedestrian accidents, drowning, burns and aggressions. The research concluded that most of the deaths occurred in children younger than three years old and was due to preventable causes.⁷

It is known that the most common cause of pediatric trauma are falls; and that children in institutions become more susceptible to accidents. This occurs due to two factors: vulnerability caused by the own age and change the home environment to daycare. These factors influence the emotional state of the children, causing them stress and impairing its normal pattern. Accidents can be predictable and can be prevented and controlled.⁷ ⁸

Prevent trauma is even more important than treat it. When this is avoided, the patient and his family are spared from suffering and economic troubles. Death from trauma results in nearly 14 thousand deaths daily, appearing among the five main causes of death.⁹

Despite the high rate of accidents involving children, there are few studies that cover the deficit of health professionals in institutions dealing with this population. Become even more scarce research with regard to knowledge of these subjects on the prevention and management of injuries occurring in such intuitions.

OBJECTIVE

- To identify the knowledge of professionals who work in early childhood education, about the prevention and management of trauma.

METHOD

The study is of epidemiological and transversal character, with descriptive analysis, which features observe, record, analyze, describe and correlate facts or phenomena without manipulating them, trying to discover precisely how often a phenomenon occurs and its relationship with other factors.¹⁰

The research was conducted in three daycare centers in the city of João Pessoa/Paraíba, Northeast Brazil, with 55 individuals working in it. Inclusion criteria for the study subjects should only be daycare workers, regardless of the function developed.

The data collection instrument was a questionnaire with nine questions objective and a subjective, which were answered in view of the researcher, for 55 people in the sample, being so named as subjects of study in order to identify the knowledge about childhood trauma, from prevention to management. The questionnaire was completed at the institution at which the sample belonged.

The data are presented as average, frequency and percentage. These procedures were performed with SPSS 16.0 and Prism 3.0 software.

This study was approved by the Ethics and Research Committee of the University Center of João Pessoa, on March 19th, 2010. It also received approval from the Secretary of Education and Culture of the Municipality of João Pessoa, according to protocol 2009/112093. All participants were asked to sign the informed consent, in accordance with Resolution 196/96 of the National Health Council.
The 55 subjects were similar with respect to age (32±8). Of these, 45 were women and 42 were working for more than one year at the institution. The level of education is presented in the following sample: higher (25,4%), medium level (40%), basic school (23,6%) and elementary education (10,9%). In none of the institutions surveyed was found in the functional health professionals. It turned out that for each teacher student was 28±3 occurring thereby a greater propensity to accidents.

The lack of nursing staff that make up the health team as part of the multidisciplinary team in kindergartens reduces the quality of care provided to children, especially regarding health promotion and disease prevention in early childhood education centers.  

The data below show the deficit in knowledge about the correct first aid procedures, mainly because the victims are children, so that specific procedures must be performed. In daycare children have a high probability of accident; therefore, the staff of the institution needs to be trained to give first aid. All accidents can be avoided, and then it is important to note the need for promotion and health education to the community. The data are shown in figures 1, 2, 3, 4 and 5.

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### RESULTS

As we can see in Figure 1, the subjects had a deficit in knowledge about the first procedures to be performed on the victims with a foreign body in the eyes.

Figure 2 shows the index and wrongs of the objective questionnaire completed by childcare professionals with regard to poisoning in children. It is observed that the subjects did not know how to act in such an occurrence.

<table>
<thead>
<tr>
<th>Type of Trauma</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intoxication</td>
<td>55</td>
</tr>
<tr>
<td>Object_eyes</td>
<td>55</td>
</tr>
</tbody>
</table>

Figure 1. Representation of the knowledge of professionals on providing relief to victims of a foreign body in the eyes.

Figure 2. Level of knowledge about First Aid Procedures to be performed in poisoning: Ingestion of Chemicals, Drugs and Plants.
According to Figure 3 was detected a large deficit in first aid procedures to be performed on a victim of Cardiopulmonary Arrest.

The figure 4 shows that the sample has difficulty in performing the control of bleeding, to maintain the homeostasis of the organism.

The figure 5 shows that the rates of trauma in this age group occur and that environments such as daycare are vulnerable to various occurrences, appearing first the falls (100%), followed by choking (18%), poisoning (7%), cardiorespiratory stop (1,8%), burns (1,8%) and electric shock (1,8%). There were no reports of bleeding.

DISCUSSION

The ophthalmic emergencies are more common in childhood injuries and eye
infections. In children, almost 80% of accidents involving the eyes occur in the home and/or school. Such episodes are responsible for most cases of monocular blindness.12

Detected high levels of mismanagement with regard to eye accidents involving children, and the risk is increased in environments such as day care centers, due to the large influx of students. Then it highlights the importance of prevention in order to avoid such accidents. I repeat that success in prevention is dependent on the prior knowledge of educators about the prediction, prevention and management of trauma. Support is also needed from a healthcare professional for effective assistance and ongoing guidance, not forgetting to mention that the impairment of eye health is an important inhibitor of child development, and may have sequelae in adulthood.

