

**WEAKNESSES IN PARENTS' AND CAREGIVERS' KNOWLEDGE OF FIRST AID
PROCEDURES FOR CHILDREN****FRAGILIDADES DE CONHECIMENTO DE PAIS E CUIDADORES SOBRE
CONDUTAS DE PRIMEIROS SOCORROS PARA CRIANÇAS****DEFICIENCIAS EN LOS CONOCIMIENTOS DE LOS PADRES Y CUIDADORES
SOBRE LOS PROCEDIMIENTOS DE PRIMEROS AUXILIOS PARA NIÑOS**

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ABSTRACT

Objective: This study aimed to analyze the scientific evidence of deficiencies in the knowledge of parents and caregivers about first aid procedures for children. **Method:** This is an integrative review with a research question structured by Population, Intervention, Context (PICO) acronym, conducted in six search sources. Data were collected using a specific form, with critical and methodological evaluation using the Critical Appraisal Skills Programme, and analysis using the data reduction method. **Results:** identified caregivers' knowledge about concepts, signs of complications and risks involved, first aid practice, prevention measures and home safety, first aid kit and when to continue to emergency services, involvement, more frequently, situations of falls, burns, tooth avulsion, poisoning, protection of the airways by a foreign body and cardiorespiratory arrest. **Conclusion:** The deficiencies in the knowledge observers signal the need for permanent interventions and continuous guidance by Nursing, considered important facilitators of popular education.

Descriptors: First Aid; Emergencies, Child; Parents; Caregivers.

RESUMO

Objetivo: analisar as evidências científicas de fragilidades de conhecimento de pais e cuidadores sobre condutas de primeiros socorros para crianças. **Métodos:** revisão integrativa, com questão de pesquisa estruturada pelo acrônimo População, Intervenção, Contexto (PICO), realizada em seis fontes de busca. Os dados foram coletados por formulário próprio, com avaliação crítica e metodológica pelo método *Critical Appraisal Stils Programme* e análise pelo método de redução de dados. **Resultados:** A amostra final quantificou 25 estudos, que identificou fragilidades de conhecimento sobre conceitos, sinais de complicações e riscos envolvidos, prática de primeiros socorros, medidas de prevenção e segurança domiciliar, kit de primeiros socorros e quando recorrer aos serviços de emergência, envolvendo, mais frequentemente, situações de quedas, queimaduras, avulsão dentária, envenenamento, obstrução de vias aéreas por corpo estranho e parada cardiorrespiratória. **Conclusão:** As fragilidades de conhecimento identificadas sinalizam a necessidade de intervenções permanentes e orientações contínuas pela Enfermagem, considerada importante facilitadora da educação popular.

Descritores: Primeiros socorros; Emergências; Criança; Pais; Cuidadores.

RESUMEN

Objetivo: Analizar las evidencias científicas de debilidades de conocimiento de padres y cuidadores sobre procedimientos de primeros auxilios para niños. **Métodos:** revisión integradora, con pregunta de investigación estructurada por acrónimo Población, Intervención, Contexto (PICO), realizada en seis fuentes de búsqueda. Los datos fueron recolectados mediante un formulario específico, con evaluación crítica y metodológica mediante el método *Critical Appraisal Stils Program* y análisis mediante el método de reducción de datos. **Resultados:** La muestra final cuantificó 25 estudios, que identificaron debilidades en conocimientos sobre conceptos, señales de complicaciones y riesgos involucrados, práctica de primeros auxilios, medidas de prevención y seguridad en el hogar, botiquín de primeros auxilios y cuándo acudir a los servicios de emergencia, involucramiento, con mayor frecuencia, situaciones de caídas, quemaduras, avulsiones dentales, intoxicaciones, protección de las vías respiratorias por cuerpo extraño y parada cardiorrespiratoria. **Conclusión:** Las deficiencias de conocimiento identificadas apuntan para la necesidad de intervenciones permanentes y orientación continua por parte de la Enfermería, considerada una importante facilitadora de la educación popular.

Descriptorios: Primeros Auxilios; Emergencias; Niño; Padres; Cuidadores.

