

## HEALTH EDUCATION INTERVENTIONS: THE IMPORTANCE OF THE NURSE IN THE TRAINING OF EDUCATION PROFESSIONALS IN THE FACE OF AN AIRWAY OBSTRUCTION (OVACE)



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**Rafael de Carvalho dos Santos<sup>1</sup>, Maria da Glória Amaral<sup>2</sup>, Isa Freitas de Alcântara<sup>3</sup>, Ana Beatriz Alvino Veloso<sup>4</sup>, Ana Carolina Valpassos R. B. Gomes Ribeiro<sup>5</sup> and Bárbara Nathaly Miranda Paixão Lomba<sup>6</sup>**

### ABSTRACT

Foreign body airway obstruction (OVACE) is a lethal and rapid condition that mainly affects children, and may cause numerous deaths annually in Brazil. When we analyze this context, we start to ask ourselves: "Why even after the Lucas Law of 2018, there are still children suffering serious sequelae and even evolving to death in their schools and daycare centers today?" With this, our objective through this study was to characterize the importance of training early childhood education teachers and the importance of nurses in the preparation of these education professionals. Due to the incidence of OVACE on infant morbidity and mortality, the need for immediate intervention was found where more actions aimed at this issue occur. Since throughout our research, in which we used an integrative review methodology and 20 articles with themes pertinent to this problem, in a majority of the articles affirmed the severity and possible consequences of this emergency. With this, we can affirm that the training carried out by nurses is essential to increase the efficiency of solutions in cases of OVACE. Thus, it is notorious that the necessary training for educators, together with the early prevention of nurses, collaborates significantly to reduce mortality rates and ensure safety.

<sup>1</sup> Nurse from Faculdade Bezerra de Araújo, emergency at the Military Fire Department of the State of Rio de Janeiro, Professor at Faculdade Bezerra de Araújo, coordinator of the postgraduate course in urgencies and emergencies for nurses, Master in local development from Universidade Augusto Motta. Specialist in Urgency and Emergency from Uninter, Specialist in Intensive Care from Uninter, Specialist in cardiology and hemodynamics from Unyleya.

Email: santoscbmerj@hotmail.com

ORCID: 0000-0002-4219-0151

<sup>2</sup> EEAN graduated in Nursing 1982, Master in Health of the Human Group - Nursing - Saú; Specialist in Nephthology Soben 1996, Nurse at the Central Army Hospital since 1983, Professor at Faculdade Bezerra de Araújo

<sup>3</sup> Graduating in Nursing at Faculdade Bezerra de Araújo - FABA.

E-mail: izzy.alcantarafreitas@gmail.com

ORCID: 0009-0007-0235-0820

<sup>4</sup> Graduating in Nursing at Faculdade Bezerra de Araújo - FABA.

Email: anabeatriztelecom@gmail.com

ORCID: 0009-0006-2546-8605

<sup>5</sup> Graduating in Nursing at Faculdade Bezerra de Araújo - FABA.

E-mail: anacarolinavalpassos@gmail.com

ORCID: 0009-0009-5554-1668

<sup>6</sup> Graduating in Nursing at Faculdade Bezerra de Araújo - FABA.

E-mail: bnathaly684@gmail.com

ORCID: 0009-0000-7824-8602

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## INTRODUCTION

In Brazil, based on DATASUS data in a survey conducted by Lopes et al. 2021, referring to the years 2018 and 2019, the annual average of infant deaths caused by respiratory tract obstruction, due to inhalation or ingestion of food and other objects, was 130.5 cases.

Still on data regarding these deaths, the Brazilian Society of Pediatrics of the State of Rio de Janeiro also carried out surveys regarding deaths, which were reported as choking, being carried out between 2009 and 2019, in children aged 0 to 9 years. As a result, airway obstruction by foreign body, OVACE, is a recurrent and significant problem in society, and this was evidenced by the number of deaths, 2,148 in the country. In its entirety, it was found that 21.6% with children between one and four years old, and 72% in babies under one year old. (Santos, et al. 2024)

With this, we can affirm the importance of disseminating first aid so that neurological damage and deaths can be reduced. First aid consists of immediate and essential interventions carried out on a person who has suffered some type of accident. Its purpose is to preserve vital functions and prevents your condition from worsening until specialized professionals can offer adequate care. (Andrade, 2020).

