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ADVANCED TRAINING IN NURSING: THE SYSTEMATIC REVIEWS AS A PEDAGOGICAL TOOL

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Abstract: Systematic reviews allow, through the application of reproducible, valid and rigorous methods, to aggregate knowledge and promote the synthesis of knowledge on clinically relevant issues. This article addresses the use of systematic literature review (SLR) as a pedagogical strategy to support advanced training in nursing, particularly in a specialized training course in advanced wound intervention. The main objective is to identify the predominant areas of research interest for nurses who are students in this postgraduate course. To this end, we conducted a review of the 27 RSLs developed throughout the various editions of the course. The title, abstract and keywords were analyzed. Subsequently, the research questions formulated were evaluated. In total, 90 nurses who attended this course between 2010 and 2020 were involved in the development of the SLRs. As a distinct pedagogical tool, the SLRs developed in an academic context provide a clear focus on the students' research interests. In this way, it is possible to structure post-graduate education and advanced practice in order to fill knowledge gaps reported by the students themselves, promoting and disseminating the incorporation of the best available scientific evidence. They also provide a solid basis for the development of skills in scientific dissemination and publication.

Keywords: Evidence-based practice, Postgraduate training, Teaching Methods, Systematic literature review.

INTRODUCTION

According to the JBI.Global (JBI, 2014), systematic literature reviews (SLR) allow adding knowledge by promoting the synthesis of studies on specific issues through the application of reproducible, valid and rigorous methods. According to the evidence-based health care model proposed by this consortium, which is advocated as reliable,

appropriate, meaningful and effective, the aim is to develop a complex process that leads to global health (Jordan et al., 2019). To this end, four structuring pillars defined are the generation of evidence, the synthesis of evidence, the transfer of evidence and its sustained implementation. The SLRs are one of the elements that embody, par excellence, the synthesis of evidence, thus materializing examples of second-generation knowledge (Graham et al, 2006).

In the context of a Specialized and Post-Graduate Training Course in Advanced Wound Intervention, nurses/trainees promote SLR processes within the scope of the course "Evidence and Research in Wounds". In fact, the promotion of evidence-based nursing based on the study of nurses' barriers, attitudes and practices has been an area of in-depth and advanced research by the teachers of this same course (Pereira, 2016).

The themes to be covered emerge from the contexts of clinical practice of the trainees themselves, contributing to the construction of an advanced practice, clinical decision-making and problem solving. This promotes the translation of knowledge and the achievement of the best results with clients/persons/patients.

Two key concepts are considered in this context, namely "knowledge translation" and "evidence-based nursing practice" (EBNP). The first concept, according to the World Health Organization (2005) implies the synthesis, exchange, and application of knowledge by the stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people's health. When we talk about EBNP, we are considering a complex process (Cullum et al, 2010) that implies, according to Fineout-Overholt & Johnston (2005), the achievement of quality clinical outcomes through a structured clinical decision-making process

that considers, in the context of care, the client's preferences and values, the best available external evidence, the existing resources, and the professional's level of expertise.

At present, we know that the implementation of the best scientific evidence in health services still does not occur in a satisfactory manner. The challenge of knowledge translation comes from two factors: on the one hand, the lack of cohesion between the scientific community and health decision makers; on the other hand, the inability of professionals to translate and apply new knowledge, and the lack of support and incentives from health institutions (Ferraz, Pereira & Pereira, 2019).

Structurally, the teachers see themselves in the new teaching paradigm advocated by Fineout-Overholt and Johnston (2005) when they reflect on the teaching of evidence-based practice as a challenge for educators in the 21st century, namely by assuming a substantive change in the paradigm of nursing education from a traditional model to a model in which curricula are based on the integration of evidence-based practice. The following transcript, although somewhat lengthy, is modeling this transition:

The traditional paradigm for teaching research typically emphasized generating research, with particular focus on research methods and extensive critique. This paradigm is no longer adequate for preparing practitioners for the level of practice expected of them. Educators must begin to provide foundational education, beginning in basic programs (...) and continuing education in evidence-based practice that will prepare nurses to give care that is based on the best available evidence. Practitioners are expected to bring the best and latest evidence to bear on their decision making with patients. (...) Educators must be able to challenge learners to incorporate valid scientific evidence; their own expertise; and their patients' choices, concerns, and values when making clinical decisions. (Fineout-Overholt & Johnston, 2005: 37).

Such a comprehensive challenge requires a significant commitment from all those who, to different degrees and with different statuses (teachers, mentors, tutors, and clinical supervisors) intervene in the educational and training processes in nursing, particularly and more generally in the health sciences.

DESCRIPTION OF PEDAGOGICAL PRACTICE

In this article, we propose to address the use of systematic literature review as a pedagogical strategy to support advanced training in nursing, namely in a specialized training program.