INTRODUCTION

Early childhood stands out as the most vulnerable phase to domestic accidents, as it is the child's growth and development phase, as their perception of risk is lower and they need caregivers to keep them safe. The most common accidents in childhood are falls, burns, suffocation, drowning, intoxication, poisoning, suffocation, cuts, electric shock, abrasions, crushing, bites and punctures, which can cause social, economic and emotional costs, which have repercussions on the family and society.¹ In most cases, these situations can be avoided or their consequences reduced with prevention and protection measures.²

The Brazilian constitution has a public policy on popular education, regulated by ordinance no. 2,761, of November 19, 2013, which guarantees the lay population access to basic health knowledge, within the Unified Health System (SUS), guaranteeing communication between health services and the community³, which encourages popular leadership in health actions, including aspects of first aid practices.

In Brazil, in 2019, domestic accidents represent the main cause of death in children aged between zero and 14 years, with a prevalence of 7.3%, with higher mortality rates in cities with transport, suffocation, falls, assaults and drownings, which resulted in a number of 113 thousand children

hospitalized in the public health service.⁴ An international prospective study identified a prevalence of 9.2% of children hospitalized due to domestic accidents.⁵

The aforementioned data reflect the importance of parents and caregivers having knowledge of first aid, since adequate practice can control, minimize and or reverse complications in emergency situations until the arrival of the pre-hospital emergency service.⁶

The literature points out that parents and caregivers who have weak basic notions of this care experience feelings of fear, insecurity and loss of emotional control when faced with accident situations involving children and close family members, negatively influencing first aid practice. Therefore, guidance strategies and sharing of this knowledge are necessary to reduce the anxiety levels of parents and caregivers and better prepare them for the necessary care.⁶⁻⁷

Considering that it is a topic highlighted in national⁸⁻⁹ and international⁵ literature as a public health problem in pediatrics, it needs to be further discussed to strengthen popular education as a facilitating tool for qualified assistance, since domestic accidents influence the epidemiological increase in child morbidity and mortality due to external causes.

In view of the above, this study aims to analyze scientific evidence of weaknesses in the knowledge of parents and caregivers regarding first aid procedures for children.

METHOD

It is an integrative literature review, which followed the steps: 1) elaboration of the question/hypothesis; 2) search and selection of primary studies; 3) organization and extraction of data; 4) critical evaluation of included studies; 5) analysis and synthesis of results; 6) presentation of the review.¹⁰

The study's research question was "What is the scientific evidence of weaknesses in the knowledge of parents and caregivers regarding first aid procedures for children?", structured through the Population, Intervention, Context (PICO) strategy, which refers to the population (parents and caregivers), intervention (first aid procedures) and context (knowledge

weaknesses), which allowed the selection of the following descriptors from the Medical Subject Heading (MeSH), from the National Library of Medicine National Institutes of Health (PubMed): "Parents"; "Knowledge"; "First AIDS".

For the strategy of search in data sources, summarized in table 1, the Boolean operator AND was used to associate descriptors, applying the advanced search for terms in the Latin American and Caribbean Literature in Health Sciences (LILACS) databases; Medical Literature Analysis and Retrieval System Online (MEDLINE®); Nursing Database (BDENF); Cumulative Index to Nursing and Allied Health Literature (CINAHL) via the CAPES portal and in the Cochrane Library (COCHRANE) and Scientific Electronic Library Online (SciELO) libraries. Data collection was carried out in pairs, from March to April 2021.

Table 1. Data source search strategy for selecting studies. 2021.

| DATA SOURCES | "Parents" AND "Knowledge" AND "First aid" | "Parents" AND "Knowledge" AND "First aid" | "Knowledge" AND "First aid" | "Parents" AND "First aid" |
|--------------|-------------------------------------------|-------------------------------------------|-----------------------------|---------------------------|
| LILACS | 1 | 307 | 17 | 2 |
| MEDLINE | 48 | 8111 | 469 | 80 |
| BDENF | 0 | 20 | 3 | 0 |
| CINAHL | 25 | 4446 | 258 | 48 |
| COCHRANE | 12 | 1492 | 84 | 16 |
| SciELO | 0 | 245 | 28 | 4 |

Source: Own preparation.