Currently, there are gaps in knowledge about first aid, with the population generally associating these practices only with health professionals. However, situations such as choking, when the body tries to expel a food or object that has obstructed the airways, require a quick response, as they can evolve into a serious emergency and, in extreme cases, lead to fainting or death by suffocation. Thus, it is essential to act promptly to avoid complications, since these occurrences can happen to anyone, at any time, and have a higher risk of being fatal in children (Santos, et al, 2024).

Considering that most of these incidents occurred in schools and daycare centers, it is of great importance to prepare the educators of these institutions who deal with these children on a daily basis. Over the years, we have had examples that the lack of preparation regarding first aid was incisive in the outcome of some victims of OVACE. The occurrence that was most talked about was the case of Lucas Begalli, a 10-year-old boy whose life was interrupted by mechanical asphyxiation in a matter of minutes, after choking on a piece of sausage during school lunch. This case, which highlighted the lack of preparation of educators to act in an emergency, led to the creation of the law that determines the holding of first aid courses for teachers and employees of public and

private schools of basic early childhood education. Known as Lucas' Law (Law 13.722), sanctioned in 2018, this legislation aims to ensure that everyone knows how to act in emergency situations until medical assistance arrives, emphasizing the importance of first aid preparation, knowledge, and training (Aires, 2021).

With all the facts mentioned above, we define that the objective of this study is of paramount importance, which aims to demonstrate the need for training educators in kindergartens and daycare centers due to the morbidity and mortality of OVACES and the importance of nurses in this training, in order to resolve or minimize the damage caused by OVACE.

## **METHODOLOGY**

The methodology used will be based on a literature review research with an integrative approach, aiming to emphasize the importance of early childhood education teachers in having the knowledge of first aid in their work environment. The study will be carried out in six stages, as follows: 1) Selection of the theme/question; 2) Establishment of inclusion criteria; 3) Definition of the information to be extracted from the studies; 4) Evaluation of studies; 5) Interpretation of the results; 6) Presentation of the review. To meet these steps, the theme was identified and the central question of the present research was elaborated: Why even after the Lucas Law, there are still children who, after suffering a VVAC, evolve with serious sequelae and even deaths?

The data search was carried out between February 2024 and May 2024, using the following research bases as the Virtual Health Library (VHL); Web of science, Medline, google scholar, SCIELO, among others. To ensure vocabulary control and identification of corresponding words, the following keywords were used: Nursing; emergency; Airway obstruction and teacher training.

The first step of this research took place in the definition of the theme and the guiding question that was carried out in January 2024.

The second step was the definition of the establishment of the inclusion criteria that took place throughout the months of January and February of the current year. From this phase, we began the third step, which was taken by defining the information to be extracted from the studies that were collected between February and May 2024.

After excluding the information necessary for the preparation of the research, we carried out the evaluation and interpretation of the studies that took place throughout the

months of June to November 2024. And finally, the last step of the research that is defined by the presentation of the review in December 2024.

## **DEVELOPMENT**

### **AIRWAY OBSTRUCTION AND ITS INCIDENCE**

Airway obstruction by a foreign body, also known as OVACE, can manifest partially or totally, but both are considered serious, sudden, and potentially fatal situations, where they prevent ambient oxygen from reaching the alveoli. (Santos, et al. 2024)

The preservation of airway patency should be done quickly and immediately in patients with OVACE, considering that it is a serious and lethal situation when not properly managed. It is important to note that its severity can be represented by the degree of obstruction that the object caused. (Santos, et al. 2024).

Foreign body aspiration is characterized by the action of aspirating and inhaling a foreign body into the respiratory tract. The act of inhaling a foreign body can occur mainly in the pediatric phase, as it is at this stage that children have the habit of taking objects to their mouth, and OVACE can occur. According to the Brazilian Society of Pediatrics, data indicate that breastfeeding women and children are more susceptible to this type of situation (Lima; Baby; Maia, 2021).

And it can be said that food, whether in grains, or even toys, can be presented as the biggest villains when talking about OVACE, being a great risk, due to the habit as already mentioned, of the curious phase, coming from its development of the sensory system. (Santos, et al)

As mentioned, childhood is the phase of curiosity, exploration for children, which ends up making them more vulnerable and susceptible to accidents caused by a foreign body that extends to an OVACE. In view of this, it becomes clear the relevance of the training and preparation of their guardians, which is not only encompassed in their family bond, but encompasses all those responsible who are daily taking care of that child, such as education professionals, preventing them from not knowing how to act in certain situations like this, and thus reducing the risk until specialized help arrives. (Lima; Baby; Maia, 2021).

