



THE KNOWLEDGE OF UNDERGRADUATE STUDENTS IN FIRST AID: AN INTEGRATIVE REVIEW

O CONHECIMENTO DE ESTUDANTES DE GRADUAÇÃO EM PRIMEIROS SOCORROS: UMA REVISÃO INTEGRATIVA

EL CONOCIMIENTO DE LOS ESTUDIANTES DE GRADUACIÓN EM PRIMEROS AUXILIOS: UNA REVISIÓN INTEGRATIVA

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RESUMO

Objetivo: analisar as produções científicas relacionadas ao conhecimento de estudantes de graduação em primeiros socorros. **Método:** trata-se de uma revisão integrativa de artigos extraídos das bases de dados LILACS, BDNF e MEDLINE e Biblioteca Virtual SciELO. Para tanto, foram utilizados os descritores Primeiros Socorros, Conhecimento e Estudantes, sem recorte temporal. A busca identificou 33 artigos dos quais apenas sete foram selecionados. A partir destes, mais cinco referências foram acrescentadas a partir de suas próprias referências citadas, totalizando uma amostra final de 12 artigos. **Resultados:** os estudos selecionados distribuíram-se entre os anos de 2010 e 2016 e avaliaram, sobretudo, o conhecimento e as atitudes dos estudantes frente ao traumatismo, reimplante e avulsão dentária; o conhecimento, ou sua retenção, e atitudes frente aos primeiros socorros, Suporte Básico de Vida (SBV), ressuscitação cardiopulmonar e ao uso de desfibriladores externos automatizados, além do gerenciamento de caixas de primeiros socorros domésticas. **Conclusões:** embora a literatura indique que os conhecimentos sobre primeiros socorros estejam difundidos nas universidades e em seu entorno, este estudo mostra que diversas pesquisas apontam *deficits* no conhecimento de estudantes universitários nas situações citadas.

Descritores: Primeiros Socorros; Conhecimento; Estudantes.

ABSTRACT

Objective: to analyze the scientific productions related to the knowledge of undergraduate students in First Aid. **Method:** this is an integrative review of articles extracted from the LILACS, BDNF, MEDLINE databases and virtual library SciELO. For this, the descriptors First Aid, Knowledge and Students were used, without a temporal cut. The search identified 33 articles out of which only seven were selected. From these,

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a further five references were added from their own cited references, with a total final sample of 12 articles. **Results:** the selected studies were distributed between the years 2010 and 2016 and evaluated, in particular, students' knowledge and attitudes regarding trauma, reimplantation and dental avulsion; the knowledge or their retention and attitudes towards first aid, basic life support, cardiopulmonary resuscitation and the use of automated external defibrillators, as well as the management of domestic first aid boxes. **Conclusion:** although the literature indicates that the knowledge about first aid is diffused in the universities and in its surroundings, this study shows that several researches show deficits in the knowledge of university students in the aforementioned situations.

Descriptors: First Aid; Knowledge; Students.

RESUMEN

Objetivo: Analizar las producciones científicas relacionadas al conocimiento de los estudiantes de graduación en Primeros Auxilios. **Método:** se trata de una revisión integrativa de artículos extraídos de las bases de datos LILACS, BDNF, MEDLINE y Biblioteca Virtual SciELO. Para ello, se utilizaron los descriptores Primeros Auxilios, Conocimiento y Estudiantes, sin recorte temporal. La búsqueda identificó 33 artículos, de los cuales sólo se seleccionaron siete. A partir de estos, más cinco referencias fueron añadidas a partir de sus propias referencias citadas, totalizando una muestra final de 12 artículos. **Resultados:** los estudios seleccionados se distribuyeron entre los años 2010 y 2016 y evaluaron, sobre todo, el conocimiento y las actitudes de los estudiantes frente al traumatismo, reimplante y avulsión dental; el conocimiento, o su retención, y actitudes frente a los primeros auxilios, soporte básico de vida, resucitación cardiopulmonar y al uso de desfibriladores externos automatizados, además de la gestión de cajas de primeros auxilios domésticas. **Conclusión:** Aunque la literatura indique que los conocimientos sobre primeros auxilios se difundan en las universidades y en su entorno, el presente estudio muestra que diversas investigaciones apuntan *deficits* en el conocimiento de estudiantes universitarios, en las situaciones citadas.

Descriptores: Primeros Auxilios; Conocimiento; Estudiantes.

INTRODUCTION

First Aid (FA) are initial actions to the victim, carried out in the place where the emergency occurs, with the purpose of maintaining life, without causing further injuries or aggravating existing ones.¹ The idea that knowledge and teaching about FA are restricted to health professionals or those close to universities is present in the literature. The teaching on accident prevention and FA comes as something belonging to health professionals or to those who are inserted in universities.² An expanded concept states that FA, in addition to being restricted to health professionals and those enrolled in universities, is widespread in hospitals and other centers that promote such courses.³

To know, teach and popularize these practices are of fundamental importance, so the present study aimed to analyze the literature related to the

knowledge of undergraduate students in first aid, whose guiding question was: "What is the literature about undergraduate student knowledge about first aid? ".

