Search strategies in nursing: between challenges and excellence towards scientific improvement

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The relentless quest for innovations in the field of Nursing demands not only a commitment to clinical excellence but also to the quality of scientific research that underpins and drives this field. In this editorial, we explore the landscape of search strategies in Nursing used in the development of evidence syntheses, such as systematic reviews, integrative reviews, scoping reviews, among others. We highlight both the identified challenges and promising paths that lead to improvement in scientific production.

It is important to emphasize that, by search strategy, we mean a technique or set of rules designed to facilitate the matching of a formulated question with the information stored in a database[1]. Thus, the search is conducted through a "strategy," which consists of a set of words and/or terms that, when combined, result in relevant citations on the researched topic[2].

It is important to highlight that the effectiveness of evidence synthesis is intrinsically linked to the literature search process, and the excellence of the search strategy has a significant influence on the quality of the final result. The purpose of the literature search is to encompass as many as possible, or ideally all, published studies related to the topic in question while maintaining precision in the retrieved records.

When assessing the current literature, discrepancies in the search strategies used in nursing studies can be identified. Therefore, it is worth noting that developing search strategies for evidence syntheses can be a challenging task for authors, fraught with various difficulties that directly impact the quality and comprehensiveness of the review. Often, authors struggle

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with precisely delineating the research problem.

The lack of a clear and specific research question can result in a generic and less effective search strategy. Properly identifying terms and keywords that comprehensively represent the research problem is crucial. Failures in this process can lead to underrepresentation, an excessive retrieval of out-of-scope studies, or even the exclusion of relevant studies.

The inappropriate use of Boolean operators (AND, OR, NOT) can result in imprecise search strategies. Standardization is essential to ensure that terms are logically and comprehensively combined. Additionally, many authors may not fully explore the advanced features available in databases.

Furthermore, the efficient management of search results and detailed documentation of the strategies employed are often neglected. This can hinder transparency, replicability, and critical evaluation of the review by other researchers. The constant dynamics of scientific production require continuous updating of search strategies over time. Failure to make periodic adjustments can result in outdated reviews.

Furthermore, it is important to develop this search strategy with the assistance of a librarian, not only during formulation but throughout the entire search process. The expertise of this professional contributes not only to the precise and comprehensive formulation of the strategy but also to the proper selection of sources, optimized use of boolean operators, and the implementation of specific filters, thus enhancing the quality and effectiveness of the literature review. Interdisciplinary collaborations like this strengthen the methodological robustness of the research, ensuring that the search strategy is optimized to comprehensively identify the relevant evidence for the synthesis at hand.

It is believed that the significant difficulty in formulating a potentially effective search strategy is associated with the absence, up to the present moment, of specific guidelines for researchers in the health field. The lack of clear and targeted guidance makes it challenging for healthcare professionals to develop search strategies that are robust, comprehensive, and aligned with best methodological practices.

In this context, it is emphasized the pressing need for initiatives that aim to fill this gap by providing practical and up-to-date guidelines for developing search strategies in healthcare research. The creation of specific standards or recommendations, taking into account the particularities of literature searching in this field, would be instrumental in guiding researchers and librarians in conducting systematic reviews and other evidence syntheses.

However, it is essential to highlight initiatives that promote excellence in the development of search strategies, such as the Peer Review of Electronic Search Strategies (PRESS) Guideline and Checklist. Additionally, researchers are encouraged to incorporate specific controlled vocabularies of Nursing, explore comprehensive databases, and use boolean operators rigorously to significantly contribute to the advancement of knowledge in the discipline.

In the face of the identified discrepancies and challenges, it is imperative for the Nursing community to commit to improving search strategies. Initiatives such as the development of standardized guidelines, ongoing training for researchers, and the promotion of the use of emerging technologies in literature searching are crucial steps for continuous improvement.

As technology advances, it is essential to harness the power of artificial intelligence, machine learning, and natural language processing tools to revolutionize the efficiency and effectiveness of search strategies, providing valuable insights and accelerating scientific progress.

In the final analysis, the commitment to high-quality search strategies is essential to establish Nursing as a solid and innovative scientific discipline. By addressing challenges and exploring new possibilities, we shape the future of nursing research. This commitment not only raises methodological standards but also contributes to the continuous development of clinical practice, promoting significant advancements in healthcare delivery. By investing in the excellence of search strategies, we invest in the enhancement of knowledge, the quality of patient care, and the consolidation of Nursing as a leading and innovative field in both scientific and practical contexts.

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