

Knowledge of basic education professionals about basic life support

RESUMO | Objetivo: verificar o percentual de acertos dos profissionais da educação, em situações problemas sobre suporte básico de vida. Método: trata-se de uma pesquisa com abordagem quantitativa, transversal com fins descritivos, realizada com 126 funcionários de diversas escolas públicas e privadas de Minas Gerais, no período de janeiro a maio de 2021. A coleta de dados ocorreu a partir de um questionário estruturado e validado, através do Google Forms. A propósito, o estudo foi submetido e aprovado no comitê de ética em pesquisa sob o parecer 3790557. Resultados: constatou-se que 13% dos funcionários declaram que estão preparados para prestar atendimentos de primeiros socorros e 87% afirmam que não estão. Conclusão: faz-se necessário a inserção de um projeto de treinamento de primeiros socorros nas escolas é de grande valia, pois visa capacitar os profissionais do sistema de ensino para o atendimento emergencial. E a partir disso, aumentar as chances de sobrevivência, além da promoção e prevenção de acidentes nas escolas.

Palavras-chaves: Ensino; Professores Escolares; Primeiros socorros; Reanimação cardiopulmonar.

ABSTRACT | Objective: to verify the knowledge of education professionals about basic life support. Method: this is a research with a quantitative approach, cross-sectional with descriptive purposes, carried out with 127 employees from various public and private schools in Minas Gerais. Data collection occurred from a structured and validated questionnaire, through Google Forms. By the way, the study was submitted and approved by the research ethics committee under opinion 3790557. Results: it was found that 13% of employees declare they are prepared to provide first aid care and 87% say they are not. Conclusion: of a first aid training project in schools is of great value, as it aims to train professionals in the education system for emergency care. And from that, increase the chances of survival, in addition to promoting and preventing accidents in schools.

Keywords: Teaching; School Teachers; First aid; Cardiopulmonary resuscitation.

RESUMEN | Objetivo: verificar el porcentaje de aciertos de los profesionales de la educación en situaciones de problemas de soporte vital básico. Método: se trata de una investigación con enfoque cuantitativo, transversal con fines descriptivos, realizada con 126 empleados de varias escuelas públicas y privadas de Minas Gerais. La recogida de datos se realizó a partir de un cuestionario estructurado y validado a través de Google Forms. Por cierto, el estudio fue presentado y aprobado por el comité de ética en investigación bajo el dictamen 3790557. Resultados: se encontró que el 13% de los empleados declara estar preparado para brindar primeros auxilios y el 87% dice que no. Conclusión: es necesario insertar un proyecto de formación en primeros auxilios en las escuelas es de gran valor, ya que tiene como objetivo formar profesionales en el sistema educativo para la atención de emergencias. Y a partir de eso, aumentar las posibilidades de supervivencia, además de promover y prevenir accidentes en las escuelas.

Palabras claves: Docencia; Maestros de escuela; Primeros auxilios; Reanimación cardiopulmonar.

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INTRODUCTION

External causes, such as accidents and violence, are responsible for about five million deaths a year worldwide. When there is survival, there can still be sequelae; it is estimated that for every person who dies, there are thirty who are hospitalized and three hundred who are treated in the emergency services. ⁽¹⁾

In recent years, the rate of accidents involving adults and children has increased significantly, especially in public environments such as schools and parks, cases include choking, burns, drowning and poisoning. ⁽²⁾ To increase the person's chance of life, and prevent sequelae resulting from the accident, first aid should start as early as possi-

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ble, so people who are present at the time of emergency should be prepared to carry out this initial aid, until the arrival of the specialized help.⁽³⁾

First aid is an initial assessment and intervention for an acute illness or injury, which can be performed by anyone, with or without medical equipment, with the aim of preserving life, alleviating suffering, preventing the progression of new pathologies and promoting recovery.⁽⁴⁾

Accidents are reported to be common, especially in the school environment, making preliminary training of educators and other professionals essential, so that they are able to act efficiently in urgent and emergency situations, using appropriate first aid techniques, which can be determined as the immediate care offered to the victim, before the arrival of specialized help.⁽⁵⁾

