Evidence-based practice: incorporating research into clinical practice
Prática baseada em evidências: incorporando pesquisas na prática clínica
Práctica basada en la evidencia: incorporando la investigación a la práctica clínica

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EDITORIAL

Scientific Evidence (ScE) is configured as "results of scientific research", carried out through procedures that incorporated validity criteria, that is, feasibility (*F*), appropriateness (*A*), meaning (*M*) and effectiveness (*E*) of health practices, taking into consideration all possible sources of bias[1]. The term Evidence-Based Practice (EBP) was created between the 1970s and 1980s, originating from the Evidence-Based Medicine (EBM) movement, where a hierarchy of levels of ScE was proposed, in order to direct the search for best available ScE for decision-making in clinical practice[2]. In 2002, nurses engaged in clinical practice and research established a model for the implementation of EBP, the "*Advancing Research and Clinical Practice through Close Collaboration* (ARCC)", with the aim of improving and better integrating research into clinical practice, linking local and national health care actions[3].

Thus, EBP consists of a problem-solving approach to providing health care actions that integrate the best available ScE from well-designed studies, and combines with the patient's preferences and values and the health professional's expertise. In order to consolidate the implementation of EBP in clinical practice, the health professional must maintain a questioning attitude in such a way as to transform clinical practice[3]. The guiding principle of EBP is the use of research results in practice. In this sense, the Evidence-Based Nursing movement emerges as a link that connects the best ScE and its application in clinical practice, focusing on decision-making for care scientifically qualified and safe[1]. In nursing practice, the application of EBP consists of seven steps: 1) elaboration of the clinical question; 2) search for ScE; 3) critical evaluation of the ScE retrieved in the search process; 4) decision-making based on the best ScE; 5) evaluation of the results of the clinical decision to be implemented; 6) changes based on the available ScE; 7) dissemination of the results of the clinical decision/praxis change[3].

In recent years, due to the exponential amount and complexity of information in the health area, it has become essential to develop means to outline more concise methodological steps within the scope of scientific research, with the purpose of enabling health professionals to have a better use of ScE[2-3]. The absence of ScE – which is at the top of the hierarchy of evidence –, those of high quality (systematic review [SR] and meta-analyses of randomized clinical trials [RCT] or well-designed RCT), does not preclude evidence-based decision-making. In these cases, what is required is the best available ScE and not the best possible evidence. It is crucial for the nurse to be able to identify   and

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interpret the best available ScE, knowing that it is not in all cases that an SR with RCT meta-analysis will be the best evidence. Most of the time, there will not be a systematic review specifically useful for all clinical questions. It is necessary for these cases, to identify the individual primary studies that answer the clinical question and critically evaluate them individually to decide whether the information provided is sound and reliable. Judging the applicability (relevance) of meta-analytical findings to a particular clinical decision is challenging[1,4].

The research still poses a challenge for the effectiveness of EBP in nursing, since it is possible to observe a paradox between research and the care provided by nurses, through distancing from science in daily practice, as well as the lack of understanding about their intrinsic relationships. In fact, it is urgent to establish the return of research results to clinical practice and that research themes are the result of their needs, in an objective and clear way, with applicability in different scenarios of professional practice. Accordingly, EBP requires the training of nurses in terms of seeking strategies for the development and use of ScE in clinical practice, in such a way as to overcome the dichotomy between theory-practice and care[1,4].

Some obstacles to the application of EBP in nursing practice include: exhaustive workday; institutional culture, which sometimes does not support the development of research; scarce time; the fact that ScE produced with greater methodological rigor are most often in another language (especially in English) and were tested in other realities; as well as the inability to research and apply the obtained results in the research. In addition, it is pivotal that the professional has knowledge about clinical epidemiology, biostatistics, health informatics and English language to develop EBP[1,4].

In the international context, there have been successful initiatives since the 1970s for the use of research results into nursing clinical practice. Nevertheless, the incorporation of ScE in the care provided by nurses has not reached the desired level yet, especially in the Brazilian context. There is a considerable delay between the generation of research results and their incorporation into clinical practice. For instance, in the academic settings, the development of ScE is carried out in a judicious manner and still for few people, and health institutions have an organizational culture with little support/encouragement for this translation[1,2,5]. Some authors introduce and discuss different models and strategies to expand the interpretative capacity of ScE and its applicability in the daily clinical practice of nurses[1,5]. This converges with the global movement to improve the quality of health services that integrates patient safety, rationality of costs and quality of care[1].

The JBI has proposed an Evidence-Based Health Care Model (EBHC)[6] with a methodology for implementing ScE in health with wide dissemination around the world. EBHC is defined as decision-making that considers the validity criteria (FAME) of health practices, making use of the best available ScE in the context in which care is provided. EBHC is based on four major pillars, namely: 1) generation of ScE (primary studies, professional expertise); 2) synthesis of ScE (systematic review, summaries of ScE and clinical guidelines/protocols); 3) transfer of ScE (education/training, systems integration and dissemination); 4) implementation of ScE (context analysis, change and results evaluation)[6]. The use of SE and/or its implementation encompasses three essential elements: 1) carrying out the change; 2) instituting an organizational change; 3) evaluating the impact of the use of ScE, whether in the health system, the care process and the health outcomes of individuals and their families[6].

In this context, in line with the EBP process, implementation science stands out, which, in addition to expanding its scope by including action planning, also considers the optimization of elements that facilitate organizational change, as well as the identification of barriers to be overcome, aiming at the improvement of health and care outcomes, cost reduction and increased satisfaction of patients, health professionals and managers[7]. Some factors that can be considered decisive in the process of implementing ScE in nursing include: organizational culture and climate, nursing leadership, organizational innovation, integration of recommendations into organizational structures and processes, interorganizational collaboration, management responsiveness and staff support, availability and access to resources, provision of continuing and permanent education, financial resources, access to research results, workload, resistance to change and time. It is important to emphasize that the nurse needs to understand and apply the skills of knowledge translation. According to the Canadian Institutes of Health Research, knowledge translation is defined as "*a dynamic, interactive process that includes the synthesis, dissemination, exchange, and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system*". In other words, knowledge translation is the set of skills needed to filter

scientific information that is really useful for the patient we care for, that is, using adaptable skills, but always with the best evidence available[9].

The implementation of Evidence-Based Nursing may contribute to the transformation of nursing practice based on tradition and tasks towards a reflective practice based on scientific knowledge, promoting the improvement of the quality of nursing care. The transfer of research results to nursing work contributes to the intensification of the critical judgment of these professionals. In the clinical practice, the knowledge and the use of the best valid and available ScE, associated with the consideration of patient's expectations and the professional's clinical experience, greatly contributes to a more assertive decision-making process in practice.

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