

Level of knowledge of teachers of early childhood education facing situations of urgency and emergency in school

Nível de conhecimento dos professores da educação infantil diante situações de urgência e emergência em escola

Nivel de conocimiento de los profesores de educación infantil ante situaciones de urgencia y emergencia en la escuela

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RESUMO

Objetivo: apresentar a experiência frente a um treinamento de primeiros socorros em uma escola para professores e funcionários em situações de urgência e emergência, com foco em acidentes prevalente em ambientes escolares. **Método:** o treinamento prático-teórico foi realizado, com o auxílio prático da ligaUrgem (liga acadêmica de urgência e emergência) da Uniceplac, no dia 30 de agosto de 2022, com um público de 30 pessoas de ambos os sexos e faixa etária de 23 à 48 anos, abordando os temas de Reanimação Cardiopulmonar, queimadura, OVACE (Obstrução de Vias Aéreas por Corpo Estranho), convulsão e desmaio. **Resultados:** durante a apresentação houve interação dos professores, onde foram questionados sobre situações vivenciadas sobre o tema e se na escola possui materiais necessários para realizar esse primeiro atendimento em casos de acidentes, também surgiram dúvidas criando situações hipotéticas sobre os temas. **Conclusão:** muitos profissionais da educação infantil estão despreparados para agir numa situação de urgência, pois o tema é pouco trabalhado na formação dos educadores e no ambiente escolar, com isso observa-se a necessidade do treinamento para que qualquer pessoa leiga possa realizar o atendimento adequado de primeiros socorros à vítima.

Descritores: Capacitação de professores; Educação em saúde; Emergência; Primeiros socorros.

ABSTRACT

Objective: to present the experience of a first aid training in a school for teachers and employees in situations of urgency and emergency, focusing on accidents prevalent in school environments. **Method:** The practical-theoretical training was carried out, with the practical help of the Urgem league (Urgem - Urgency and Emergency Academic League) of Uniceplac, on August 30, 2022, with an audience of 30 people of both genders and ages ranging from 23 to 48 years old, covering the topics of Cardiopulmonary Resuscitation, burns, OVACE (Airway Obstruction by Foreign Body), convulsions, and fainting. **Results:** during the presentation there was interaction among the teachers, where they were asked about situations experienced on the subject and if the school has the necessary materials to perform this first aid in case of accidents. **Conclusion:** many child education professionals are unprepared to act in an emergency situation, because the theme is little worked in the educators' training and in the school environment, thus the need for training is observed so that any lay person can perform the proper first aid care to the victim.

Descriptors: Teacher training; Health education; Emergency; First aid.

RESUMEN

Objetivo: presentar la experiencia de una formación de primeros auxilios en una escuela para profesores y empleados en situaciones de urgencia y emergencia, centrándose en los accidentes frecuentes en el entorno escolar. **Método:** el entrenamiento práctico-teórico fue realizado, con la ayuda práctica de la liga Urgem (Liga Académica de Urgencia y Emergencia) de la Uniceplac, el 30 de agosto de 2022, con una audiencia de 30 personas de ambos sexos y edades que van de 23 a 48 años, abordando los temas de Reanimación Cardiopulmonar, quemaduras, OVACE (Obstrucción de la Vía Aérea por Cuerpo Extraño), convulsiones y desmayos. **Resultados:** durante la presentación hubo interacción de los profesores, donde se les preguntó sobre situaciones vividas sobre el tema y si la escuela cuenta con los materiales necesarios para realizar esta primera atención en casos de accidentes, también surgieron preguntas creando situaciones hipotéticas sobre los temas. **Conclusión:** muchos profesionales de la educación infantil no están preparados para actuar en una situación de emergencia, ya que el tema está poco trabajado en la formación de los educadores y en el ámbito escolar, por lo que se observa la necesidad de formación para que cualquier persona no experta pueda realizar los cuidados adecuados de primeros auxilios a la víctima.

Descritores: Formación del profesorado; Educación para la salud; Emergencias; Primeros auxilios.