MAIN GOAL AND OBJECTIVES

With the main purpose of identifying the predominant areas of research interest of these nurses, postgraduate students in the area of advanced wound care, we conducted a review of the 27 systematic literature reviews developed during the first eight editions of the Specialized Training Program in Advanced Wound Intervention of the School of Nursing of the University of Minho, which is accredited by ELCOS - Portuguese Wound Society and EWMA - European Wound Management Association. In addition, we also intended to analyze the different types of review developed, as well as the robustness of the results found. From the objectives previously assumed, the goal was also the a posteriori identification, based on the various themes studied, of a set of topics of interest that could support the introduction and/or deepening of the course programmatic contents. A total of 90 nurses who attended this postgraduate course between 2010 and 2020 were involved in the preparation of the SLRs.

METHODOLOGY

Initially, the title, abstract and keywords (MeSH descriptors or virtual health

descriptors) were analyzed for each SLR. Subsequently, the respective research questions were analyzed using the PICO model (Patient / Population, Intervention, Comparison and Outcome). The models (systematic & umbrella reviews) recommended by the JBI (Aromataris & Munn, 2020) were used to develop and structure each SLR and this paper. In practical terms, the process leading to the development of the SLRs, regardless of the different types of review performed, sought to follow cumulatively the following steps: identification of a clinically relevant question; development of a simplified review protocol; location of studies; selection of relevant studies; critical appraisal of the quality of the selected investigations; collection of data from each individual study; synthesis of the findings of each individual study; and presentation of a review report.

To conduct and structure the final review report, we recommended the use of the Preferred Reporting Items for systematic reviews and meta-analyses (PRISMA), in line with what was proposed by Page et al. (2021).

MAIN RESULTS AND IMPLICATIONS

The results were organized according to the categories identified by the criteria of the EWMA, namely its scientific publication - International Journal of Wound Care. In order of frequency [n], the following study themes were identified for systematic review: Devices & Interventions [14]; Leg Ulcer [8]; Procedures [8]; Infection [6]; Pressure Ulcer; Prevention; Quality of Life; Wound Assessment & Chronic Wounds [3]; Health Economics & Outcomes; Negative Pressure Therapy & Antimicrobials [2]; Acute Wounds; Burns; Education & Nutrition [1].

With regard to the different types of SLRs conducted, according to what was proposed by Munn and colleagues (2018), effectiveness

SLRs naturally predominate. However, other types of review were identified, namely: cost/economy evaluation; prevalence and/or incidence; and also test and/or diagnostic accuracy, associated with the use of devices.

It should be noted that overall and in a hierarchical perspective (DiCenso, Bayley, & Haynes, 2009), the quality of the evidence found did not always involve studies of the highest quality, which may also limit, to some extent, the findings verified in the various SLRs.

As main implications for the teaching practice, we observed that the SLRs developed in an academic context and as a distinct pedagogical tool, provide a clear focus on the study interests of students, who are, necessarily, professionals. In this way it is possible to structure post-graduate education and advanced practice in order to fill knowledge gaps reported by the students themselves and to build evidence-based practice in the context, promoting and disseminating the incorporation of knowledge. They also provide a solid basis for the development and promotion of skills in scientific dissemination and publication. With all the limitations and constraints, this strategy aims to stimulate professionals to permanently question their own practices, and this is not only desirable, but also a primary and primordial step in the construction of an evidence-based practice (Melnik et al., 2010).

CONCLUSIONS

The mastery of skills and abilities regarding the methodology of evidence-based clinical practice is imperative for the provision of high quality health care. Teaching and learning that enhance the development of these skills, namely and in this case evidence synthesis, is essential to ensure these same capabilities. To this end, we advocate multifaceted and clinically integrated approaches that take into

account the practices and settings in which professionals are working.

The available evidence supports that the implementation of tailored interventions may be the most effective, although their effect is variable and moderate (Baker et al., 2015).

The World Health Organization itself, through its European Region (WHO/ER), has developed a set of strategies for the strengthening of nursing, taking into account the Health 2020 goals (WHO, 2014). In summary, it is proposed that evidence-based practice should be a theme that concerns all nurses, and that it should be promoted through teaching and education, research, leadership, and access to sources of evidence.

Despite the many limitations and constraints identified in the teaching of evidence-based health care (Young et al., 2014) of which we are aware, the pedagogical strategy now exposed provides, in our

understanding, an important contribution to achieve the above mentioned desideratum. In addition, as the target audience of this strategy is composed of professionals, a positive “contamination” effect is perceived among the remaining professional teams and organizations, thus also contributing to the development of a culture of demand and rigor in the contexts of professional practice and clinical practice.

The provision of evidence-based health care is an imperative of modern societies and is part of a context in which citizens and communities present clinical challenges of greater complexity, requiring responses from professionals and organizations with greater quality and high safety, within a framework of significant restrictions on human, material, and technical resources, implying higher levels of effectiveness, efficiency, and effectiveness in health interventions (Pereira, 2021).

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