Professionals who work in the school environment, whether they refer to teachers or employees, need to acquire formal and continuous training to deal with emergencies in the school environment, since the child's interest in exploring new situations, their potential, new skills and interaction form with the school environment can cause accidents when exposed to the threats present in this space.⁽⁶⁾

Schools and teachers play an important role in promoting health and preventing illnesses and accidents among children and adolescents, as they are the first to have contact with the victim when providing first care at school.⁽⁶⁾ Thus, it is common for teachers and other employees to report situations at school that result in cuts, bleeding, falls, sprains and fractures of the upper and/or lower limbs.⁽⁷⁾

Considering the context of accidents in the school environment, prevention strategies that can reduce the severity of the injury when it occurs are also important, such as training employees and teachers in first aid and the

use of protective equipment during the practice of sports activities.⁽⁸⁾

In this sense, health education enters the school to reflect on the world, health, the disease process and the logic of the system, providing strategies for social transformation, reorienting health practices and influencing the care model in order to develop and improve the promotion and prevention of diseases, in addition to reflecting on the problems present in society.⁽⁹⁾ This type of education also contributes to the recognition and development of favorable attitudes towards quality of life.⁽¹⁰⁾

Therefore, it is necessary to create accident prevention strategies as well as the training of employees and teachers of basic education education networks on Basic Life Support, improving the level of knowledge in first aid techniques. Given the above, the following research problem emerged: What is the level of knowledge of education workers about Basic life support?

This study aimed to verify the percentage of correct answers by education professionals in situations of basic life support problems.

METHOD

This is a research with a quantitative, transversal and descriptive approach.

Data collection was carried out with 126 employees of public and private schools in a large city in Minas Gerais, from January to May 2021. Professionals who did not accept to participate in the study and did not fill in the free and informed consent form and also professionals who lived in another city and who still filled out the questionnaire and people who had training in the area.

For sample selection, the snowball technique was used, where the researchers sent the questionnaire link, along with an invitation to participate in the

study to some people, after answering the questionnaire, they were asked to share the link to their contact's network, and so on. This technique allows for a more comprehensive collection, as it uses the indication in series of informants from networks of relationships with the research object.⁽¹¹⁾

The questionnaire used was validated by Pérgola and Araújo and contains 13 questions about knowledge of basic life support techniques.⁽¹²⁾ The same was sent through google forms due to the COVID-19 pandemic, and before answering the questionnaire, the participants acknowledged the informed consent form. After data collection, the correct questions were raised and these were tabulated from Excel spreadsheets.

This study complied with all the ethical and legal criteria of resolution 466/2012, which deals with research involving human beings, and was approved by the research ethics committee of Faculdades Unidas do Norte de Minas, under opinion 3.790.557.

RESULTS

The age of employees ranged from 24 years and 60 years, of which 19,4% were men and 80,6% were women. 58 (46%) performed the role of the teacher and 68 (54%) other roles within the school. 59(47%) worked with the initial years of elementary school and 7(5%) with the final years, 60(48%) worked with other grades.

The correct answers index of the participants was tabulated and presented in absolute numbers and relative numbers and is presented in table 2. Regarding the initial conduct in case of unconscious victims, 77 (61,1%) verified signs of life first and then called for specialized help, which is the correct statement for this situation.

School professionals who participated in this study were asked about the details that should be observed and

Table 1 – Sample characterization according to school function, Montes Claros, MG, April/2021 (n=126)

VARIABLE	N	%
Function		
Professor	58	46%
Others	68	54%
Total	126	100%
School level at which they work		
Elementary School - Early Years	59	47%
Elementary School - Final Years	7	5%
Others	60	48%
Total	125	100%

Source: Study data, 2021.

Table 2 – Percentage of correct answers on first aid situations, Montes Claros, MG, April/2021 (n=126).