The inclusion criteria were used: languages in English, Portuguese or Spanish; text available in full; time frame of the last five years (2016-2021), considering the quantity of results, the optimization of the reading of articles and the most recent findings on the topic; studies that portray weaknesses in the knowledge of parents and caregivers regarding first aid procedures with children. The exclusion criteria were adopted: literature review studies, editorials,

brief communications, dissertations and theses, studies repeated in the same database or duplicated in different databases.

The study search and selection process, illustrated in figure 1, was carried out by two researchers/reviewers, independently and, in case of doubt or disagreement, a third researcher was consulted. The PRISMA 2020 flow diagram for new systematic reviews was used.¹¹

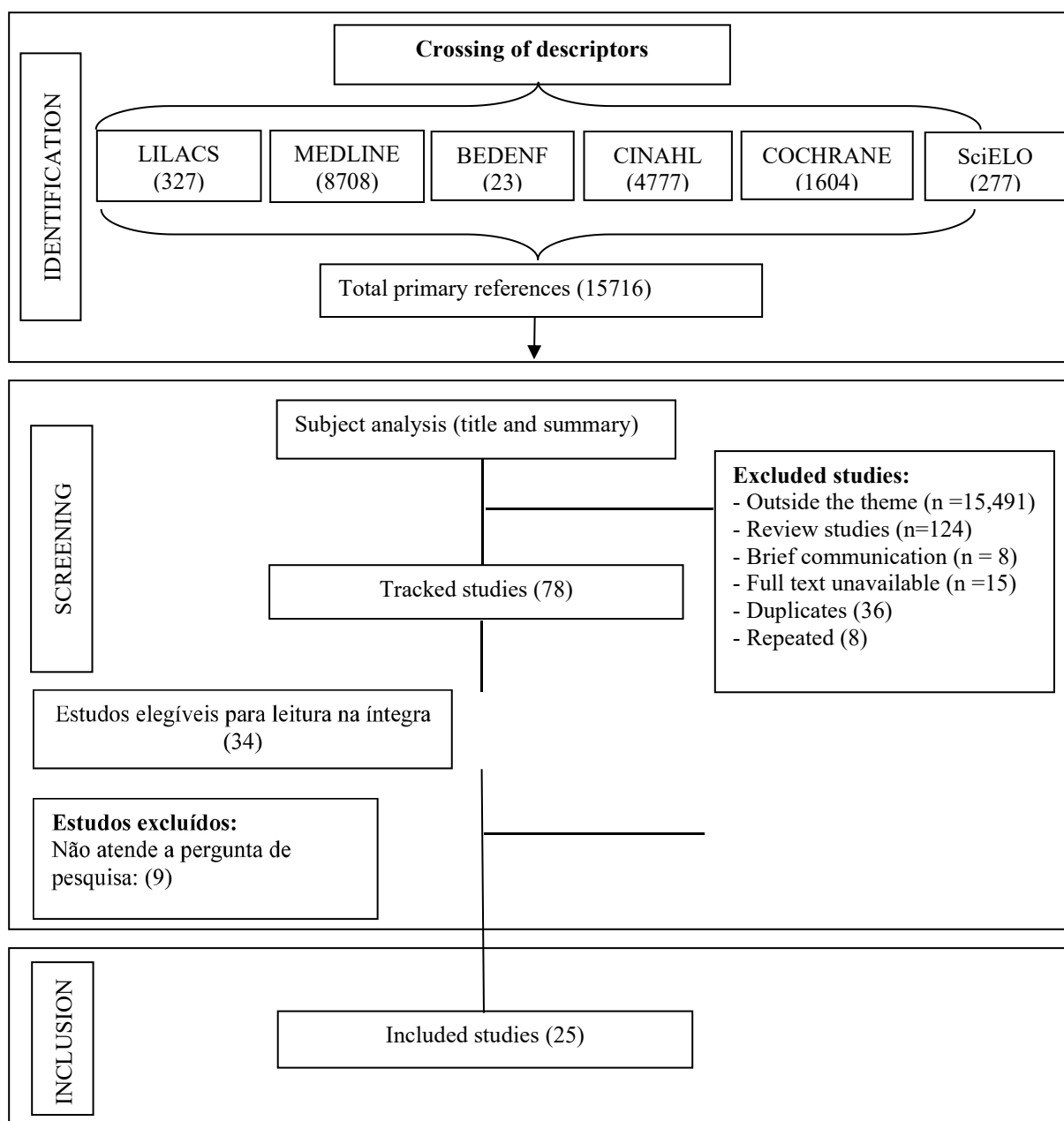


Figure 1. Selection process for integrative review studies. 2021.
Source: Page et al.¹¹