Introduction

First aid is defined in the First Aid Manual, 2003, as the immediate care that must be carried out quickly to an individual, victim of accidents or sudden evil, that the physical condition is endangered to his life, in order to maintain vital functions and avoid aggravation of his current conditions, promoting a service with appropriate measures and procedures until the arrival of qualified assistance.¹

The time is very important for first aid to make a difference in the victim's prognosis, so care should be performed as quickly as possible and following the correct technique. It is in this environment that the lay population, who are often the first to have contact with the victim, makes a difference when well instructed and oriented on how to behave in urgent and emergency situations, with this, the population in general has to be trained to meet this demand.²

According to Article 135 of the Brazilian Penal Code of December 7, 1940, the omission of aid and the lack of efficient first aid care to a person who needs help can be performed with care or just by calling for specialized help. The first hours after an accident are the most important to ensure the recovery or survival of injured people, sequelae and serious damage.³

The discussion on the theme of First Aid in the school environment is of great relevance, since with this knowledge it can minimize the damage in case of accidents related to their daily life, and the lack of knowledge of them can increase the damage to the patient's life. In school it is common to have minor accidents and with this it is essential that teachers have basic knowledge of how to proceed in cases of emergency aid.⁴

The accident that happens most in schools is related to falls of students, who generate wounds and even due to severity can generate a fracture of a limb, according to him, the level of knowledge of elementary school professionals is not suitable for the type of situation.⁵ Due to this, it is necessary to train the school professionals, because pre-hospital care contributes to the difference between life and death; between temporary, severe or permanent sequelae; between a productive life and a destitute.⁶

There is no current curriculum of undergraduate courses, a discipline that teaches first aid basics. Thus, teachers may not know how to act in situations that endanger the life and health of students or ways to avoid future harm, improperly driving any child who is victims of minor accidents or who presents himself with another pathological condition.⁷

Continuing education for school teachers has to be constantly so that they can start pre-hospital care until the arrival of the specialized team in the accident, which can save lives, so the Law Lucas was created (Law No. 13,722 of October 4, 2018), because children have a fragility to be injured, this is of the utmost importance to have adequate materials in schools, easily accessible and that teachers and staff know how to use.⁸

Thus, the objective of this work is to report the experience of the authors of this study, before a first aid training in a school and prepare these teachers and employees for situations of fall, convulsions, nosebleeds, fainting, among other situations, raise awareness about the importance of the theme and encourage to acquire knowledge outside the training that can contribute greatly to their daily life, because any qualified person can take the lead and provide a good first aid care, helping to save a life, so with the study not only teachers are benefited, but the entire population that has contact with children.

Method

The work is a descriptive and reflective experience report on the experience of undergraduate nursing students (bachelor's degree) about an educational action with active teaching-learning methods, with the help of urgent and emergency disciplines and integrative projects. The project aimed to provide school professionals with the development and learning of first aid techniques. The Logical Model is a means of project planning that enables, together with the people under study, the structuring of an ideal intervention.

Thus, the following objectives were established: 1). To pass on to employees the practical theoretical content; 2) to answer all doubts in the face of the topics addressed; 3) emphasize the importance of constant training; 4) To demonstrate in a practical way the topics addressed; 5) to certify that the content has been absorbed and that they are able to act in an emergency situation.

From these objectives, a planning was elaborated with the theoretical and practical materials that would be used to perform the training that consisted of: first aid course of the IBRAPH (Brazilian Institute of PhC) focused on Lucas law, dolls to perform adult and pediatric CPR, bandages, splints, adult and pediatric BVM (Valve and Mask Bag), DEA (automatic external defibrillator), slide-shaped presentation that will be used in a classroom.

The expected results, which include the effects on the target audience, were related to better appropriation of content, participation of all actors involved and, concomitantly, to the increased exchange of experiences between students and teachers. Regarding the impact, they were described as finalistic effects of the intervention, the decrease in idleness and passivity of the students during the training.

The practical-theoretical training was carried out by the authors of the present study, graduating from the 10th semester of nursing, with the help of the Urgem league (academic league of urgency and emergency) of Uniceplac during the practice part, on August 30, 2022, before the training was approached an average of 30 people of both sexes and age between 23 years until 48 years, the training was started with the theoretical content addressing the themes of CPR, burn, OVAC (Airway Obstruction by Foreign Body), convulsion and fainting, in a second moment were demonstrated the appropriate practices by nursing students and the correct techniques of intervening in situations of first aid in schools, as a form of prevention and

reception, in order to bring safety to children and parents by leaving their children in the institution.

Results

In a certain school in the Administrative Region of Gama - Federal District, the authors are students of the 10th semester of the nursing course, together with the Urgem league held on August 30, 2022 a training for employees of a private school of elementary school, on first aid with emphasis on the Lucas Law.

