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Knowledge, attitudes and practices in first aid in the school environment: an integrative review

Conhecimento, atitudes e práticas em primeiros socorros no ambiente escolar: uma revisão integrativa

Conocimientos, actitudes y prácticas de primeros auxilios en el entorno escolar: una revisión integradora

ABSTRACT

Objective: To analyze the scientific evidence on knowledge, attitudes and practices in first aid of teachers who work in the school environment. **Method:** Integrative literature review, carried out in June and July 2020 in the Cinahal, Scopus, Pubmed, Bdenf and Lilacs databases. Articles that portrayed the theme in the sample period from 2010 to 2020 were included. Those that had trainee teachers as participants were excluded. **Results:** 25 articles were selected and emerged in two categories: knowledge, attitudes and practices in first aid and school environment - strategies for training in first aid aimed at the promotion, prevention and injuries of accidents. **Conclusion:** It appears that there is a lack of knowledge about the necessary actions in first aid care, which impacts the attitudes and practices performed, as well as the treatment and prognosis. Thus, educational interventions are strategies that promote the development of knowledge, attitudes and practices necessary for first aid care.
Descriptors: School Teachers; First aid; Knowledge, Attitudes and Practice in Health.

RESUMO

Objetivo: Analisar as evidências científicas sobre conhecimento, atitudes e práticas em primeiros socorros de professores que atuam no ambiente escolar. **Método:** Revisão integrativa da literatura, realizada no mês de junho e julho de 2020 nas bases Cinahal, Scopus, Pubmed, Bdenf e Lilacs. Foram incluídos artigos que retratassem a temática no período amostral de 2010 a 2020. Excluíram-se aqueles que tinham como participantes professores estagiários. **Resultados:** 25 artigos foram selecionados e emergiram em duas categorias: conhecimento, atitudes e práticas em primeiros socorros e ambiente escolar – estratégias para a capacitação em primeiros socorros voltada para a promoção, prevenção e agravos de acidentes. **Conclusão:** Constata-se que há desconhecimento sobre as ações necessárias no atendimento em primeiros socorros, o que impacta nas atitudes e práticas executadas, bem como no tratamento e prognóstico. Assim, intervenções educativas são estratégias que promovem o desenvolvimento de conhecimento, atitudes e práticas necessárias ao atendimento em primeiros socorros.
Descritores: Professores Escolares; Primeiros Socorros; Conhecimentos, Atitudes e Prática em Saúde.

RESUMEN

Objetivo: analizar la evidencia científica sobre los conocimientos, actitudes y prácticas en primeros auxilios de los profesores que trabajan en el ámbito escolar. **Método:** Revisión bibliográfica integradora realizada en junio y julio de 2020 en las bases de datos Cinahal, Scopus, Pubmed, Bdenf y Lilacs. Se incluyeron los artículos que retrataron el tema en el período de la muestra de 2010 a 2020. Se excluyeron aquellos cuyos participantes eran profesores en prácticas. **Resultados:** Se seleccionaron 25 artículos, de los que surgieron 2 categorías: conocimiento, actitudes y prácticas en los primeros auxilios y ambiente escolar - estrategias para la capacitación en los primeros auxilios orientadas a la promoción, prevención y atención de accidentes. **Conclusión:** Se observó que existe un desconocimiento sobre las acciones necesarias en la atención de primeros auxilios, lo que repercute en las actitudes y prácticas realizadas, así como en el tratamiento y pronóstico. Así pues, las intervenciones educativas son estrategias que promueven el desarrollo de los conocimientos, las actitudes y las prácticas necesarias para la atención de primeros auxilios.
Descriptores: Maestros; Primeros Auxilios; Conocimientos, Actitudes y Práctica en Salud.

Priscila da Silva Miranda[1]
0000-0002-0554-8310

Liliane Faria da Silva[1]
0000-0002-9125-1053

Emília Gallindo Cursino[1]
0000-0002-5845-9709

Izabella da Silva Viana[1]
0000-0002-5214-8360

Maria Estela Diniz Machado[1]
0000-0001-9228-0676

[1]Universidade Federal Fluminense; Nitéroi, Rio de Janeiro, Brasil.