For the data organization and extraction stage, the EndNote® software, version X9, year 2018, was used to build the database and select primary studies, which allowed the management of references in folders according to the criteria inclusion and exclusion and comparison between reviewers. Data extraction occurred using a

self-designed form that contains variables for characterizing the studies (authors, year, database, language, location, objective), for methodological characterization (type of study, number of participants, setting, data collection and analysis) and applicability variables of the research question (content covered and knowledge weaknesses).

Regarding the critical and methodological evaluation stage of the studies, the Critical Appraisal Stills Program CASP instrument was adopted, a Systematic Review Checklist model (2018) from Oxford¹², which consists of a list with 10 questions for systematic evaluation and verification of three dimensions: validity of the review results, results and scope of results. According to the checklist, when screening the first two questions, if a negative answer is obtained, the study is no longer considered of good quality, however, the studies that continued with the evaluation, based on the score achieved in the CASP, were classified into two categories: good article methodological quality with reduced bias (six to ten points), article of satisfactory quality with increased bias (less than five points).¹³

The qualitative data analysis and synthesis stage occurred using the Whittmore¹⁴ data reduction method, which consists of categorizing the data, through classification and division of primary

sources into subgroups, allowing us to summarize the weaknesses in the knowledge of parents and caregivers based on the content covered (urgency and emergency situations) in the studies listed for the review. This facilitates the interpretation and systematic comparison of findings with the study question.

And, completing the last stage of the review, the findings were presented through tables, with a brief descriptive synthesis, whose findings were discussed with literature relevant to the study topic.

RESULTS

The final sample consisted of 25 studies, distributed across data sources MEDLINE® (12), LILACS (5), CINAHL (5), COCHRANE (2)SCIELO(1); in languages: English (20), Portuguese (2) Spanish (3); with data collection instruments varying between questionnaire (22), form (1), application (1) and focus group (1). The characterization of the studies regarding the other variables is detailed in table 2.

Table 2. Characterization of the studies included in the integrative review. 2021

| Authors (year) | Local | Objective | Type of study and CASP* | Research scenario/ number of participants |
|--------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|
| Santos <i>et al</i> (2019) ¹⁵ | Portugal | Identify the level of knowledge of parents/caregivers of children about first aid in domestic accidents and whether there is an association with sociodemographic factors. | Transversal CASP: 7 | hospital Center (54) |
| Burgess <i>et al</i> (2018) ¹⁶ | Australia | To assess the level of knowledge about burn risks and burn first aid in mothers of young children and determine factors that predict adequate versus inadequate first aid knowledge in this population. | Randomized Controlled Clinical Trial CASP: 9 | Participants' residence (498) |
| Kumar <i>et al</i> (2018) ¹⁷ | India | To evaluate the combined effectiveness of the structured teaching program on febrile seizures and epilepsy and the patient information leaflet on caregivers' knowledge of home management of seizures, compared to the leaflet alone. | Randomized controlled CASP: 9 | Pediatric Neurology Outpatient Clinic (64) |
| El Seifi <i>et al</i> (2018) ¹⁸ | Egypt | To evaluate the effect of a health education intervention on improving the knowledge, attitude and self-efficacy of mothers with preschool-aged children about household injuries and basic first aid measures. | Randomized controlled CASP: 9 | Participants' residence – El Ghar Village (244) |
| Míguez-Navarro <i>et al</i> (2018) ¹⁹ | Madrid | To determine the level of knowledge of first aid and cardiopulmonary resuscitation among parents of children who presented to the Pediatric Emergency Department and identify the factors that affect this knowledge. | Transversal CASP: 8 | Pediatric Emergency Service (405) |
| Al-Johani <i>et al</i> (2018) ²⁰ | Saudi Arabia | To evaluate the knowledge and practice of first aid among parents present in Primary Health Care Centers in the city of Al- Madinah. | Transversal CASP: 8 | Primary Health Care (390) |
| Alomar <i>et al</i> (2016) ²¹ | Saudi Arabia | To determine the current level of knowledge, attitude and belief about first aid for burns among caregivers. | Transversal CASP: 7 | Pediatric Emergency Service (400) |
| Naumeri <i>et al</i> (2019) ²² | Pakistan | Check first aid knowledge among parents of children with burns. | Transversal CASP: 8 | Hospital – Department of Pediatric Surgery (310) |
| Abelairas- | Spain | | Transversal | Schools - Early |

