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REVIEW ARTICLE

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INSTRUMENTS THAT ASSESS NURSING KNOWLEDGE ON PRESSURE INJURIES: INTEGRATIVE LITERATURE REVIEW

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ABSTRACT

Objective: to map the instruments that assess the knowledge of the nursing team in the management of pressure injuries. **Method:** Integrative review conducted in the indexed databases LILACS/BVS, Pubmed, Scopus, CINAHL, Embase and Web of Science from 2009 to June 2020, following the recommendations of the PRISMA tool. **Results:** 22 studies were selected. The objects of the studies were similar, since they portrayed the knowledge of the nursing team about pressure injuries and the deficit of this knowledge. **Conclusion:** The results of this review show that nursing professionals demonstrated unsatisfactory knowledge, a worrying reality when considering that pressure injuries are directly linked to patient safety and quality of care.

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INTRODUCTION

In 2016, at the Consensus Conference held in Chicago, USA, the term Pressure Ulcer (PU) was redefined, where this type of injury came to be called Pressure Injury (PI). This lesion is defined as localized damage to the underlying skin and/or soft tissues, usually over a bony prominence, or related to the use of a medical device or other artifact, occurring as a result of intense and/or prolonged pressure in combination with shear (National Pressure Ulcer Advisory Panel, 2016). The National Patient Safety Program (NPSAP) is related to actions aimed at ensuring people's integrity, preventing adverse events and preventing the occurrence of errors, thus promoting safer patient care. One of the actions that should be foreseen in the NPSAP is that aimed at the prevention of pressure injuries in health services (Brazil, 2013). Pressure injury corresponds to the third type of event most frequently reported by the NPSAP of Brazilian hospitals. Studies of incidence and prevalence allow identifying the characteristics and susceptibility of individuals in different care environments and different countries. These data enable the identification of risks, construction and implementation of prevention and treatment protocols, and support professional qualification (Silva, 2016). International epidemiological studies show an average prevalence in

hospitals in Denmark, Ireland and Sweden of 15%, 16% and 25%, and incidence of 1.8%, 11% and 20%, respectively (Petz, 2017). In Germany, the prevalence was 1.21% and the incidence was 0.78% in the years 2007 to 2011 (Strazzieri-Pulido, 2015). A multicenter cross-sectional study in hospitals in China identified prevalence rates of 1.58% and incidence of 0.63% (González-Méndez, 2018). In Brazil, studies have identified an incidence of 13.13% to 62.5% and prevalence between 9.2% and 37.41%, depending on the population, region and hospital unit that the study was conducted (Inoue, 2015 and Habiballah, 2016). The prevention of the occurrence of pressure injury can be implemented through different strategies, considering the complexity and severity of patients, avoiding increased hospitalization time and costly expenses to health services. In this context, nursing care must be provided efficiently and effectively, through health actions that meet the real and potential needs of patients, ensuring the quality of care performed, which requires technical-scientific knowledge from the professional (Stuque, 2017). In this context, the present study is justified by the relevance of verifying the knowledge that the nursing team has about the prevention and treatment of PIs, since it is directly related to daily care, both in prevention and treatment. Additionally, it may contribute to the advancement of knowledge in this area. This study aimed to

map the instruments that assess the knowledge of the nursing team in the management of pressure injury.

METHODS

This is an integrative literature review supported by Ganong's proposed recommendations⁽¹⁰⁾: formulation of the research-based question, selection of the sample from the selected descriptors to the theme, categorization of studies, evaluation of studies, interpretation of results and dissemination of the review or synthesis of knowledge. For the formulation of the research question, the PCC strategy was used, acronym of "population" (P), "concept" (C) and "context" (C): "which instruments evaluate the knowledge of the nursing team in the management of pressure injury?"

The research was developed in May 2020. The descriptors used to build the strategies were: "Wounds and Injuries", "Pressure Ulcers", "Skin Ulcers", "Skin Wounds", "Skin Injuries", "Skin Injuries", "Nursing Care", "Nursing", "Nurse", "Patient Care Management", "Outcome and Process Assessment", "Process Assessment", "Evaluation". Among the descriptors were used the terms Boolean: AND and OR to compress the search keys to be used for searches in the databases. The search was performed in the databases: LILACS/VHL, Pubmed, Scopus, CINAHL, Embase and Web of Science. The inclusion criteria were: national and international studies, available in English, Spanish and Portuguese, with a time frame from 2009 to 2020, which were about instruments that assess the knowledge of the nursing team in the management of pressure injury. Scientific articles that did not answer the research question, that escaped the objective of the study and duplicated were excluded. The search was carried out simultaneously for two collaborators, in the same collection period and using different computers, in order to ensure that no study was improperly excluded. For cases of divergence, the studies were selected after peer discussion. After the selection of the studies, these were arranged in a structured form containing production characterization data: authors, year, journal, methodological design, sample. And in each publication, the instruments used to evaluate knowledge were identified.