Corresponding author:
Priscila da Silva Miranda
priscilamiranda@id.uff.br

INTRODUCTION

In Brazil, significant changes in the causes of infant mortality point to the growth of so-called external causes, which include accidents and violence. Accidents are described as unintentional events that can be prevented or avoidable; these events cause physical and emotional damage to the children, family and community in which they live[1-2].

In this sense, in 2019, accidents caused 66,413 hospitalizations and 1,576 deaths in children aged 1 to 9 years in Brazil[3-4]. Thus, childhood is characterized by a period of vulnerability to accidents; factors such as the development of motor, cognitive and sensory skills require special care and remain alert[5]. Accidents can occur in different contexts such as home, traffic, clubs and schools.

In the school environment, where 47.9 million students are in basic education, including kindergarten, elementary and high school education, sometimes full-time[6], the combination of factors such as the structure of school buildings and combined activities with the phases of development, predispose the occurrence of accidents.

Thus, when there is an accident situation at school, teachers experience the apprehension of being responsible for the children in this circumstance, having to provide the first care and refer them, when necessary, to the health service. This experience causes frustration when they do not have knowledge about basic notions of first aid[7].

First aid is understood as the assistance that is provided by a health professional or not. This assistance helps individuals who are suffering or even at risk of death[8-9]. In this context, Federal Law 13,722, of October 4, 2018, known as The Lucas Law, in its 1st Art., makes it mandatory to train first aid basics of teachers and employees of public and private educational establishments and child recreation establishments[10].

A study carried out in Iran found similar results, in which teachers had inadequate knowledge in first aid[11]. Another study carried out in Turkey, with the participation of 331 teachers, found that they did not feel able to offer first aid care[12].

In Brazil, a study carried out in two schools in the city of São Paulo showed that much of the teachers' knowledge comes from common sense, often erroneous and obsolete, showing that they are unprepared to deal with these situations[13].

Considering the relevance of the theme first aid in the school community, this review aimed to analyze the scientific evidence on knowledge, attitudes and practices in first aid of teachers who work in the school environment.

METHOD

Integrative Literature Review (ILR) that observed the following stages: identification of the theme and selection of the research question; establishment of criteria for inclusion and exclusion of studies; definition of the information to be extracted from the selected studies and categorization of the studies; the assessment of studies included in the integrative review; the interpretation of results and presentation of the review; in addition to the synthesis of knowledge[14].

The research question was elaborated based on the components through the PICo strategy: (P) Patient/Problem, (I) Phenomenon of interest, Co (Context)[15]. The question was: What is in the scientific literature on knowledge, attitudes and practices of teachers in first aid in the school environment?

The bibliographic survey was carried out in June and July 2020, using the search terms of the Health Sciences Descriptors (Decs) in the bases: Latin American and Caribbean Literature on Health Sciences (LILACS), Database of Private Nursing Data (Bdenf) and Medical Subject Headings (MeSH) National Library of Medicine and National Institutes of Health (Medline/PubMed) and Sciverse Scopus (Scopus) and in the specific CINAHL titles of the Cumulative Index to Nursing and Allied database Health Literature. We chose to use the descriptors in English, in order to obtain a larger sample of studies. Thus, the search terms were combined with the Boolean operator AND, explained in Figure 1.