| | | | | |
|-----------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------|
| Gómez <i>et al</i> (2020) ²³ | | Explore first aid knowledge from early childhood education teachers and parents of children at this educational stage. | CASP: 8 | childhood education (470) |
| Rodríguez <i>et al</i> (2017) ²⁴ | Spain | Evaluate parents' knowledge about foreign body aspiration in children. | Transversal CASP: 7 | Otorhinolaryngology and respiratory endoscopy offices (200) |
| Cosme-Silva <i>et al</i> (2017) ²⁵ | Brazil | To assess parents' level of general knowledge about first aid measures for permanent tooth avulsion and correlate this knowledge with their children in a school environment (public or private). | Transversal CASP: 7 | Public and Private Elementary Schools (179) |
| Enríquez <i>et al</i> (2017) ²⁶ | Cuba | To assess the level of knowledge about the conduct to be followed in the event of dentoalveolar trauma in parents and educators in a children's circle. | Cross-sectional descriptive observational CASP: 9 | School - Early childhood education (46) |
| Dias <i>et al</i> (2020) ⁵ | Brazil | Understand how a first aid educational intervention with mothers/caregivers of Brazilian children with congenital Zika virus syndrome affects the treatment of seizures and choking. | Qualitative CASP: 6 | Specialized service - Association of Mothers of Angels of Paraíba. (10) |
| Qing <i>et al</i> (2019) ²⁷ | China | To evaluate caregivers' knowledge of first aid for small area thermal burns in children and reduction of morbidity and damage caused by burns in children. | Transversal CASP: 7 | Schools – Nursery, kindergarten, primary and secondary schools (5814) |
| Mishra <i>et al</i> (2018) ²⁸ | Pakistan | To assess general knowledge and practices related to first aid treatment for burns and previous history of exposure to burns (self/family) as factors influencing knowledge of first aid for burns in the general population of Rawalpindi. | Transversal Description CASP: 8 | Hospitals (400) |
| Soumyamol <i>et al</i> (2017) ²⁹ | India | To evaluate the effectiveness of an educational nursing intervention on knowledge of first aid for epilepsy among caregivers of children with epilepsy. | Experimental, intervention CASP: 8 | Center specialized in Neurology (30) |
| Supínová <i>et al</i> (2019) ³⁰ | Slovakia | Evaluate the basic knowledge of the public about the disease of epilepsy and identify the extent of the general public's and professional capabilities in helping a patient with a severe epileptic seizure. | Quantitative study CASP: 6 | Unspecified scenario (200) |
| Alyahya <i>et al</i> (2018) ³¹ | Kuwait | To assess parents' knowledge of first aid measures for permanent | Multicenter Transversal | Dental specialty center |

