



Research Utilization of Evidence-Based Practice in Clinical Setting Among Nurses: A Review

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ABSTRACT

The application of findings from scientific research to clinical practice is referred to as research usage. Practitioners can enhance patient conditions and outcomes by using scientific information and findings to guide their actions. Excellent nursing care is a patient's right, a major responsibility of nurses, and a driving force behind nursing practice's rapid growth in science and medicine. Research is crucial in nursing because it can reveal vital details regarding illness trends and risk factors, treatment outcomes, public health interventions, functional skills, care patterns, and healthcare spending. Clinical practice and research must be carried out simultaneously to develop and execute quality initiatives that will improve local, national, and international practice. Research has revealed that there may be influences on how evidence-based approaches in healthcare are used. Factors from the studies included a lack of administrative assistance and a requirement for authority from nurses. This report gives a review of the published and available research information about factors affecting research utilization of evidence-based practices among nurses working in a clinical setting in selected countries globally.

KEYWORDS: Nursing Research, Research Utilization, Evidence-Based Practice

INTRODUCTION

One of the essential skills of nurses is the ability to evaluate research findings and apply them in practice [1]. Each year, numerous studies were conducted and published in the field of nursing through journals, conferences, and media. Even though these studies enhance nursing knowledge, most of them were not effectively used in clinical practice [2]. There is a gap between what people studied in theory and what they do in clinical practice. This gap is mostly due to identified barriers in research utilization findings in actual nursing practice [3].

When it comes to global health, Research Utilization is the process of transforming evidence into practice towards the health improvement of people and communities [4]. Nurses play a vital role in research utilization and implementation in clinical decision-making practice. Research utilization is crucial to the nursing profession, as it continues to develop, grow and integrate its practice with evidence-based practice to enhance its body of knowledge [5,6]. Evidence-Based Practice (EBP) encourages the provision of efficient, updated, and safe patient care. The techniques used to accomplish this include mentoring, EBP training, and scientific research conducted during workshops, seminars, and journal clubs [7]. This simply tells us that research is a good way in helping patients achieve their optimum level of functioning.

Nurses may have a positive attitude toward research-based practice, but applying the evidence of research into practice has remained slow [9]. These possible factors affecting nurses and other healthcare workers to implement research evidence in practice are such: a.) lack of support for research utilization, b.) level of confidence of nurses, c.) fear of accountability for client harm, and d.) lack of training and access to research [2, 10, 11].

The study review was designed to identify the factors affecting Research Utilization of Evidence-Based practice among nurses. Research utilization in clinical practice is one of the challenges nurse experiences, thus, it is important to study the gap between research and implementation. This study would also be helpful to nurses to develop strategies in facilitating research and incorporating findings in their practices to meet the healthcare challenges and improve the health status of patients.

METHODS

Journal databases including Google Scholar, PubMed, Biomed Central, Nurse Media, and Research Gate were used to conduct this review. Three selection criteria were applied including a search strategy, article selection from each database, and data extraction. The search started on December 17, 2022 till February 28, 2023. The review was based on the following index terms: nursing research, research utilization, and evidence-based practices.

RESULTS AND DISCUSSION

Factors Affecting Research Utilization

Even though Evidence-Based Practice (EBP) is a complex process, its implementation has been acknowledged globally as a lever for improving healthcare services according to Pitsillidou *et al* [12]. Patient safety research has typically focused on data analysis to identify patient safety problems and to show that a new practice will increase both patient safety and quality of care. Implementing evidence-based safety practices is challenging, necessitating strategies that address the complexity of systems of care, individual practitioners, senior leadership, and changing healthcare cultures to be evidence-based safety practice environments as stated by Titler M. [19] Recognition of, and a desire to narrow, the research-practice gap, has led to the accumulation of a considerable body of knowledge on research utilization and related terms, such as knowledge translation, knowledge utilization, innovation adoption, innovation diffusion, and research implementation mentioned by Squires *et al* [25]. According to the findings, nurses need more authority to apply research findings in practice and, as a result, in implementing EBP. The cause for nurses' lack of autonomy is unknown and needs further investigation. Identifying factors affecting the implementation of Evidence-Based Practice can serve as a basis for improving the quality of healthcare and developing strategies for resolving existing problems [12].

Lack of EBP, limited financial resources, and the need for clarification on whether practices are evidence-based were the three organizational-level challenges to EBP implementation. Most respondents indicated their agency culture supports EBP; however, local health departments were significantly more likely to report a lack of support from supervisors and leadership said by Kennedy *et al.*[13]. Despite expanded information on the benefits of adopting a research-based approach in providing nursing care and increased accessibility of research findings for nurses, the research utilization in nursing practice remains, at best, slow and haphazard. As a result, patients frequently do not receive the best (or even optimal) nursing care [25]. Nurses believed that behaviors anticipated of them were arbitrarily determined by doctors and managers. Consequently, they were hesitant to depart from customary and physician-ordered nursing care. This left little opportunity for research utilization stated by Scott and Pollock [28].