RESULTS

A total of 3,256 publications were found after the process, 22 publications that dealt specifically with the theme were selected. Figure 1 represents the selection flowchart of the studies.

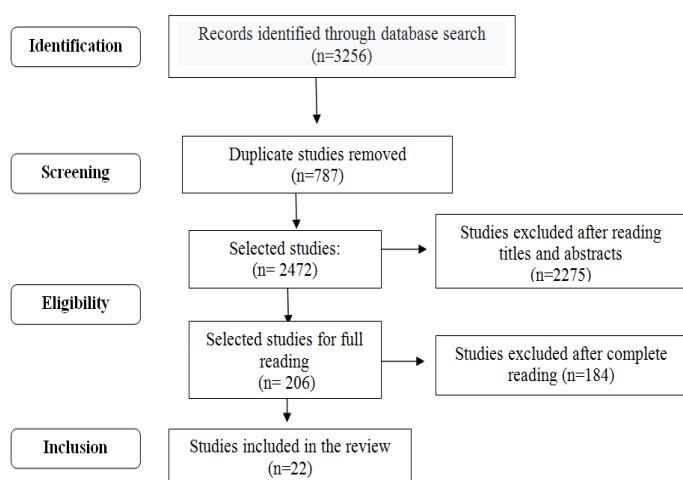


Figure 1. Study selection flowchart. Niterói, RJ, Brazil, 2020

Of the studies, 21 are scientific articles and a master's thesis. Table 1 presents the characterization of the studies included regarding the identification of authors, year of publication, methodological design, sample, Journal.

Regarding the measurement of the knowledge of the nursing team, five different validated instruments were used. Two studies used their own non-validated instruments Table 2.

DISCUSSION

Mapping the instruments that assess the knowledge of the nursing team in the management of pressure injury allowed identifying the unsatisfactory level of this knowledge and analyzing the positive impact of educational actions. It is observed that, currently, the concern of the research is related to the knowledge of the nursing team about pressure injury in the evaluation, staging and prevention of this disease to the patient in the various care environments. Thus, the 22 articles 19 include in the title the descriptor "knowledge", thus revealing the interest about the level of information of these professionals regarding the theme researched and prevention care. Seven studies used the educational intervention as a strategy, showing an increase in knowledge after the procedure with nursing professionals (Delmore, 2020; Araújo, 2019; Campoi, 2019; JMB, 2001; Alemida, 2017; Galvão, 2017; Mv Baron, 2016 and Soares, 2014). And seven studies suggested educational or educational programs (Khojastehfar, 2020 and Rafiei, 2014), training (Aydin, 2010 and Galvão, 2017), continuing education (Kopuz, 2019 and Iranmanesh, 2011) and educational intervention (Rocha, 2015). Research conducted at national and international level on the knowledge of nursing professionals regarding the prevention and treatment of pressure injury emerges as a concern of specialists for the high prevalence and incidence coefficients that still exist in health institutions. Most of these studies showed knowledge deficit of the components of the nursing team in some specific areas, which include measures to prevent pressure injury (Beeckman, 2011 and Galvão, 2017). In the studies presented in this research, nurses and nursing technicians/auxiliaries also have a deficiency in knowledge about the recommendations for prevention and treatment of pressure injury. Prevention measures and the characteristics of pressure injury should be part of the list of knowledge of all nursing professionals, since they are preventable injuries (Ferreira, 2018).

The nursing team's knowledge about pressure injury is as important as the prevention of risk to develop it. Planning effective interventions, from the creation of prevention protocols and appropriate training becomes important, in the tireless and continuous search for the improvement of the quality of nursing care, performing care with responsibility and autonomy, without implying professional life and without aggravating the clinical status of the patient (Anselmi, 2009), which will certainly promote greater patient safety. The index of ignorance about important characteristics to be evidenced during the management of pressure injury may favor the inadequate and late treatment of these lesions, prolonging the infectious condition and delaying the healing process, generating burden on both the user and the health system (Baratieri, 2015 and Costa, 2016). In Brazil, such measures, related to protocols of prevention and treatment of educational actions, are quite limited and begin to be instituted according to institutional accreditations for quality, in which the incidence of pressure injury is included, and the National Policy of Patient Safety (Khojastehfar, 2020). Although it is an indicator of negative quality of health services, pressure injury is still a problem underestimated by professionals. The frequent occurrence persists in hospitalized patients, characterizing a scenario that shows the need for urgent measures to revert to the situation. The knowledge deficit, combined with the use of inadequate practices by professionals, contributes to the maintenance of reality. The prevention of the occurrence of pressure injury requires a better understanding of the nursing team on all aspects that involve its development, as well as attitudes towards ethical care with the adoption of best practices, including the search for adequate resources. Several strategies can be used to improve the level of knowledge of professionals, but it is necessary to identify the personal and institutional barriers that hinder the fulfillment of this goal (Tchouaket, 2017). It is understood that problematizing the situations of the work process favors the construction of knowledge, understood not as knowledge transfer, but

Table 1. Synthesis of scientific production. Niterói, RJ, Brazil, 2020.