Figure 1 – Search strategy in databases

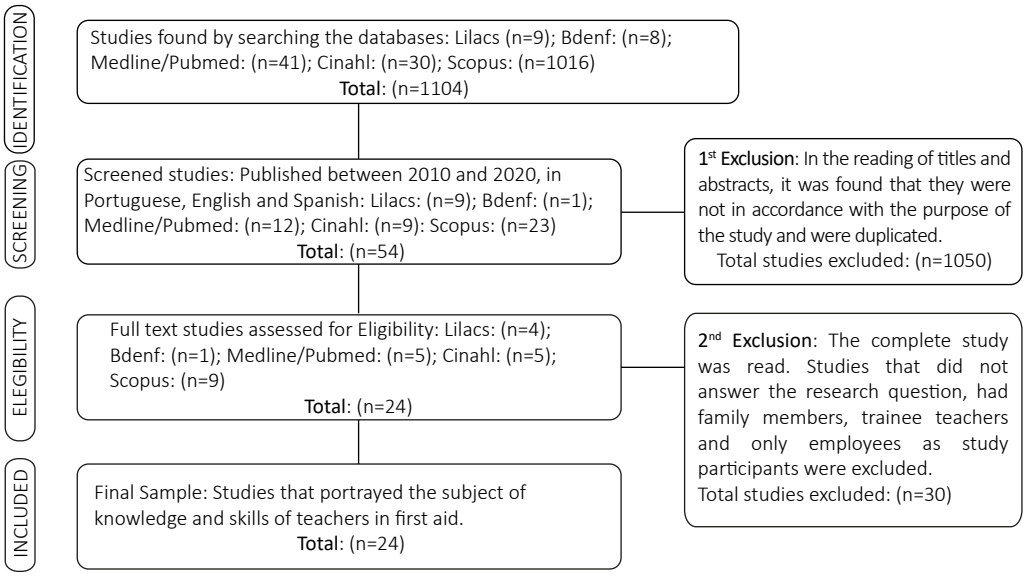
PICo	Decs	Mesh	Títulos Cinahl
P	School Teachers	School Teachers	School Teachers
	AND	AND	AND
I	First Aid	First Aid	First Aid
	AND	AND	AND
Co	Health Knowledge, Attitudes, Practice	Health Knowledge, Attitudes, Practice	Health Knowledge

Source: Research Data

Studies published from 2010 to 2020 were included, in order to obtain current and extensive studies on the subject, in addition to the fact that in 2010 updated guidelines from the American Heart Association[16] were published, in Portuguese, Spanish and English, texts complete online, and that portrayed the theme of first aid at school, carried out by teachers (designated after reading the abstracts of the studies). For the exclusion criteria were defined: editorials, opinions and/or comments, theses, dissertations, studies that addressed the topic: first aid performed by teachers who were trainees and family members.

The searches in the databases captured 1,104 references and after applying the inclusion and exclusion criteria, it was found that 24 studies answered the research question and composed the review. Thus, the flowchart of the results obtained according to the recommendations of the meta-analysis model (PRISMA)[17] is represented below (Figure 2).

Figure 2 – Flowchart of the results obtained from the PRISMA recommendation



Source: Research Data.

The 3rd stage consisted of defining the information to be extracted from the selected studies. To ensure methodological rigor and verify the scientific evidence, a figure was created by the author in Microsoft Word, in which the main characteristics of the studies are described, with the following items: country/design/level of evidence and main results (Figure 3).

The evidence level (EL) was identified based on the study design. Thus, I was assigned to systematic reviews and meta-analysis of randomized clinical trials; II for randomized clinical trials; III for a non-randomized controlled trial; IV for case-control or cohort studies; V for systematic reviews of qualitative or descriptive studies; VI for qualitative or descriptive studies and VII for expert opinion and/or expert committee reports. This hierarchy classifies levels I and II as strong, III to V as moderate and VI and VII as weak[17].

The 4th stage was the assessment of the studies included in the integrative review and the 5th stage was the interpretation of the results. In the 6th stage, the main results evidenced from the analysis of the articles included were presented and the information extracted from the studies was grouped into categories for thematic analysis. This analysis was based on the nuclei of meaning that make up the analyzed text[18]. In all the conduction of the review, two blind reviewers participated.

RESULTS

Most publications came from international journals 18 (75%) and were carried out in countries such as Brazil 6 (25%), Iran, Greece, Ethiopia, India and China 2 (8%), Germany, Saudi Arabia, Croatia, Sudan, Portugal and South Korea 1 (4%). The largest number of publications occurred in 2017 with 8 studies (33%) and 2019 with 4 studies (16%). Participants in 22 studies (92%) were teachers and only 2 studies (8%) included other school staff participants. There was a predominance of quantitative studies 22 (88%) and with EL IV. The presentation of the synthesis of the studies is shown in Figure 3.

Figure 3 – Description of studies included in the integrative review, by country, design, level of evidence and main results, Niterói, Rio de Janeiro, Brazil, 2020.