METHOD

The present study is an integrative review, whose methodology synthesizes and analyzes the publications of a certain theme with the intention of solving a problem, directing the future researches.⁴ Identification of the theme and selection of the research question; establishment of the inclusion/exclusion criteria of the studies; definition of the information to be collected; categorization and evaluation of selected and included studies; interpretations of the results and synthesis of knowledge are the steps followed to prepare this study.⁵

The Latin American and Caribbean Literature in Health Sciences databases (LILACS) were used to search for articles; Bibliographic Database Specialized in the area of Nursing (BDENF); Virtual Library SCIELO (Scientific Electronic Library Online) and MEDLINE (Medical Literature Analysis and Retrieval System Online) using the descriptors First Aid, Knowledge and Students in the languages of the English, Spanish and Spanish languages. As inclusion criterion we considered scientific articles produced in full that met the study objective. Preliminary notes, editorials, letters to the editor, reflective studies, reports of experience and duplicate publications were excluded. There was no temporal cut. Manual searches of references identified from the references of the selected articles also composed the sample.

RESULTS

The search identified 33 articles, of which only seven were selected. From the references of these, five more were added, totaling the final sample of 12 articles. To characterize these articles, the following information was extracted: assessed competencies, authors and courses of the subjects evaluated (table 1).

The selected studies were distributed between the years 2010 and 2016 and evaluated, above all, the subjects' knowledge and attitudes regarding trauma, re-implantation and dental avulsion. Knowledge, or its retention, and attitudes in First Aid, Basic Life Support, Cardiopulmonary Resuscitation and the

use of the Automated External Defibrillator (AED), as well as the management of domestic first aid boxes.

In relation to the subjects surveyed, undergraduate students in Physical Education,⁶⁻⁸ Medicine,⁹⁻¹⁰ Nursing,⁹⁻¹¹ Pharmacy,¹¹⁻¹² Physical Therapy, Nutrition and Occupational Therapy¹¹ were identified. Two studies did not identify the specific course participants.¹³⁻¹⁴

Table 1 - Characterization of selected studies.

| ASSESSED COMPETENCES | STUDIES/AUTHORS | COURSE OF ASSESSED SUBJECTS |
|--|--|--|
| Knowledge and attitudes in dental emergencies | Francisco et al. 2016; Antunes et al. 2016; Santos et al. 2015; Silva et al. 2013; Alencar et al. 2012; Maia et al. 2014 | Physical Education |
| Knowledge and Attitudes in Basic Life Support, First Aid and Use of Automated External Defibrillator | Tavares et al. 2015; Ruijter et al. 2014; Maia et al. 2014; Alencar et al. 2012; Bogle et al. 2012; Kopacek et al. 2010 | Medicine, Nursing, Physiotherapy, Pharmacy, Nutrition and Occupational Therapy |
| Management of domestic first aid boxes | Solá et al. 2016 | Nursing |

DISCUSSION

In the studies that dealt with the aspects related to trauma, avulsion and dental re-implantation mentioned above, it was observed that the students evaluated had limited or inadequate knowledge for immediate care in cases of dental avulsion and dental trauma, as well as insufficient knowledge about the handling of traumatized teeth.^{6-7,14-15}

It was also inferred that these students did not receive information about the subject during graduation. Studies conducted with undergraduates in physical education in 2016 indicate that only 3.21% of the interviewees had received information about dental trauma and use of the mouth-guard during graduation, similar to the results found previously where 95.5% of the participants did not receive information on graduation. In addition, only 19.83% correctly answered the questions regarding the conduct against avulsion; 54.69% to the handling of the avulsed tooth and 7.77% to the transport of the avulsed tooth.¹²⁻¹⁷

In what refers to knowledge about Basic Life Support, a study analyzed in this review found that 99.9% of the participants obtained, in an objective test,

10 marks lower than the minimum levels acceptable by the American Heart Association, although they did not evidence them. Regarding the use of the AED and the performance of the CPR maneuvers, according to Bogle, Mehrotra, Chiampas, Aldeen.¹³ observed that most students at an American university would not perform CPR or use the AED without help. In a study performed with Brazilian students, only 17.7% would be able to perform cardiac compressions when faced with a cardiac arrest situation.¹⁴

When analyzing knowledge retention one of the studies showed that pharmacists of the course of Pharmacy kept the acquired information on the use of the AED until four months after initial test, in opposition to another research that showed limitations in the retention of knowledge of medical students, on First Aid and Basic Life Support (BLS). Still on the subject of first aid, a study carried out in Spain concluded that the student of nursing by conducting an analysis, in his own first aid box, can help him to improve his abilities front to the theme.^{8-9,11}

CONCLUSION

Although the literature indicates that knowledge about First Aid is widespread in and around universities, the present study shows that several studies point out deficits in the knowledge of university students, as well as their retention when evaluated for dental emergencies, First Aid, Basic Support and Correct Use of Automated External Defibrillator.

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