## SIGNS AND SYMPTOMS OF AN OVAC

CAVO occurs when there is a partial or complete blockage of the airway by objects or food, being an emergency that requires immediate intervention to avoid serious complications such as hypoxia and even a CPA. (Souza et al., 2021)

In CAVAC with partial blockade (when there is still air passage), the patient presents persistent cough, in an attempt to eliminate the object; noisy breathing, especially stridor in children; respiratory distress; hoarseness and limitation when speaking. (Targino, 2023)

In the case of a complete blockage (where there is no more air passage), there is an impossibility to breathe, speak and/or cough. Patient becomes cyanotic, agitated, growing anxiety and with an expression of despair; sudden movements from the hands to the neck and loss of consciousness (if there is no rapid intervention). (Araújo, 2024).

## COMPLICATIONS OF AN OVAC

In cases of partial blockade OVACE, the best intervention is the Heimlich maneuver. Created in 1974 by physician Henry Heimlich, the technique uses pressure on the diaphragm, compressing the bilateral lung base and inducing an artificial cough to expel the blocking object. (Habrát, 2022).

The maneuver was adapted for babies under 1 year old, consists of placing the baby face down on the rescuer's forearm with the head slightly tilted downwards and 5 chest compressions are performed. If the object is not expelled, the baby is cited on his stomach for 5 more compressions. In children over 1 year old, the rescuer positions himself behind the child, forming a fist with one hand and placing it on the person's abdomen, in the midline between the navel and xiphoid appendix, keeping the thumb facing the abdomen. Then place your other hand over the first. (Habrát, 2022)

In an unconscious victim of OVACE, cardiopulmonary resuscitation (CPR) is necessary and it is important to have adequate materials. Start the procedure by placing the victim on a firm surface. Use your clasped hands to perform chest compressions, maintaining a rhythm of about 100 to 120 compressions per minute. If available, a vent mask can facilitate air administration by ensuring a proper seal. Periodically check the victim's mouth for visible objects and, if possible, remove them carefully. Continue CPR until emergency arrives or until the victim returns to normal breathing. It is crucial that the rescue team is well trained and that the materials are ready and in good condition. (Ferrairo, 2021)

A rescuer: When only one person is available to provide assistance, one should alternate between compressions and ventilations, treating the situation as if it were an adult, performing 30 high-quality compressions followed by two ventilations. (Lavonas et al. 2020).

Two or more rescuers: when there are at least two professionals available to assist the child, the ideal is to reduce the time to increase the number of ventilations per minute, ensuring better oxygenation. In this case, one rescuer takes care of the compressions while the other takes care of the airway, performing ten cycles of 15 compressions followed by two ventilations. (Lavonas et al., 2020).

## IMPORTANCE OF TRAINING

There is an importance of immediate first aid and the training of educators to perform it, especially in school environments, where children and adolescents are constantly on the move and subject to accidents or health emergencies, and the natural curiosity of the little ones puts them at greater risk of aspiration of objects. (Vargas, 2024).

The ability of educators to perform clearance maneuvers, such as the Heimlich maneuver, is extremely important. In OVACE situations, where the help of a health professional may not be immediately available, it is the preparation of educators that can make the difference in the matter of survival. They need to identify the signs of choking and understand what they need to do to clear the airway quickly. First aid training gives these professionals not only the technical knowledge, but also the confidence to act calmly and accurately at critical moments. (Fioretino et al., 2022)

Trained professionals are not only able to intervene in emergencies, but also to guide students on safe practices, such as chewing food thoroughly, avoiding running with objects in their mouths, and being mindful of the size of the objects they play with. This guidance contributes to the creation of a culture of safety within the school environment, minimizing the risks of suffocation. (Oliveira et al. 2020)

Thus, continuous training in first aid for educators represents a preventive measure that contributes to the safety of the children and adolescents under their responsibility. (Agra, 2021)

With the proper preparation, these professionals become potential rescue agents, capable of intervening until the arrival of specialized care, ensuring greater protection and safety in the school environment. (Agra, 2021)