Study	Country/ Design/ Evidence Level	Main results
S1(19)	Germany / Quantitative study Simple blind design / Level IV	Teachers showed improvement in knowledge of first aid, compared to the study carried out in 2008; this improvement occurred after completing the first aid course.
S2(20)	Iran / Cross-sectional quantitative study / Level IV	Adequate assistance in accidents caused by electricity and falls that caused fractures received the lowest rate of success. Teachers with training and experience in first aid scored higher.
S3(21)	Saudi Arabia / Cross-sectional quantitative study / Level IV	A low level of knowledge of teachers was identified, and many would like to learn first aid through videos and applications.
S4(22)	Greece / Cross-sectional quantitative study / Level IV	A limited level of knowledge was identified, which caused the insufficiency of propitious attitudes.
S5(23)	Brazil / Integrative Review / Level V	Educational measures such as lectures, workshops and training had a positive impact on identifying the accident and providing first aid.
S6(24)	South Korea / Quantitative Case Control Study / Level VI	The program provided an improvement in the knowledge, confidence and performance of teachers in the experimental group compared to the control group.
S7(25)	Ethiopia / Cross-sectional Quantitative Study/ Level IV	Teachers have low knowledge and a positive attitude; concerning appropriate practice was not identified.
S8(26)	Iran/ Cross-sectional Descriptive/ Level IV	Although many participants have experienced it, they recognize that they have unsatisfactory knowledge.
S9(27)	Croatia / Cross-sectional Descriptive / Level IV	Although most teachers have experienced cases of dental trauma, most are unaware of the management and necessary attitude.
S10(28)	India / Quasi-experimental / Level III	The educational tool provided knowledge and attitudes, especially the handling and cleaning of the tooth before replanting.
S11(29)	Brazil / Experience Report / Level VI	Teachers had little knowledge, insecurity during practice on mannequins and perception of possible incorrect actions.

(continue)

Study	Country/ Design/ Evidence Level	Main results
S12(30)	Brazil / Quasi-experimental / Level III	The training provided an increase in (theoretical) knowledge, especially in performing cardiopulmonary resuscitation (CPR) and using an automatic external defibrillator.
S13(31)	Brazil / Qualitative Descriptive Study (semi-structured interview) / Level VI	The educators studied proved to be lay people in relation to the initial care of school accidents.
S14(32)	Spain / Descriptive qualitative study / Level VI	It is observed that knowledge is deficient, which makes the performance of teachers unfeasible.
S15(33)	Sudan / Cross-sectional Descriptive / Level IV	Low knowledge and negative attitude imbued with stigma and prejudice, with the presence of considerable harmful practices.
S16(34)	Ethiopia / Quasi-Experimental Study / Level III	A considerable portion of teachers understand epilepsy as a psychiatric disease linked to insanity; attribute treatment suggestions such as: holy water and Church healing sessions.
S17(35)	Portugal / Analytical Cross-sectional Study / Level IV	It appears that theoretical knowledge is inferior to operational knowledge, so there are doubts about how to act.
S18(36)	Argentina / Quasi-experimental / Level III	After the educational intervention there was an improvement in knowledge.
S19(37)	Brazil / Quantitative Descriptive Study / Level IV	Most consider that they have insufficient knowledge; Concerning the conducts carried out were: application of first aid, calling the parents, calming the child and referring him to hospital care.
S20(38)	Brazil / Quantitative Cross-sectional Study / Level IV	Approximately half of the teachers surveyed had unsatisfactory knowledge about dental trauma and emergency protocols.
S21(39)	India / Experimental Study / Level III	Teachers' knowledge is incomplete; most understood the symptoms of epileptic seizures as rhythmic movements and were unaware of warning signs.
S22(40)	China / Longitudinal Cohort Study / Level IV	Variations in short-term and long-term knowledge are observed, but higher than that of training.
S23(41)	China / Cross-sectional quantitative study / Level IV	The employees had a low level of knowledge.
S24(42)	Greece / Quantitative Cross-sectional Study / Level IV	It was noted that knowledge is insufficient and fragmented, due to only a few actions being carried out.

Source: Research Data

The analysis of the articles generated results grouped into 2 categories: 1 - Knowledge, attitudes and practices in first aid (subdivided into 3 thematic subunits) and School environment - strategies for training in first aid aimed at the promotion, prevention and injuries of accidents.