| | | | | |
|----------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------|
| | | tooth avulsion in Kuwait and investigate sociodemographic influence. | CASP: 9 | (554) |
| Hussain <i>et al</i> (2020) ³² | United Arab Emirates | To assess the knowledge of parents visiting a specialized dental center in Ajman about permanent tooth avulsion and necessary first aid procedures for better prognosis. | Transversal CASP: 8 | Dental specialty center (388) |
| Servat <i>et al</i> (2019) ³³ | Brazil | Identify whether the parents/guardians of the children cared for in the Children's Clinic at Faculdade Avantis have already received information on how to proceed in the event of a dental trauma and whether having received information is associated with the conduct in the event of a dental trauma. | Observational CASP: 7 | Avantis College Children's Clinic (80) |
| Black <i>et al</i> (2020) ³⁴ | Canada | To examine the association between self-reported exposure to concussion education and self-reported knowledge, beliefs, and behavior among parents and coaches of youth ice hockey players. | Transversal CASP: 8 | Ice hockey sports field (786) |
| Chirongoma <i>et al</i> (2017) ³⁵ | Zimbabwe | Evaluate the first aid measures provided by caregivers after a burn injury and the sources of information. | Transversal CASP: 8 | Hospitals – Wards specializing in pediatric burns (50) |
| Habeeb <i>et al</i> (2020) ³⁶ | Saudi Arabia | Determine parents' level of knowledge about choking, drowning, and burns, their readiness to participate in a first aid course, and solutions from their perspective to improve the level of knowledge about first aid for children. | Transversal CASP: 8 | Primary Health Care (294) |
| Hui <i>et al</i> (2016) ³⁷ | Singapore | To assess knowledge of pediatric burn first aid among caregivers and determine whether knowledge levels can be increased after a short educational intervention. | Transversal CASP: 8 | Pediatric emergency hospital (274) |
| Olatosi <i>et al</i> (2020) ³⁸ | Nigeria | To determine knowledge and sources of information on first aid treatment of avulsed permanent teeth in a group of mothers from southwestern Nigeria. | Transversal CASP: 9 | Universitary hospital (385) |

Caption: CASP = Critical Appraisal Stils Program

Source: Own preparation.

Considering the CASP assessment, it was found that the majority of studies presented good methodological quality with reduced bias.

The studies covered a variety of topics, highlighting burns, falls and fractures,

concussion, convulsion, tooth avulsion, syncope, cardiorespiratory arrest, foreign body airway obstruction (OVACE), electric shock, poisoning, drowning, whose weaknesses in knowledge follow described in table 3.

Table 3. Contents covered and weaknesses in the knowledge of parents and caregivers. 2021.

| AUTHORS | CONTENT COVERED | WEAKNESSES IN KNOWLEDGE |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Santos <i>et al.</i> ¹⁵ | Falls, poisoning, burns | - Care for skin injuries after falls: wounds, edema and bruises. Care for poisoning by inhalation, ingestion or contact with the skin, care for burned skin and blisters. |
| Burgess <i>et al.</i> ¹⁶ | Burns | - Concepts about causes and age range of risk, care for injuries. |
| Kumar <i>et al.</i> ¹⁷ | Convulsion | - How to act in seizure situations at home, how to minimize the consequences of seizures. |
| El Seifi <i>et al.</i> ¹⁸ | Falls, injuries/fractures, poisoning, burns,OVACE | - Basic first aid measures, prevention of home accidents. |
| Míguez-Navarro <i>et al.</i> ¹⁹ | Burns, injuries, bleeding, poisoning, trauma, loss of consciousness, head contusion, suffocation, convulsions and CPR | - General aspects regarding first aid practices by parents. |
| Al-Johani <i>et al.</i> ²⁰ | Foreign body in the ear, animal bites, poisoning, hypoglycemia, injuries, burns, convulsions, loss of consciousness | - How to provide first aid and how to create your home first aid kit. |
| Alomar <i>et al.</i> ²¹ | Burns | - First aid and what to do with uncontrolled heat sources. |
| Naumeri <i>et al.</i> ²² | Burns | - What to do with burned clothes, questions about products and home remedies for treating burns, time needed to get to the emergency room. |
| Abelairas-Gómez <i>et al.</i> ²³ | Children unresponsive, unconscious, airway stabilization, CPR, OVACE, AED, BLS. | - How to perform CPR on children, sequence for providing assistance to an unconscious child, use of the AED. |
| Rodríguez <i>et al.</i> ²⁴ | OVACE | - How to identify the most dangerous objects and the physical signs of suffocation. |
| Cosme-Silva <i>et al.</i> ²⁵ | Tooth avulsion | - Care for the injured tooth, where to store it, when to go to the dentist, the length of service, when complications are identified. |