The dynamic was a theoretical-practical presentation through oral exposure with slide using addressing the main issues on the subject (first aid kit, emergency numbers, choking, burns, convulsions, injuries, intoxication, fainting and cardiorespiratory arrest and cardiopulmonary resuscitation) and then practices of cardiopulmonary resuscitation in mannequins appropriate for compressions and maneuvers of Hemilich (desengasgo) in children and adults.

The teachers were asked about situations experienced on the subject and if in school there are materials needed to perform this first care, in view of this reported that there were only scissors without tip, cotton, ice bag and band-aid adhesive dressing. They were instructed on the importance of having a first aid kit containing PPE (gloves, mask and goggles), as well as tweezers, thermometer, flashlight, bandage, cardboard splint, gauze packages, adhesive, microporous tape, wheelchair, saline, pocket mask and automatic external defibrillator (DEA), the main emergency numbers were also cited, being them: 190, 192 and 193, military police, Mobile Emergency Care Service and fireman, respectively.

During the presentation there was interaction of teachers, where doubts arose creating hypothetical situations to verify the effectiveness of the Heimlich maneuver, such as if the victim is high, low and obese. Under these conditions it is indicated to encourage cough, which is an attempt to expel objects that may disturb breathing, if the cough reflex has no successor, it is necessary to perform the Heimlich maneuver, through abdominal compressions in order to clear the airways. A vest that simulates a choking could be used and the teachers were able to perform such maneuvers and thus have a greater understanding of the performance of this intervention.

According to the Brazilian Institute of Pre-Hospital Care (2022) in burn situations, it is important to assess the extent and depth of the wound, in addition to verifying signs of infection such as pain, heat, swelling, secretion and pus. In these situations, it is necessary to perform the cooling with running water at room temperature and make a clean and non-adherent cover. In cases of major burns it is necessary to activate emergency services such as SAMU or firefighters.⁹

On the subject of convulsions it was mentioned that this event has already happened and the education professionals did not know how to act in this situation, reported feeling a lot of despair and nervousness, because it is not a common occasion, being clarified the importance of keeping calm, teaching how to continue in the face of

convulsive crises, moving away nearby objects, protecting the head and lateralizing it, never try to contain the movements and hold or pull the tongue.⁹

In view of the theme addressed, possible traumas that can happen in the school environment, such as fractures, wounds and dislocations, when addressing the themes were emphasized the importance of having a first aid kit in a strategic place in the school or even more than one to leave organized care, emphasized what should be in a first aid kit and how to use each item, such as bandages in fracture situations, the ways to immobilize the limb and relieve the patient's pain until the arrival of specialized help or to be able to safely transport the patient.

It was reported by the teachers of the institution that fainting is one of the situations that occur most in the school, and the concern of teachers was precisely how to proceed in these cases. The main causes of fainting were mentioned, which are: pain, heat, dehydration, hypoglycemia, orthostatic hypotension and intense emotions. Subsequently, prevention measures were presented: to stay hydrated, to maintain adequate nutrition, to get up and sit slowly.

In the fainting, in which the victim is unconscious, but still breathes is indicated the lateral position of security consisting of laying the person on his stomach, kneeling on his side, removing objects that may hurt the victim, stretching the arm that is closest to you and bend it, forming an angle of 90°, hold the hand of the other arm and pass it over the neck, placing it next to the person's face, bend the knee that is further away from you, slowly rotate the person to the side of the arm that is resting on the ground and tilt the head slightly backwards, to facilitate breathing. In the situation where the student breathes and has already regained consciousness, it is oriented to raise the limbs below 30° - 60° or put in a comfortable position.⁹

For the theme of cardiorespiratory arrest, one of the most important factors is to know how to identify CRP, where an initial assessment is needed to verify if the victim is breathing, visualizing if the patient's chest is moving, checking pulse, which can be brachial or carotid, and finally check the patient's responsiveness, calling him or her and making stimuli to see if he or she is conscious or just unconscious or just unconscious. Being identified that the patient does not breathe, has no pulse and does not respond, call specialized help to bring advanced support and initiate quality compressions, correctly positioning the hands in the patient's chest, at the proper pace and depth letting the chest return completely after compressing and offering oxygen to the patient if he has ventilatory support, it is important to emphasize that it is not recommended to perform mouth-to-mouth breathing, to prevent the spread of diseases, if not the same, continue the compressions until the arrival of the aid or until a DEA arrives.