## ROLE OF THE NURSE IN THE TRAINING OF EDUCATORS IN THE FACE OF AN OVAC

Nurses play a key role in training educators to respond to emergencies such as foreign body airway obstruction (OVACE). With a solid background in first aid and rescue techniques, the nurse is the professional given as the first option to teach the correct clearance maneuvers, such as the Heimlich maneuver and other essential practices to ensure safety in cases of choking. The guidance of a trained nurse allows educators to acquire technical and practical knowledge, increasing the effectiveness of first aid actions in emergency situations. (Cruz, et al., 2021)

In addition to teaching the techniques, the nurse has a comprehensive knowledge about the functioning of the human body, which makes him able to explain the physiology involved in airway obstruction. This understanding helps educators not only learn the maneuvers, but to understand the reason for each step, enabling a more conscious and effective application. The nurse can also instruct about the signs and symptoms of partial and total obstruction, in addition to teaching how to identify the severity of the situation and the need to call the emergency service. (Silva et al., 2022).

The involvement of nurses in the training of educators also contributes to the construction of a culture of prevention within the school environment. He can provide guidance on safe eating practices, such as the importance of chewing food well and avoiding small objects when playing, in addition to promoting lectures and educational activities that aim to raise awareness among both educators and students about the risks of suffocation. In this way, the nurse acts not only in emergency training, but also in the prevention of accidents. (Lima et al, 2024).

Another crucial point is the role of the nurse in updating and recycling the knowledge of educators. First aid practices can evolve over time, and updating is essential for educators to be prepared to act safely. The nurse, by conducting annual training, ensures that professionals are always up to date with the latest and appropriate practices to deal with emergencies. (Marques et al, 2023).

In view of this, the presence of the nurse in the training of educators adds a level of security and confidence to the process, ensuring that the techniques are taught correctly and responsibly. Educators trained by nurses feel safer to act in emergency situations, which is reflected in the safety of students and the peace of mind of parents. The contribution of nurses in this context, therefore, is essential to create a safer school



environment that is prepared to face health challenges efficiently and carefully. (Oliveira, et al. 2022).

## RESULTS AND DISCUSSIONS

This study analyzed the problem of airway obstruction by foreign body (OVACE) in children, with the importance in the training of educators and the role of the nurse as a fundamental agent for the expansion of knowledge in first aid. The results obtained from the literature review highlight the urgency of preventive measures and specific training that result in better effectiveness in the safety of children in the school environment.

The data showed that CAVAC is a condition of high incidence among children, with most fatal cases recorded in babies under one year of age. According to our surveys, in a survey of 2,148 children. Corresponding to 72% of the cases, children under one year of age. Followed by children between one and four years old, which represented a rate of 21.6%. And from five to nine years, the equivalent of 6.4%.

The natural behavior of the infant phase, marked by curiosity and exploration, makes the little ones more vulnerable to accidents of this type. Food, toys and small objects stand out as the main causes of these episodes.

To carry out this research, 20 articles were chosen, where they were analyzed in detail, and data considered related to this theme were used. Table I shows the main elements of each of them, containing year, author, journal and objective.

Table I

Year	Title	Authors	Newspaper	Objective
2020	Primer Notions of First Aid and Main Emergencies	Gabriel Freitas De Andrade	Portal UFRRJ	Describe the conduct of first aid in certain situations.

2024	Cautions for foreign body airway obstruction (OVACE) during infant food introduction	Rafael de Carvalho dos Santos, Sarah Gomes Medeiros, Priscila de França do Prado da Rocha, Ana Lúcia da Costa Coutinho, Thais de Souza Ramos, Charlene da Silva Ribeiro	Seven academic publications	Prevention and, when unavoidable, for immediate intervention, minimizing the complications of CAVAC and even distancing the possibility of death
2023	Lucas Law: know the story behind the law	Tamara Aires	Cmo Drake.	Defining the implementation of Luke's Law
2021	Airway obstruction by foreign body in children: nurses' work	Maria Cristina De Brito Lima, Elessandra Rezende De Barros and Luiz Faustino Dos Santos Maia	Revista Recien., São Paulo, v. 11, n. 34, p. 307-311	Rates of infant deaths due to an OVACE
2021	Conducts of immediate puerperal women in the face of an alleged choking in babies.	Antonio Filho Leal Lopes, Melina Lopes Lima, Luciane Patrícia Andreani Cabral, Everson Augusto Krum and Cristina Berger Fadel.	Fundamental Care13(2), 260-266. DOI:10.9789/2175-5361.RPCFO.V13.9201	Indexes related to an OVACE
2021	Pediatric emergencies in airway obstruction due to foreign body	Alessandra Lima de Sousa, Aline dos Vales Sousa, Francisco Braz Milanez Oliveira, Kadja Fernanda Tinoco, Naiane Almeida da Silva, Nataly Camila Gomes de Arrais Figueredo, Thays Rayane Souza Ferreira, Vaniele dos Santos da Silva da Oliveira, Wanne da luz Salazar Carvalho.	Digital Publisher	Define and differentiate the types of OVACE
2023	Sons Pulmonares	Susana Targino	My Life	Identify the signs and symptoms of a partially blocked OVAC.