Healthcare professionals face the difficulty of providing care while also finding, evaluating, and implementing new evidence into their daily practice. Unfortunately, for many clinicians, the environments they work in are not always conducive to this as stated by Duff *et al* [20].

More specifically, research has revealed that issues limiting the extent of EBP include a lack of knowledge and skills, lack of resources (financial, material, and human resources), limited support, and inadequate training in research methodologies [12]. These professionals presented weaknesses in the implementation of the Evidence-Based Practice related to the lack of knowledge for evidence evaluation, work overload, and resistance to change of practice Camargo *et al.* [23]

The results show that there is a need for improvement in terms of communication efforts, dissemination strategies, and incentives to promote EBP implementation in public health emergency preparedness and response. Possible strategies include increasing staff capacity, knowledge, and skills to support the implementation of EBPs; increasing awareness and accessibility to EBPs through focused distribution activities, and providing funding and incentives to support EBP uptake and sustainability. [13].

Evidence-based Practice in the Nursing Profession

The application of the best scientific evidence for clinical decision-making in professional patient care is known as evidence-based practice (EBP). The bulk of nursing treatment in Ethiopia is based on experience, tradition, intuition, common sense, and unproven assumptions. Evidence-based clinical practice can improve healthcare quality while decreasing costs and improving clinical outcomes according to Degu *et al* [14]. Integrating evidence-based practice (EBP) into healthcare professionals' everyday practice can enhance the practice environment and patient outcomes. Nurses must expand their knowledge base, standardize practice, and enhance patient outcomes. The purpose of this study is to investigate nursing students' views and implementations of EBP, to investigate variations in students' beliefs and implementations due to past EBP training, and to investigate the link between the two as stated by Abu-Baker *et al.*[15].

Teaching nursing students how to access, evaluate, and appropriately use evidence-based knowledge is crucial if we are to advance nursing science, improve practice for future nurses, and improve patient outcomes [15]. Suggested changes should encourage the reading of research; discussion of research; risk-taking to implement new ideas; mentoring; and education of nursing staff, hospital administration, and physicians mentioned by Krakers and Peters [26].

Nurses Involved in Nursing Research

Nurses are anticipated to engage in research and scholarly investigation, but despite continued efforts, the practice-research gap continues to be rife with significant barriers. System strategies still need to address concerns at the individual nurse level. Given the implications on quality and safety, identifying individual nurse strategies should be an essential focus for nursing leaders and researchers stated by Mulkey M. A [16]. In order to fully deliver the essence of EBP, nurses have responded to launch initiatives that optimize the valuable contributions that nurses have made, can make, and will make. Such initiatives involve the adoption of practices; realignment of curriculum and education; development of models and theories; scientific engagement in the new fields of research; and creation of a national research network to study improvement stated by Stevens K. R. [21]. Evidence-based practice also provides opportunities for nursing care to be more individualized, more effective, streamlined, and dynamic, and to maximize the effects of clinical judgment. When evidence is utilized to determine best practices rather than to support current practices, nursing care stays up with the recent technological advancement and takes advantage of new knowledge developments as mentioned by Youngblut and Brooten [24].

Research capacity in nursing is the ability to conduct nursing research activities sustainably in a specific context, and it is usually used at a non-individual level. Research capacity in nursing is critical for developing the nursing discipline and positive nurse, patient, and healthcare system outcomes. More studies are needed to explore the allied concepts of research capacity in nursing and better understand relationships among these allied concepts according to Chen *et al.* [17].

In order to promote positive care outcomes and perceptions of care quality, it is essential to provide healthcare services that respect and meet the needs of patients and caregivers. This satisfies a crucial need for patient-centered care. Effective communication between patients and healthcare providers is crucial for patient care and recovery. Consequently, patient-centered communication is essential to ensuring optimal health outcomes, reflecting long-held nursing values that care must be patient-specific and responsive to patient health concerns, beliefs, and contextual factors explained by Kwame & Petrucka [18].

With the constant presence of institutional, communication, environmental, and personal/behavioral barriers, achieving patient-centered care and communication in nurse-patient clinical interactions is challenging. Healthcare professionals must identify these barriers and facilitators of patient-centered care and communication to promote patient-centered care, given their interconnections in clinical interactions [18].