Knowledge, attitudes and practices in first aid

Traumatic tooth injury (Tti): appropriate and inappropriate interventions

Studies S3[21], S4[22], S8[26], S9[27], S10[28] and S20[38] portrayed the knowledge, attitudes and practices of teachers in the face of traumatic dental injury. The studies identified that the school team is unaware of this situation, which translates into insufficient and inadequate attitudes and practices. S4[22], S8[26], S9[27] and S20[38] highlight that teachers have already witnessed accidents, but only in studies S8[26], S10[28], S4[22] and S20[38] there was a previous realization by some participants in a first aid course in which this theme was addressed.

In cases of tooth avulsion, accidental loss of the tooth, the participants of studies S3[21] and S8[26] believed that it was necessary to look for the tooth, while in S9[27] they would not perform this care and were unaware of the possibility of performing replantation, and upon witnessing

the accident most would call their parents. In the case of this type of accident, it is important to differentiate whether the tooth is permanent; as exposed in S3[21], only 33.8% believe they can differ. In order to promote knowledge about the handling and hygiene of the tooth, in case of avulsion, S10[28] promoted training, thus there was a marked positive change in this knowledge from 50.50% to 90.60%.

Regarding the storage and transport of the tooth, most professionals in studies S3[21], S8[26] and S9[27] mentioned the dry medium using gauze, napkin or handkerchief; and the minority of participants in studies S3[21], S4[22], S8[26], S10[28], cited milk as the most appropriate.

Epilepsy as stigma and prejudice – management when dealing

In this category, studies S15[33], S16[34] and S21[39] dealt with seizures resulting from epilepsy. It was noted that there was knowledge imbued with stigma and prejudice, in which they attribute demons, evil spirits and psychiatric illness as etiological factors.

Thus, the practice in S15[33] is to tie the child, put a spoon in the mouth and not know how to act, church healing sessions and holy water. In S16[34] there were practices such as making the child smell a match, pouring water on the face and inserting a spoon in the mouth. In study S21[39], some teachers believed that epilepsy was an impediment to education, as they thought that it reduces children's mental capacity.

Varied themes on first aid assistance – knowledge and ignorance

Studies S1[19], S2[20], S13[31], S14[32], S17[35], S18 [36], S19[37], S23[41] and S24[42] were grouped in this category that deal with different topics such as choking[20,31,35,41-42], cardiac and respiratory arrest[32,35,36;42], poisoning[41], intoxication[37], shock[19], fracture[19,20,31,35-37], injuries[19-20;32;35-37], spinal injury, among others[19,20,31,35]. It was found that the complexity of situations that can be witnessed in the school context raises the need to include these themes in the body of school activities, in order to promote comprehensive care for the children.

Study S14[32] identified that there is deficient knowledge, with the knowledge being more accurate in those who took a first aid course. In this sense, studies S17[35], S19[37] and S24[42] identified that the first aid care undertaken was inadequate and not performed by all professionals. Studies S17[35] and S19[37] addressed some precautions, such as, in case of fainting, leave the child on a flat surface, not offering liquid; in case of respiratory difficulty, sit the child down and calm him/her, contact the ambulance, the family and the school administration.

Unlike study S24[42], in S2[20] the teachers who experienced accident situations had a higher level of knowledge. Study S1[19] identified that after 6 years of the first study, which was a pilot study using a validated questionnaire, which assessed the teachers' knowledge, it highlights that the lack of adequate knowledge about first aid still persists. However, there was an improvement in knowledge in some accidents, after the first aid course was offered. Study S23[41] showed how much the team's knowledge was insufficient; although some professionals had training in first aid, the focus of the training provided to them was only on a few themes. Similarly, study S13[31] described that the team of teachers were lay people in relation to initial care and in situations of accidents. However, they showed interest in learning about appropriate care in situations they could witness in this context.

School environment - strategies for training in first aid aimed at the promotion, prevention and injuries of accidents

Studies S5[23], S6[24], S7[25], S11[29], S12[30], S14[30], S18[36], S21[39] and S22[40] assessed the knowledge of teachers and employees[30] and different training strategies were used, all of which resulted in improvements in knowledge.