Discussion

For the preparation of the training, the highest rates of accidents in schools were researched, following the study Fioruc, et al. (2017)¹⁰ are the following themes: hemorrhage, fainting, convulsion, PCR and OVACE, after the decision of the themes we prepared the materials of easy understanding and reading, to be used in the training, because we obtained praise from the teachers of the material addressed and the theoretical practical form that the themes were presented.

It is possible to perceive the interest of professionals on the subject, because it is a rarely addressed content. It was explained what first aid would be, the appropriate ways to provide them and how to act in this type of situation. We obtained information from participants who felt afraid and insecure in witnessing such situations, at a time to answer possible questions, in which they reported moments already lived and questioned how they acted in front of these events, if it was adequate and which would be the most appropriate to solve these problems witnessed.⁷ In addition to demystify popular sayings that do not have effective scientific evidence, they were also instructed to remain calm in order to be able to provide first aid in the best possible way until the arrival of a specialized team, if necessary, as also says previous study.¹¹

Another theme that generated many doubts is ovace, because even teachers not familiar with this term, as already reported and a previous study¹² and not knowing the appropriate technique, the theme demonstrated and emphasized in how the correct technique brings more chances of survival to the individual, left them more confident to act if it occurs in school.

We defend the importance of practical activities, which was what was expected to occur after the theoretical presentation, in order to evaluate the actual absorption of the content, but due to the time they made available to us some teachers could not remain.¹³

After the presentation of the themes and the training, most teachers stated that they never had such an approach, a training for such situations and recognized the importance of it, as well as the exchange of experiences that happened during the discussion of the themes, leaving the training more dynamic and richer of information where we can help them, was also encouraged to seek more specialized training, which may have more time and more content to be seen.¹⁴

It is important to remember that knowledge about first aid is provided for by law, and basic training needs to be applied to teachers and members of educational institutions. In this case, the ideal would be to have more time to perform this intervention, perhaps on weekends or at a time when the institution and professionals have more time available. However, the first step has been taken, it is of paramount importance to have the initiative to share this type of knowledge, which is essential to promote the safety and health of our children.⁸

Conclusion

The main form of accident prevention is by identifying possible risks and taking measures to minimize the possibility of accidents, especially in the school environment, which is very busy and has a more vulnerable public that does not have the same notion of danger to adults and without adequate supervision increases the chance of accidents.

Training means a way to promote development on some topic, in this case, it would be related to obtaining a knowledge about the first care to be provided in case of accidents, and it is necessary a theoretical-practical knowledge for such actions, as well as having confidence to act in some situations, therefore it is necessary to train and continuous training for possible updates of care protocols.

Therefore, it is essential to training teachers in order to reduce possible complications in cases that the simple act of providing first aid adequately would already solve the problem. This training can be performed in a more participatory way, for example: with simulations that represent the main occurrences mentioned in the article and the fact of having active listening with the teachers and employees of the institution, because with their help it is possible to put more different situations to add and give more examples to the training.

A determining factor for learning is the level of interest in content and teachers know this well. Therefore, there needs to be a commitment to receive this necessary knowledge, awareness and communication among teachers so that it can become a current of knowledge and thus encouraging the other to improve their experiences and the way of acting in an emergency situation. However, the theory alone is not enough, to learn something is necessary to practice, so it would be interesting to occur activities in medium intervals of time, thus stimulating the interaction of professionals with various activities on the subject, in order to keep the practices always present in memory.

By learning about various topics it is necessary to remain calm and have confidence, both are acquired with the practice, so professionals will know how to act in various situations with mastery and with this parents who leave their children in schools will be more confident and feeling safer when leaving their children in an environment that in the event of an accident, will have trained professionals to provide basic support to students.