2022	How to Do the Heimlich Maneuver in Conscious Adults or Children.	Dorothy Hebrat	Manual MSD	Explain how the Heimlich maneuver is performed in babies under 1 year old and in children over 1 year old.
2024	Foreign body airway obstruction (OVACE) in adults	Juan Carlos Silva Araújo	PEBMED	Identify the signs and symptoms of a fully blocked OVAC.
2021	CPR in children.	Fernanda Ferrairo	Resident Eumedic	Explain how the CPR maneuver is performed.
2024	The importance of first aid: guide for emergency responders and first responders	Ivan Vargas	Ivan Vargas	Seek the importance of immediate first aid.
2022	Heimlich maneuver as a choking technique in pediatric first aid: Integrative literature review	Maria Eduarda Pereira da Silva, Elenice de Fatima Souza Capelario, Luana Almeida dos Santos, Maraysa Costa Vieira Cardoso, Érica de Andrade Alves da Silva, William Gomes da Silva, Bárbara Lislá de Araújo Pereira, Nathália Fonseca da Silva, Cristina Maria Oliveira Martins Formiga, Rodrigo Daniel Zanoni	Research, Society and Development, v. 11, n. 17, e50111738629, 2022 (CC BY 4.0)   ISSN 2525-3409	Explain why the nurse is suitable for this training
2022	Importance of health education on the Heimlich maneuver and first aid in early childhood education	Maria Fernanda Pereira Gomes Fiorentino, Camila Silva da Cruz Simião, Daiane Suele Bravo, Vanessa Ramos Lopes Valverde	Annals of the 25th Brazilian Congress of Nursing Councils (CBCENF)	Seek the importance of identifying the signs of choking.
2022	Continuing education of teachers in first aid	Kiarelli Otoni Almeida Agra.	Nilo Peçanha Library – IFPB (João Pessoa campus)	Provide the importance of continuous enablement.

2021	First aid health education interventions in the school environment: an integrative review	Karine Bianco da Cruz, Tatiana Carvalho Reis Martins, Pedro Borges da Henrique Cunha André de Lima Gustavo Godas, Eduarda Siqueira Cesário and Bruna Moretti Luches	Journal of Education in Health Sciences, v. 19, n. 1, p. 13-26	Explain the importance of the nurse's role in the training of educators.
2021	Technologies for health education on foreign body airway obstruction: an integrative review	Fabiana Laranjeira da Silva, Nelson Miguel Galindo Neto, Guilherme Guarino de Moura Sá, Michelline Santos de França, Paula Marciana Pinheiro de Oliveira, Monaliza Ribeiro Mariano Grimaldi	Journal of the School of Nursing of the University of São Paulo · 2021; 55:e03778	
2024	First aid in schools: teaching how to save lives.	Weverson Luis Monteiro Lima, Amanda da Silva Matos, Geovana Baier dos Santos, Heloisa Sthefany dos Santos Miranda, Juan Mathaus Leal de Carvalho, Raysa Pereira de Sousa, Teresa Costa do Amaral Moreira, Iângla Araújo de Melo Damasceno	FT Magazine	Explain why nurses are suitable for this training in a school environment.
2023	The role of the nurse as a health educator in current times.	Bruna Rodrigues Guze, Jennifer Silva Santos, Lucas Pereira da Silva, Mariana Freitas de Souza, Luiz Faustino dos Santos Maia	Remecs Journal - Multidisciplinary Journal of Scientific Studies in Health	Seek to explain the role of nurses in updating this training.
2022	Impact of first aid training on the knowledge of educators and school agents.	Willian Bil de Oliveira, Susane Helen Monteiro Satiro Gonçalves, Patrícia da Silva Muller, Hercules de Oliveira Carmo	Reviews.	Point out the effect of first aid training on the knowledge of educators.