The S11[29] consolidated the educational action through observation and conversation circles, with a problem survey, presentation

of the intervention proposal and execution of the practice on mannequins. This made it possible for teachers to understand the knowledge about prevention and action in the face of school accidents. Studies S5[23], S12[30] and S18[36] carried out teaching strategies by approaching conceptual aspects and practical display of maneuvers on mannequins; study S21[39] carried out a series of workshops with power point presentations and videos.

In order to provide security and confidence to provide first aid, S7[25] included the coaching approach in the experimental group, the organization of this method takes into account the needs of the individual. This strategy made it possible to improve the knowledge, confidence and performance of teachers in the experimental group, who scored higher than the control group.

Studies S21[39] and S22[40] observed the impact of training over time, and identified variations in short and long-term knowledge, however all of them showed higher rates of knowledge after training.

DISCUSSION

Studies on accidents and health problems in the school environment address prevention and first aid actions for children. Primary prevention contributes to the understanding of the factors that favor the occurrence of the accident, in order to provide subsidies to avoid it. However, after the accident or health problem has occurred, secondary prevention is substantial to provide adequate and safe care, which leads to a better prognosis[43-44].

The results of this review highlighted that Tti is a common type of accident in the school environment. Factors such as the long period at school, in addition to performing activities such as running and jumping, can thus cause falls[45]. Similar results were obtained in a study carried out in Colombia with 2,226 teachers, where 35.5% of the teachers had witnessed dental trauma at least once, but only 5.3% had received previous training in dental trauma[46]. This confirms the need to train the school community in order to promote an adequate initial treatment and consequently a better prognosis.

The Tti with the highest incidence are: avulsion, dislocation and fracture of coronary; therefore, when tooth avulsion occurs (protrusion of one or more dental elements), it is recommended to look for the tooth, sanitize it, differentiate whether it is a primary or permanent tooth, store it in an appropriate medium and refer the child to the dentist for reimplantation[45]. However, these knowledge and practices were unknown to most teachers in the analyzed studies.

In this review, it was observed that among the possible attitudes of teachers in the face of avulsion, would be to call the child's parents what is harmful, because the duration of time impairs the viability of the tooth to perform the reimplantation and few knew the importance and need for care to be performed during this period, which implies a poor prognosis. From this perspective, the time required to perform the reimplantation varies between 30 and 60 minutes; in addition, because children have mixed dentition where there are primary and permanent teeth, it is essential to know how to differentiate them, as only permanent teeth need reimplantation[45].

Due to the tooth coming into contact with the ground and causing possible contamination, it is necessary to clean the tooth in running water and the tooth or tooth fragment be stored and transported in milk due to its osmolarity and easy access[45]; however the results of this review showed that the most cited medium for storing and transporting was gauze. Similar data were identified in a study that identified that 58.9% of teachers would keep the tooth in a dry environment as a napkin[44].

Thus, inappropriate actions cause an undesirable prognosis and, therefore, the treatment lasts longer than required. Thus, there is an increase in financial expenses and psychological impact due to the image being altered, especially the physical impact, as the child's chewing is modified, culminating in losses in nutrition and quality of life[45].

Another condition that stood out in the studies was epilepsy. A disease existing in society, which can be witnessed in the school environment, and its signs and symptoms are not just uncontrolled and involuntary contractions of muscles. There are also warning signs like headache and mental irritation that are little known. When there is a seizure, measures such as supporting the child's head, turning his body laterally and measuring the seizure time are essential. However, inappropriate practices can cause damage to the child's life, so knowing the management to deal with epilepsy is necessary, as the impact it can cause on the child permeates the physical damage, bringing social isolation and difficulties in learning[44].

This allows for reflection on how much the disease, in addition to bringing the stigma to which society's seclusion provides, also impacts the educational process. Thus, early on, the right to education is suppressed, which causes a scenario of social inequality, when the intention is to treat the different in various ways, thus providing equity[48], which is why the guarantee of the right to education and lifelong learning is a principle of the Law of Guidelines and Bases[49]. Therefore, epilepsy cannot be understood as an impediment to education and the teacher can be seen as the resource with the greatest impact to promote equity[50].