| | | |
|----------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enríquez <i>et al.</i> ²⁶ | Dentoalveolar trauma | - Care with transportation, reimplantation, storage and time spent looking for specialized services. |
| Dias <i>et al.</i> ⁵ | Convulsions and choking | - How to identify the signs, provide care and when to take them to an emergency department. |
| Qing <i>et al.</i> ²⁷ | Burns | - Care for burns and when to take them to the emergency department. |
| Mishra <i>et al.</i> ²⁸ | Burns | - What to do with a burn, how long to irrigate with cold water, what coverage to use and what to do with blisters. How to proceed with accessories and adhered clothing. What to do in a fire situation. |
| Soumyamol <i>et al.</i> ²⁹ | Epilepsy | - Basic concepts about the disease, what to do when an epileptic attack occurs. |
| Supínová <i>et al.</i> ³⁰ | Epilepsy | - What to do during an epileptic seizure and apply CPR to the victim. |
| Alyahya <i>et al.</i> ³¹ | Tooth avulsion | - Care with possibility of reimplantation, attempt at self-reimplantation, urgency of replantation, identification of means of cleaning and adequate transport. |
| Hussain <i>et al.</i> ³² | Tooth avulsion | - Care with reimplantation, storage, when taking to the emergency service. |
| Servat <i>et al.</i> ³³ | Tooth avulsion | - When to take it to the emergency department, where to store the tooth and reimplant it. |
| Black <i>et al.</i> ³⁴ | Concussion | - How to identify symptoms and onset time of concussion, when to release for sports activities, when to take emergency services. |
| Chirongoma <i>et al.</i> ³⁵ | Burns | - Knowledge about burns, care for the injury (how to cool it, what to put on it for healing). - Care for burns and how to remove stuck clothing. |
| Habeeb <i>et al.</i> ³⁶ | Choking, drowning and burning | How to perform child release maneuvers. When to start CPR in a drowning situation, where to perform understanding, whether or not to cover the victim. |
| Hui <i>et al.</i> ³⁷ | Burns | - First aid care and what to do with blisters. |
| Olatosi <i>et al.</i> ³⁸ | Tooth avulsion | - Reimplantation (when taking it to an emergency or specialized service, appropriate transport of the missing tooth). |

Caption: OVACE = Foreign Body Airway Obstruction; CPR = cardiopulmonary resuscitation; AED = automatic external defibrillator, BLS = Basic Life Support.

Source: Own preparation.

DISCUSSION

Through the analysis of the selected studies, weaknesses in the knowledge of

parents and caregivers were identified regarding various topics in relation to first aid, the discussion of which took place to

resolve the doubts presented in the most common trauma and clinical situations.

A study on the epidemiology of pediatric trauma carried out in Brazil identified, among the most common traumatic situations, traffic accidents and falls from bicycles in children aged four to ten years and domestic accidents with falls from a high plane or the same level and drownings in children under three years.³⁹ In this research, falls, burns and tooth avulsions were identified as the most recurrent traumatic situations among children and which generated doubts among parents.

Burns can occur in various ways, even under adult supervision, the most affected age group is from zero to two years old, and hot drinks are the main cause^{16,35}, requiring immediate attention and care.

Studies recommend removing jewelry and accessories, not removing burned clothing adhered to the wound site, and letting the blisters drain on their own, with their handling restricted to healthcare professionals.²⁷⁻²⁸

Strong evidence show that the effective treatment to reduce the consequences of burns consists of cold running water for 20 minutes, applied within three hours after the burn, providing relief pain relief, scar control, shorter hospital stay and faster re-epithelialization.^{16,40-41} Cover the patient with damp cloths assists in pain

relief and maintains a balance in the temperature of the burn, which helps in the specialized treatment of burns.²⁰

Regarding dental trauma, a systematic review study identified that, in children and adolescents, they occur mainly due to falls at home, being more frequent in the male population, with the most common type of trauma being tooth enamel fracture. Dental trauma requires special care, as well as installing safety measures at home and eliminating risk factors for falls, strengthening protective equipment during sports and providing guidance to parents regarding first aid measures.⁴²