Promotion of Evidence-based Research Utilization

The application of scientific research findings to clinical practice is referred to as research utilization. Scientific evidence and conclusions in this field are significant to practitioners to make optimal decisions and improve patient status and outcomes according to Da'seh and Rababa [2]. However, there needs to be more studies on the barriers to research utilization in nursing, including the organization and expansion of this field. Despite their limitations, the current findings give an up-to-date review of current research use studies in nursing. It is critical to identify the barriers to implementing study findings. The findings of this study demonstrate a link between research and evidence-based practice, which encourages filling gaps in existing nursing practice.

It is essential to determine the barriers to the utilization of research findings. The results of this study establish the connection between research and evidence-based practice which stimulates meeting the gap in the current nursing practice as mentioned by Jabonete & Roxas [3]. Nursing care needs to move towards quality improvement using EBP. It is necessary to equip nurses with the knowledge and skills required for EBP. Managers should develop an appropriate strategic plan by considering supporting factors and hindrances in implementing EBP in clinical explained by Farokhzadian *et al.* [22]. Greatest facilitators to research utilization reported included the availability of more time to review and implement research findings, availability of more relevant research and colleague support mentioned by Hutchinson and Johnson [27].

Table 1 : Summary of Related Literatures about Research and EBP Utilization

AUTHOR AND YEAR	IMPORTANT INSIGHTS ABOUT EBP AND RESEARCH UTILIZATION
Pitsillidou <i>et al.</i> (2021)	EBP is a lever in improving healthcare services, identifying factors that affect its utilization such as lack of autonomy from nurses will help in addressing the existing problem, lacking of knowledge and skills, lacking of resources either manpower, material or financial and limited training to staff.
Titler M. G. (2008)	Implementing EBP is challenging and needs strategies to develop a culture which promotes an EBP safety environment.
Squires <i>et al.</i> (2011)	Recognition to research - practice gap will lead a person to acquire knowledge and use it to practice but still, the use of research is still in slow process and as a result, patients frequently do not receive the best of care.
Kennedy <i>et al.</i> (2002)	Lack of resources, lack of culture support and leadership were some of the factors affecting EBP implementation. Strategies that may help in promoting EBP are increasing staff capacity, adding knowledge and skills to staff, providing funding to activities, and incentives to staff as well.
Scott and Pollock (2008)	Difficulty separating from physician - ordered care or traditional practices is also one of the factors affecting usage of research.
Duff <i>et al.</i> (2020)	Environment may also affect healthcare professionals when implementing new practices.

Camargo <i>et al.</i> (2018)	Work overload and resistance to change also causes refraining from implementation of research.
Degu <i>et al.</i> (2020)	EBP can improve healthcare and decrease hospital costs.
Abu Baker <i>et al.</i> (2021)	Nurses must enhance their knowledge to enhance patients' outcomes. Nursing students must also be equipped with knowledge to utilize EBP and to further advance the nursing practice.
Mulkey M. A. (2021)	Nursing strategies must be addressed individually by nursing leaders.
Stevens K.R. (2013)	To fully deliver the essence of EBP, nurses are the ones that should initiate adoption of new practices, realignment of education, developing new models and theories, engagement to research activities and broadening of research network within the institution.
Youngblut and Brooten (2001)	Nurses must stay up to date with the recent technology advancements and trends.
Chen <i>et al.</i> (2019)	Research capacity in nursing is critical for developing the nursing discipline and positive nurse, patient, and healthcare system outcomes.
Kwame & Petrucka (2021)	Communication is crucial between nurses and patients to meet the optimum needs of the patient. Barriers that hinder communication must be addressed to promote patient-centered care interactions.
Da'seh and Rababa (2021)	Scientific evidence helps practitioners to improve patients' outcomes. The research and EBP utilization gap must be filled by doing further studies.
Jabonete and Roxas (2022)	It is essential to determine the barriers to the utilization of research findings.
Farokhzadian <i>et al.</i> (2015)	Managers should develop an appropriate strategic plan by considering supporting factors and hindrances in implementing EBP in clinical practice.
Hutchinson and Johnson (2004)	Allotting time to review and implement research findings, availability of more relevant research and colleague support will help in aiding research utilization

CONCLUSION

This review reinforced conclusions from the published articles with respect to positive relationships between nurses and the factors affecting their utilization of evidence-based practice. Nurses required more power or confidence to apply study findings in practice and, as a result, implement EBP due to a lack of support from the administration. Research usage issues were also linked to insufficient financing and inadequate manpower labor patterns. The improvement of knowledge and accessibility to EBPs through targeted dissemination initiatives, such as constructing organizational capacity to support EBP implementation, particularly staff capacity, knowledge, and skills; and identifying funding and incentives to promote EBP uptake and sustainability that may promote research utilization in the workplace more frequently, are potential strategies that have been mentioned.

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CONFLICT OF INTEREST

The authors whose names were mentioned above certify that they have no affiliations with or involvement in any organization with any financial or non-financial interest in the subject matter or materials discussed in this article.

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