2020	Preventive actions to avoid child accidents in the school environment: integrative review.	Bruna Melo de Oliveira, Larissa Becker de Godoy, Sofia Mello Moraes, Roberta Garcia Gomes, Rogério Silva Lima	Sustinere: Journal of Health and Sustainability. Vol. 8 No. 2	Seek the importance of safety culture within the school environment.
2020	Guidelines for Basic Life Support and Emergency Care in Pediatrics.	Eric Lavonas, J.; MAGID, David J.; AZIZ, Khalid; BERG, Katherine M.; CHENG, Adam; HOOVER, Amber V.; MAHGOUB, Melissa; PANCHAL, Ashish R.; RODRIGUEZ, Amber J.; TOPPJIAN, Alixis A.; SASSON, Camilla. Translation: Tim Ferriss.	AMERICAN HEART ASSOCIATION (AHA).	Explain how the CPR maneuver is performed with 1 and 2 or more rescuers.

An important milestone in this context was the creation of the Lucas Law (Law 13.722/2018), which requires educational institutions to train their professionals in first aid. This legislation emerged as a response to tragic cases, such as that of Lucas Begalli, a 10-year-old boy who died after choking on a piece of sausage in a school environment. However, despite the regulation, there are still challenges related to the effective implementation and periodicity of training.

When evaluating the studies, we identified that even after the creation of the Lucas Law, created in 2018, we are still facing several cases of OVACE in schools and daycare centers with unfortunate outcomes. In May 2022, a child died in the municipality of Petrópolis in the state of Rio de Janeiro by an OVACE with a piece of apple. Another fact was in the municipality of Rio das Ostras, also in the state of Rio de Janeiro, where a 4-

year-old girl died after suffering an OVACE for a seed or olive. In May 2023, a 2-year-old boy died after suffering an OVACE in the daycare with an egg. In November 2023 in Rio Grande do Sul, a 6-month-old breastfeeding mother died from OVACE with milk. It doesn't stop there, in April 2024, in the municipality of Mogi Guaçu years in the interior of São Paulo, a 7-year-old boy died after suffering an OVACE with a piece of bread. In October 2024, an eight-month-old baby suffered an OVACE at the daycare center and died in the municipality of Santa Rosa in Rio Grande do Sul. And last, but not least, unfortunate, in November 2024, in the Campo Grande neighborhood in Rio de Janeiro, a 7-year-old girl died after suffering an OVACE with a piece of bread in her residence.

In some of these cases, the report cited the presence of educators trained to act in the face of this emergency. However, we can observe the high mortality in this situation. With this, continuing education for these professionals is of paramount importance. In this scenario, the important role of nurses in the training process of these educators comes into play, as well as in their improvement with technical and practical training; the nurse is able to transmit the necessary knowledge for educators to recognize the signs of airway obstruction and perform appropriate interventions, such as the Heimlich maneuver and CPR. In addition, nurses promote a culture of prevention, guiding educators and students on safe practices in eating and playing.

Nurse-led trainings proved essential not only to act in emergencies, but also to build a foundation of safety within the school environment. Annual training and the constant updating of practices ensure that educators are able to act quickly and efficiently, significantly increasing the chances of survival until specialized help arrives.

The preservation of airway patency should be done quickly and immediately in patients with OVACE, considering that it is a serious and lethal situation when not properly managed. It is important to note that its severity can be represented by the degree of obstruction that the object caused. (Santos, et al. 2024).

In agreement with Santos et al 2024, we highlight the importance of agility and speed regarding an OVACE, where for the professional to know how to act in the best way, it is also necessary to have knowledge and what attitudes to take in the face of it. It is relevant to emphasize the veracity of this consequence, where it can be lethal, if it is not handled correctly and at the right time.

In OVACE, the degree of obstruction dictates what attitudes can be taken, as they can be classified as partial blockage or total blockage depending on the obstruction in

which the objective came to cause in the child. The total blockade should be of total alarm for the one who is ready to provide such help, as it can quickly evolve into hypoxia, where the victim may die in moments. The partial blockade has its emergency part, as it can also become a total one, and thus evolve into a critical case. Bearing in mind that both, even with their particularities, are still lethal depending on the action of the trained professional.