The lack of parental knowledge regarding dental trauma was greater for tooth avulsions. It was found in the literature that the majority of mothers do not know that permanent teeth can be reimplanted, having little knowledge of first aid in managing this type of situation. The recommended first aid measures are to keep the child calm and the tooth clean in the alveolar cavity or stored in a moist environment, which can be pasteurized whole milk (most recommended), saline solution or saliva itself to maintain the integrity of the tooth. Do not use means such as plastic bags, paper, tissues, as they contribute to the irreversible desiccation of the periodontal ligament, resulting in the loss of the reimplanted tooth over time. The

search for specialized health services must occur immediately, as professional care within the first 30 minutes presents a greater chance of reimplantation.³⁸

Regarding clinical conditions, the intoxication and poisoning, obstruction of the airways by a foreign body and cardiorespiratory arrest were also the most common clinical conditions observed in the studies.

Poisonings are common in children exposed to substances found at home, such as cleaning products, medicines and plant toxins.⁴³⁻⁴⁴ It is important to highlight that you should not offer any type of liquid or induce vomiting, regardless of the type of substance ingested, as many of these substances are fat-soluble, which accelerates the absorption of the toxic substance by the body, compromising adequate hospital care.⁴⁴

When the contact was the skin, it is recommended to clean the area with running water for 20 minutes, never bathing the child, as there is a possibility of spread the product. It is important when seeking specialized service to know the type of product that was consumed, however, other people should not be put at risk if the substance is toxic.⁴⁵

Foreign body airway obstruction (OVACE) occurs more frequently in children under three years of age, due to the regurgitation of milk and the ingestion of

materials such as coins, batteries, caramels, chewing gum, games with small parts and foods such as pieces of meat or fish.²⁴ Initial first aid for partial obstruction consists of having the patient try to expel the foreign body, either by coughing or sneezing.²⁰

In total obstruction, when the child cannot breathe and already shows signs of hypoxia, the Heimlich maneuver is performed in children over one year old and alternating chest compressions and back blows are performed in babies under one year old⁴⁶. It is important to note that the main signs of suffocation are the sudden difficulty breathing or abnormal breath sounds.²⁴

With regard to cardiorespiratory arrest, the main causes in children are sudden infant death syndrome, trauma, respiratory problems and congenital heart disorders.⁴⁷ The recommendations of the Brazilian Society of Cardiology advise lay people that first aid should begin with checking local safety, then the initial assessment of the child, if the child is unconscious and not breathing, the mobile emergency service should be called, calling 192 and applying cardiopulmonary resuscitation (CPR).⁴⁸

Weakness in first aid actions can lead parents to carry out premature and harmful actions.⁵ Considering the size of the child and the resuscitation technique, there are some specificities. When referring to the

CPR maneuver in babies, the index and middle finger should be used, on the nipple line, for chest compressions. In older children, the hypothenar region of one hand should be used on the nipple line, making 30 alternating chest compressions for two breaths and, if there are two rescuers, providing 15 compressions for two breaths.⁴⁸

Considering the vast field of knowledge and practice areas in Nursing, this study has scientific, technological and social relevance, as it delimits the weaknesses in knowledge due to the most common urgent and emergency situations in the daily lives of parents involving children, which allows for the Nursing professional to pay attention to the most prominent points in their health education activities to better understand the target population, in addition to providing scientific evidence to improve educational technologies that qualify their health care, considering household issues, social and cultural.

CONCLUSION

The study brought together weaknesses in the knowledge of parents and caregivers about concepts, signs of complications and risks involved, first aid practice, prevention and home safety measures, how to create a first aid kit and

when to resort to emergency care services, which most frequently involved situations of falls, burns, tooth avulsions, intoxications and poisonings, airway obstruction by a foreign body and cardiorespiratory arrest. Therefore, the need for permanent interventions and continuous guidance by Nursing is seen, being considered an important facilitator of popular education.

The study's limitation is that the identified weaknesses are not correlated with the sociodemographic profile of parents and caregivers, which would allow identifying whether there is an association between the population's lack of knowledge and the level of education, income and access to health services. It was also found that the limitation presented is also a gap in knowledge of the research listed for the review, suggesting new studies, as it allows strengthening health education strategies and improving educational materials.

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