Authors	Outline Methodological	Sample	Periodic
Delmore et al. (2020) ¹¹	Descriptive	58 nurses	Advances in Skin & Wound Care
Khojastehfar et al. (2020) ¹²	Transverse	308 nurses	Journal of Tissue Viability
Araújo et al. (2019) ¹³	Longitudinal	9 nurses	Rene Magazine
Kopuz, Karaca (2019) ¹⁴	Transverse	250 nurses	Clinical and Experimental Health Sciences
Campoí et al. (2019) ¹⁵	Almost experimental study	95 nurses	Brazilian Journal of Nursing
Cardoso et al. (2019) ¹⁶	Descriptive	26 nurses	Research Journal: Care and Fundamental Online
From Meyer et al. (2019) ¹⁷	Transverse	430 nurses 43 nursing assistants	Journal of Tissue Viability
Sousa, Faustino (2019) ¹⁸	Transverse	38 nurses	Research Journal: Care and Fundamental Online
Aydın et al. (2019) ¹⁹	Transverse	347 nurses	J Wound Ostomy Continence Nurs
Barakat-Johnson et al. (2018) ²⁰	Transverse	749 nurses	J Wound Ostomy Continence Nurs
Vasconcelos, Caliri (2017) ²¹	Observational	82 nurses and nursing technicians	Esc Anna Nery
Almeida (2017) ²²	Transverse	18 nurses 84 nursing technicians	Dissertation (UFF)
Galvão et al. (2017) ²³	Descriptive	14 nurses 26 technicians/ nursing assistants	Brazilian Nursing Rev
Baron et al. (2016) ²⁴	Experimental	12 nurses 59 nursing technicians	Latin American Nursing Rev
Rocha et al. (2015) ²⁵	Descriptive	9 nurses 76 technicians nursing	Cogitare Nursing Journal Of Wound Care
Rafiei et al. (2014) ²⁶	Transverse	159 enfermeiros	International Journal of Orthopaedic and Trauma Nursing
Qaddumi, Khawaldeh. (2014) ²⁷	Transverse	194 enfermeiros	BMC Nursing
Soares et al (2014) ²⁸	Descriptive	49 enfermeiros	Rev aide UFPE
Iranmanesh et al. (2013) ²⁹	Transverse	57 enfermeiros	Journal Of Wound Care International Wound Journal
El Enein, Zaghoul. (2011) ³⁰	Transverse	122 enfermeiros	International Journal of Nursing Practice
Iranmanesh et al. (2011) ³¹	Transverse	126 enfermeiros	International Wound Journal
Claudia et al. (2010) ³²	Descriptive	256 enfermeiros	International Journal of Nursing Practice

Table 2. Presents the instruments for evaluating the studies. Niterói, RJ, Brazil, 2020

References	Instruments used	Validated
A11,13,16,18	Pieper-Zulkowski Pressure Ulcer Knowledge Test (PZ-PUKT)	Yes
A12,15,20,21,22,23, 24,25,26,28,29,31,32	Pressure Ulcer Knowledge Test (PUKT)	Yes
A14	Pressure Ulcer Prevention Knowledge Survey	Yes
A17	PUKAT 2.0 Questionnaire	Yes
A27	PU Knowledge Test	Yes
A19	Form of knowledge and practice on pressure injuries	No
A30	Knowledge questionnaire	No

as a collective construction, in which all professionals seek solutions from the experience of daily life in order to respond to their own needs (Beeckman, 2016). In a qualitative research, in view of the discourses of the interviewed professionals, it is clear the need to improve the knowledge of nurses who care for patients who live with pressure injury (Souza, 2018). It is considered as limitations that the available studies brought only seven instruments of evaluation of the nursing team in the management of pressure injury, five of which were validated, and some studies did not present themselves in Open Access format, making it impossible to access them.

CONCLUSION

In the present study, it was possible to evidence through the assessment instruments that the nursing team demonstrated unsatisfactory knowledge about pressure injury. These findings indicate a worrying reality, especially when considering that the prevention of pressure injuries is directly linked to patient safety and quality of care. Thus, the lack of knowledge on the subject addressed is evident, it reiterates the need to develop educational strategies for the qualification of professionals, since the lack of knowledge directly impacts on preventive actions and, consequently, on the incidence and prevalence of pressure injury.

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