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References

1. Cardoso TAO. Manual de primeiros socorros. Rio de Janeiro: Fundação Oswaldo Cruz; 2003.
(https://www.fiocruz.br/biosseguranca/Bis/manuais/biosseguranca/manual_deprimeirosocorros.pdf)

2. Dantas RA, Dantas DV, SilNascimento e Silva IR, De Araújo NM, Laurentino AM, Nunes HM, Ribeiro MD. Abordagem dos primeiros socorros na escola: crianças, adolescentes e professores aprendendo a salvar vidas. *Enfermagem Brasil* [Internet]. 16 jul 2018 [citado 3 nov 2022];17(3):259. Disponível em: <https://doi.org/10.33233/eb.v17i3.1186>
3. Brasil. Art. 135 do código penal. Decreto-lei 2848/40. Omissão de socorro. 07 de dezembro de 1940.
4. Ritter NS, Pereira NS, Silva SM, Soares RM, Thum C. A importância de se trabalhar o conhecimento de socorros em âmbito escolar. XV seminário internacional de educação no Mercosul, 2013. (<https://www.unicruz.edu.br/mercosul/pagina/anais/2013/SAUDE/ARTIGOS/A%20IMPORTANCIA%20DE%20SE%20TRABALHAR%20O%20CONHECIMENTO%20DE%20SOCORROS%20EM%20AMBITO%20ESCOLAR..PDF>)
5. Nogueira MH, Nascimento PF, Silva LA, Alcântara DS, Rocha JC, Buges NM, Pinheiro JD, Aguiar N, Ribeiro MD, Cirqueira SM. O conhecimento dos professores do ensino fundamental em primeiros socorros. *Revista Eletrônica Acervo Saúde* [Internet]. 19 jul 2022 [citado 3 nov 2022];15(7):e9958. Disponível em: <https://doi.org/10.25248/reas.e9958.2022>
6. Dos Santos Okabe J, Paula Boaventura A. Primeiros Socorros na escola para alunos do ensino fundamental. In: XXIV Congresso de Iniciação Científica da UNICAMP - 2016 [Internet]; 19-21 out 2016. Campinas - SP, Brazil: Galoa; 2016 [citado 3 nov 2022]. Disponível em: <https://doi.org/10.19146/pibic-2016-50820>
7. Brolezi EA. Orientações de primeiros socorros em urgência e emergência na escola. p.111-123, 2018. (https://portal.unisepe.com.br/unifia/wp-content/uploads/sites/10001/2018/06/15primeiros_socorros_naescola.pdf)
8. Brasil. Lei Lucas (13722/18). Obriga as escolas, públicas e privadas e espaços de recreação infantil a se prepararem para atendimentos de primeiros socorros. 04 de outubro de 2018.
9. Instituto Brasileiro de APH – IBRAPH. Primeiros Socorros com ênfase na lei Lucas. Salvador – BA; 2022. (<file:///C:/Users/Acer/Downloads/IBRAPH-SLIDES-PS-LEI-LUCAS-CURSO-COMPLETO.pdf>)
10. Fioruc BE, Molina AC, Vitti Junior W, Lima SA. Educação em saúde: abordando primeiros socorros em escolas públicas no interior de São Paulo. *Revista Eletrônica de Enfermagem* [Internet]. 30 set 2008 [citado 3 nov 2022];10(3). Disponível em: <https://doi.org/10.5216/ree.v10.46619>
11. Zonta JB, Eduardo AH, Ferreira MV, Chaves GH, Okido AC. Autoconfiança no manejo das intercorrências de saúde na escola: contribuições da simulação in situ. *Revista Latino-Americana de Enfermagem* [Internet]. 2019 [citado 3 nov 2022];27. Disponível em: <https://doi.org/10.1590/1518-8345.2909.3174>
12. Pereira JD, Mesquita DD, Garbuio DC. Educação em saúde: efetividade

de uma capacitação para equipe do ensino infantil sobre a obstrução de vias aéreas por corpo estranho. Revista Brasileira Multidisciplinar [Internet]. 8 out 2020 [citado 3 nov 2022];23(2Supl.):17-25. Disponível em: <https://doi.org/10.25061/2527-2675/rebram/2020.v23i2supl..828>

13. Cabral E, Oliveira MD. Primeiros socorros na escola: conhecimento dos professores. Ensino, Saude e Ambiente [Internet]. 22 maio 2017 [citado 3 nov 2022];10(1). Disponível em: <https://doi.org/10.22409/resa2017.v10i1.a21255>

14. Da Silva LG, Da Costa JB, Furtado LG, Tavares JB, Costa JL. Primeiros socorros e prevenção de acidentes no ambiente escolar: intervenção em unidade de ensino. Enfermagem em Foco [Internet]. 10 nov 2017 [citado 3 nov 2022];8(3). Disponível em: <https://doi.org/10.21675/2357-707x.2017.v8.n3.893>

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