In cases of partial blockade OVACE, the best intervention is the Heimlich maneuver. Created in 1974 by physician Henry Heimlich, the technique uses pressure on the diaphragm, compressing the bilateral lung base and inducing an artificial cough to expel the blocking object. (Habrat, 2022).

Agreeing with Habrat, the Heimlich maneuver is considered the effective technique for clearing the airways, because when applied quickly and correctly it can prevent the progression of the patient's clinical condition. Although it is a simple technique, its execution requires knowledge and training to ensure that it is carried out effectively and safely. Taking this to the school context, where children are more prone to this type of emergency, the urgent need to spread this knowledge among educators, who are often on the front line in these situations, stands out.

Another important point to be discussed is about the adaptation of the maneuver for different age groups, especially in younger children, where pressure should be applied with more caution to avoid abdominal injuries. This technique further emphasizes the relevance of continuous and specific training for education professionals, ensuring that they are able to perform the technique effectively. In addition, regular first aid training is essential to prepare them to act efficiently, ensuring a quick and appropriate response in critical situations, promoting the safety and well-being of children.

In an unconscious victim of OVACE, it is necessary to perform cardiopulmonary resuscitation (CPR) and it is important to have adequate materials. Start the procedure by placing the victim on a firm surface. Use your clasped hands to perform chest compressions, maintaining a rhythm of about 100 to 120 compressions per minute. If available, a vent mask can facilitate air administration by ensuring a proper seal. Periodically check the victim's mouth for visible objects and, if possible, remove them carefully. Continue CPR until emergency arrives or until the victim returns to normal breathing. It is crucial that the rescue team is well trained and that the materials are ready and in good condition. (Ferrairo, 2021)



Proper performance of cardiopulmonary resuscitation (CPR) in unconscious victims of OVACE is essential to increase the chances of survival and reduce possible sequelae. The literature highlights that immediate interventions, such as chest compressions and effective ventilation, can restore circulation and prevent irreversible damage caused by prolonged hypoxia. Specific training in CPR, including the use of devices such as ventilation masks, is highlighted as a key measure to enable educators to deal with emergencies of this nature.

In addition, the importance of an organized and well-guided approach is highlighted, especially in school contexts, where the presence of health professionals may be limited. The need to safely identify and remove visible objects in the victim's oral cavity during maneuvers reinforces the role of practical training in preparing lay individuals to act in emergency situations.

Finally, the continuous preparation of rescue teams and the availability of adequate materials are elements that ensure more efficient interventions. These factors not only enhance the positive outcomes of CPR, but also contribute to the formation of a safer environment, promoting rapid and effective response in emergency situations, especially among vulnerable populations, such as children.

There is an importance of immediate first aid and the training of educators to perform it, especially in school environments, where children and adolescents are constantly on the move and subject to accidents or health emergencies, and the natural curiosity of the little ones puts them at greater risk of aspiration of objects. (Vargas, 2024).

Foreign body aspiration is characterized by the action of aspirating and inhaling a foreign body into the respiratory tract. The act of inhaling a foreign body can occur mainly in the pediatric phase, as it is at this stage that children have the habit of taking objects to their mouth, and an OVACE may occur. According to the Brazilian Society of Pediatrics, data indicate that breastfeeding women and children are more susceptible to this type of situation, with 50% of airway aspirations being performed in children under 4 years of age and more than 94% before the age of seven. (Lima; Baby; Maia, 2021).

Confirming what Vargas says, school environments become places of high risk for medical emergencies, especially because children are curious. However, this highlights the high need for specific training for education professionals, as a lack of adequate preparation can lead to irreversible worsening. In this way, the continuous training of

education professionals becomes a fundamental point to minimize risks and ensures quick and effective interventions in cases of OVACE.

Like Vargas, the SBP has been describing alarming rates that make us reflect on the importance of having preventive measures within schools. Because the OVACE has already come into focus a few years ago, and even with so much repercussion of the Lucas case, who died due to such an emergency, nowadays it continues to be an emergency to be emphasized, since in recent years there have been similar fatalities such as the one mentioned above.