Variables	N	%
What is the first action to be taken in an unconscious victim situation?	77	61,11
What details should be noted on a victim that should be reported to the first aid service during the call for help?	82	65,08
When a spinal injury is suspected, what should be done?	92	73,02
Do you know how block mobilization is done?	92	73,02
If the victim is breathing but is unconscious, what position should be placed (or at least the head) if there is no suspicion of a break in the spine.	65	51,59
Why is it necessary to perform first aid with great precision and in a short period of time?	76	60,32
What emergency numbers do you know?	49	38,88

Source: Study data, 2021.

informed to the first aid service during the call for help request, 82 (65,08%) expressed the correct answer that they check the signs of life.

Another point that deserves attention and that was addressed in this study is the approach to the victim with suspected spinal injury. In this regard, 92 (73,02%) of respondents answered that the best thing is not to move the victim or mobilize them in a block, if necessary, thus avoiding spinal injuries.

When approaching the participants about how a block mobilization is performed, 92 (73,02%) stated that it is performed by moving the head along with the rest of the body, so that the

spine remains motionless.

In the case of the victim breathing, but unconscious, 57 (45,6%) stated that they should be placed in a lateral safety position. When asked about the reason for the need to perform first aid with great precision and in a short period of time, 76 (60,32%) answered that it is to avoid sequelae, ensure continuity of treatment and reduce discomfort. Regarding the participants knowing the emergency numbers, 49 (38,88) demonstrated knowledge of the correct numbers.

DISCUSSION

When performing the analysis of the results, it was noticed that most respondents have a degree of theoretical knowledge about emergency procedures, however, they do not feel prepared to provide emergency care in the exercise when faced with a real situation.⁽¹³⁾

In this perspective, the fear of taking initiatives and performing a wrong action constitutes the biggest impediment for lay people to initiate first aid to a victim, with trained people being more likely to take action. It was also possible to observe the inanity related to decision-making and unpreparedness that could possibly be related to the inefficient lack of training to add theory and practice. It is important to emphasize that being prepared and being properly able to actually preserve a life in risky situations are very different situations, bearing in mind that the main cause of death outside hospitals is lack of care and the second is inadequate assistance of disabled people.⁽¹⁴⁾

Qualitative study carried out in the city of Divinópolis, with teachers of kindergarten, also showed weaknesses in the knowledge of first aid. They reported incidents of accidents in schools, in which they acted on impulse, in an attempt to save the child's life and sometimes performing maneuvers that could have worsened their health condition.⁽¹⁵⁾

According to the Ministry of Health, any trained person will be able to provide first aid, conducting themselves with serenity, understanding and confidence. Keeping your cool and being in control are important. Therefore, on October 4th, 2018, Law No. 13.722 was approved, which makes training in basic notions of first aid mandatory for teachers and employees of public and private basic education establishments and child recreation establishments.⁽¹⁶⁾

The population's knowledge about first aid is essential to avoid harm to victims, or even death. In this pers-

pective, health education should be adopted as a primary instrument. ⁽¹⁷⁾ Many emergency situations permeate people's daily lives and these could be avoided or managed quickly and effectively in order to promote the victim's recovery.

Other analytical studies should be carried out involving the score of correct answers, their impact on the survival of victims of accidents.

CONCLUSION

The study above showed weaknesses in the knowledge of basic life support practices of education profes-

sionals in the studied municipality. To increase life chances and reduce the risk of sequelae in the face of an accident, it is necessary for school officials to be trained to provide first aid until the arrival of health specialists.

The insertion of a first aid training project in schools is of great value to train professionals in the education system and students for emergency care. And from that, increase the chances of survival, in addition to the promotion and prevention of accidents in schools and minimize the damage resulting from incorrect manipulation of the victim, as it can result in the worsening of the victim's health status.

The execution of this study showed the significance of developing knowledge on the subject and the importance of disseminating it in schools, as this activity is of great value to human life. Thus, providing an educational environment that enables the formation of more aware and responsible citizens, who, based on this practice, become trained in the promotion and prevention of accidents, and who are able to act in situations of health problems by providing first aid, propagating this important practice, which can prevent sequelae and save lives. 🐦

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