The unintentional poisoning, mainly drugs, represent a public health problem due to the high prevalence.13

Accidents among children are common and contribute to raising infant mortality. Poisoning (or poisoning) represent one of the main types of accidents involving children, so poisoning, mostly unintentional, are the leading cause of Pediatric emergency.14 are considered accidental because mostly stem from situations that facilitate of typical phases of the child to inappropriate behaviors of family and little incentive to preventive measures..13

Adults must take responsibility for the children, making sure they are not exposed to potentially toxic substances, showing concern about the prevention of possible complications.

It is the obligation of health professionals to know the degree of information of the responsible child, and then inform them of potentially dangerous situations and instruct them on preventive measures as well as the provision of an adequate relief. Thus, a diagnosis of the situation on the management of poisoning in the environment where there is a large influx of children is of great importance, so that they can act more critically and effectively this problem.

A previous study found a decrease as the accident occurs in children who require hospitalization; and later foreign bodies and bleeding. Intoxication and burn showed low levels, also in this study.15

In children, rarely cardiac arrest is a sudden event, ie, children are still secondary to prolonged circulatory or respiratory distress.16

The first adequate relief and fighting hypothermia in cases of cardiopulmonary arrest, improve survival.17 More to resuscitate a patient must anticipate and prevent the stop, since in most cases the patient shows signs of not being well and if these signals are perceived, and can act to prevent CPA. Prevention can also be accomplished through educational campaigns, since, according to the Ministry of Health 1995, external causes are the leading cause of death in patients from 5 to 19 years old.16

The training of the population about pre-hospital conduct can improve the outcome of critically ill patients.17 The service minimizes sequels and influences the results. It is noteworthy that unlike adult, pediatric victim in the CRA should be before requesting aid of Specialized Agency to start the attendance. In other words, it proves the necessity of the intervention prior of who is closest to the victim, in this case, the carers.

The Cardiopulmonary Resuscitation consists in the treatment of Cardiopulmonary Arrest. Are maneuvers that aim to maintain circulation and artificial respiration and restore them to normal as soon as possible, minimizing brain injury. In order to maintain a fast, safe and effective attendance, is accomplished through a phased approach and algorithms. It requires careful consideration regarding when to start a particular maneuver, as well as when to stop it. The algorithm for the initial treatment of the patient seeks the recognition of the CRA and the first call to the victim. Therefore, a Cardiopulmonary Resuscitation (CPR) of quality is lifesaving.18

Bleeding is considered any output of blood out of your normal circuit, and if it occurs in abundance and not controlled, can cause death in three to five minutes. The interval between the lesion and sets the therapeutic critical for recovery.19

Addressing themes of bleeding is important for the care of children, showing that they are more conducive to be involved in an accident. The major concern that the professional should have provided first aid to a victim with this situation is to prevent loss of blood that can lead to hypovolemic shock.

Studies on the incidence of pediatric trauma are extremely rare in Brazil, making it more difficult to develop preventive strategies related to different types of health disorders. In the United States, childhood trauma is responsible for 30% of all deaths among children and adolescents. For this reason, there has been increasing interest in research aimed at preventing, seeking knowledge of
factors and processes by which accidents occur, the specific characteristics of certain accidents, and social environment in which they occur.\textsuperscript{20}

The percentage of trauma injuries from external causes reached 50% or more of preventable deaths and injuries. Therefore, prevention is the key word. Prevention is possible in most cases, through education, legal measures and passive protection.

**CONCLUSION**

Prevention is the most effective way to reduce the high rates of childhood accidents. Therefore, it is necessary to develop educational programs that promote improved professional training of individuals active in the labor market. Have an instructional and educational material facilitates and standardizes instructions given, with a view to health care, such as building manuals for the guidance of users and families.

It is pertinent to emphasize the importance of guidance on accident prevention and management of these children to early childhood professionals, during their training, giving them better training in first aid, followed by continuing education for all employees who working in daycare, so they are prepared for the prevention and management of trauma. This educational work could be linked to universities or in partnership with agencies and emergency care.

Since it has detected a sharp deficit of professional institution on the correct management of the trauma, it emphasizes the theme approach to the subjects involved in the process of education. Knowledge regarding accidents involving children, as well as the importance of adequate management, contributes to reducing the physical and emotional trauma experienced by them.

With regard to the types of accidents it proved what was already established in the literature, which falls reached 100% of the types of accidents, presenting a greater percentage. Thus, it has also identified: choking (18%), poisoning (7%), burning (1,8%), cardiac arrest (1,8%), electric shock (1,8%). There were no reports concerning the events involving traumatic bleeding.

In relation to health professionals, there was an absence in the institutions surveyed.

To know and disclose data that show the reality of accidents in childcare is a critical and social professionals who form the health and, in particular, those who care directly for children. It is noteworthy that these data contribute to the parents, which in turn can be alert to the risks of accidents that can happen to their children. These accidents can lead to a mismatch of the family structure, the same subjects as the economic and social distress. The absence of health professionals as part of the multidisciplinary team diminishes the quality of care provided to children, especially in relation to health promotion, prevention and management of childhood trauma.

**REFERENCES**

Knowledge of professionals who work...