The ability of educators to perform clearance maneuvers, such as the Heimlich maneuver, is extremely important. In OVACE situations, where the help of a health professional may not be immediately available, it is the preparation of educators that can make the difference in the matter of survival. They need to identify the signs of choking and understand what they need to do to clear the airway quickly. First aid training offers these professionals not only the technical knowledge, but also the confidence to act calmly and accurately at critical moments (Fioretino et al., 2022).

Throughout our research, we highlighted the relevance of the technical preparation of educators to act in an OVACE, especially in scenarios where access to a health professional is non-existent. This responsibility requires educators to be properly trained to recognize the signs of obstruction and perform the Heimlich maneuver efficiently and safely. This training goes beyond simple technical learning, it involves the development of skills that allow them to act with precision, making the victim not have any risk to their lives.

In the school context, the training of educators becomes even more indispensable. Training not only equips them with the necessary technical knowledge, but also strengthens their confidence to act quickly in high-pressure situations. Well-prepared educators become a vital extension for health professionals, where the help response is a critical factor for quanta of time and place. Thus, investing in continuous training programs is essential to ensure that they are able to deal with OVACE situations, promoting a safer and more prepared environment for emergencies.

Nurses play a key role in training educators to respond to emergencies such as foreign body airway obstruction (OVACE). With a solid background in first aid and rescue techniques, the nurse is the professional given as the first option to teach the correct clearance maneuvers, such as the Heimlich maneuver and other essential practices to

ensure safety in cases of choking. The guidance of a trained nurse allows educators to acquire technical and practical knowledge, increasing the effectiveness of first aid actions in emergency situations. (Cruz, et al., 2021)

The role of the nurse in training educators to respond to emergencies, such as foreign body airway obstruction (OVACE), is crucial to ensure that professionals who deal directly with children are prepared to act quickly in risky situations. The first aid training provided by nurses goes beyond the transmission of techniques; It involves the technical and practical training necessary for educators to know how to identify and respond to emergencies effectively. The correct application of clearance maneuvers, such as the Heimlich maneuver, can make the difference between life and death in cases of choking, and it is essential that educators feel confident to act under pressure.

The reviewed literature corroborates that, although educators are not health professionals, their role in the initial management of emergencies is decisive for the success of care. The nurse, with their technical knowledge about the human body, not only teaches the necessary maneuvers, but also provides an in-depth understanding of the physiological processes involved, helping educators to make more informed decisions during an emergency. Additionally, ongoing training and updating knowledge are vital, as first aid practices can evolve over time.

By training educators, nurses also promote the creation of a safer environment in schools, with the integration of preventive practices and the reduction of risks associated with accidents. By enabling educators to acquire the skills necessary to act quickly and effectively, nurses contribute significantly to the prevention of serious complications and improve emergency response, directly benefiting the safety and well-being of the children in their care.

## **FINAL CONSIDERATIONS**

With the research carried out, we conclude that foreign body airway obstruction (OVACE) is a highly serious medical emergency, especially in the context related to children, where the risk of accidents of this nature is amplified by the natural curiosity of children. An adequate and immediate response in OVACE situations can mean the difference between life and death, and it is crucial that the professionals involved are well prepared and trained to carry out the interventions.

Thus, the importance of training educators in first aid is highlighted, with emphasis on the correct application of the Heimlich maneuver and the performance of cardiopulmonary resuscitation (CPR) in cases of unconscious victims. These trainings not only equip educators with the necessary technical and practical knowledge, but also develop the confidence to act accurately and calmly in critical situations. This preparedness is even more crucial in school settings, where health workers are not always available, and educators become the front line in responding to these emergencies.

In this review of the literature, the relevance of the role of the nurse in the training of these professionals is evidenced, transmitting not only the intervention techniques, but also a broader understanding of the physiological processes involved. This approach provides deeper and more effective learning, as well as reinforcing the need for ongoing training to keep up with the evolution of best practices in first aid.

In addition, the inclusion of first aid training programmes in schools should be seen as a priority, given the alarming rates of OVACE cases in children and the relevance of preventive and rapid response measures. The creation of safer environments prepared for medical emergencies is a collective commitment, involving educators, health professionals, families, and educational institutions.

Finally, by investing in the training of educators, we are promoting not only the safety and well-being of children, but also the construction of a culture of prevention and care, where agility and competence in the management of risk situations become fundamental elements to save lives. Thus, the dissemination of knowledge about first aid should be widely encouraged, especially in contexts such as school, where its application can make all the difference.

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