It was observed in the studies that most of the teachers' knowledge and skills come from their experiences and common sense. The assistance to be effective needs to be provided in an adequate and safe way based on scientific knowledge, as performing the assistance takes place in the performance of techniques. It was also found in a study carried out in Brazil that experiences can influence teachers' knowledge[51]. Therefore, this can be the beginning for actions to improve the knowledge of the school team, when working on the aspects that guide the experiences and practices in first aid, building knowledge in a significant way.

It is identified that absent, inadequate and incomplete knowledge results in damage to students' lives; this is what happened to a child in the city of São Paulo named Lucas Begali, who during a walk at his school, he choked on the snack offered and because he did not receive first aid care properly, there was brain damage (hypoxia), providing serious deficiencies to the student[10, 52].

CPR, when performed in the 1st minute, has a 98% success rate; from the 5th minute this success decreases considerably to 25% and at the 10th minute it decreases to 1%. The earlier it is performed, the greater the chance of saving lives[8,16]. In this sense, it is essential to carry out an educational intervention in health as a care strategy within the school environment, with the purpose of sharing knowledge and experiences. And thus develop autonomy, trust, safety and responsibility of the school community to act in the face of the actions of promotion, prevention and necessary assistance in each accident[51].

In this way, studies have identified many benefits from improving knowledge, attitudes and practices to confidence to perform first aid actions. A similar result was identified in a study carried out in Brazil[53], in which there was a lack of confidence to manage health complications. In order to promote this competence, they carried out the *in situ* simulation, where 4 scenarios were created. The themes that made up the simulation were: obstruction of the airways by a foreign body/choking, falling with a deep wound/bleeding, convulsive crisis and cardiorespiratory arrest. It appears that this simulation contributed to promoting teachers' self-confidence[54-55].

The knowledge obtained through training is varied, and one of them, found in this review, concerns the telephone number of the Mobile Emergency Care Service (SAMU), which after the training became known. The importance of using it immediately in emergency cases was clear to the participants, impacting the time between the accident and professional assistance. Educational interventions provide improvements for the development of this knowledge according to a study carried out in Brazil, which aimed to assess the effect of an educational workshop on the

knowledge of health and early childhood education professionals about prevention and care for children with choking. It was found that the workshop was efficient to expand and develop the professionals' knowledge[56].

In this review, no consensus was found regarding the ideal period of interval between qualifications or training. However, the need for permanent education in the school environment regarding first aid is clear. It is essential that the maintenance of this activity occurs, since assistance in first aid requires techniques, understanding of mnemonics and calm in execution. Therefore, the formation of intersectoral partnerships, with educational actions practiced regularly, contributes to the maintenance of skills and experiences[57].

The Health at School Program comes from this scope due to the fact that it has teams working in the promotion and prevention of health, which makes comprehensive care possible. Thus, the participation of nurses contributes to expanding the health promotion process, as they have educational skills as the axis of their actions, which, when performed with the situational diagnosis, cross the needs of the context and promote comprehensive care [57].

CONCLUSION

The results of this study showed that although the school environment allows physical, psychological and cognitive development, being a place of discoveries, social interaction and learning, accidents can occur, due to the child's developmental stage or even due to structural issues of the school. This requires, above all, fast and safe care by teachers and staff, who thus need knowledge, attitudes and appropriate practices in first aid.

The studies in this review showed that teachers and employees have insufficient knowledge, attitudes and practices to provide first aid, despite being the ones who witness and most of the times provide first aid in the school environment. This unpreparedness can harm the children and directly impact treatment and prognosis.

As for the source of knowledge on which the school community bases its attitudes towards first aid, its own experiences and common sense stood out, generally without a scientific nature. The educational interventions pointed out by the studies obtained positive results. However, the methodology used and the duration of the training were considered significant factors for obtaining and maintaining knowledge. However, it is important to emphasize the importance of dialogue about how the school team would like to learn first aid, making them active participants in this process, in order to promote appropriate attitudes and consolidate the practice.

Thus, the intersectoral actions promoted in conjunction with the Health at School Program have the possibility of articulating the training of adequate knowledge of the school team in first aid assistance.

It is hoped that the present study will enable the development of other studies, understanding and addressing the gaps regarding methodologies and teaching strategies used to train teachers and employees in the school context for first aid care.

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