

# KNOWLEDGE, ATTITUDE, AND PRACTICES REGARDING EVIDENCE BASE PRACTICES OF NURSES AT TERTIARY CARE HOSPITAL

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## Abstract

Background: Integrating evidence-based practice (EBP) into healthcare delivery is pivotal for ensuring optimal patient outcomes and enhancing the quality of care. As frontline healthcare providers, nurses play a central role in this process, bridging the gap between research findings and clinical application. Objective: To assess knowledge, attitude, and practices regarding evidence-based practices of nurses at tertiary care hospitals. Methodology: This quantitative cross-sectional study was conducted in a tertiary care hospital in Khyber Pakhtunkhwa. The study employed a convenient sampling technique to select participants among 61 nurses. Result: In this study examining nurses' engagement with evidence-based practice (EBP), it was found that most nurses recognized EBP's fundamental importance and demonstrated a proactive approach toward integrating research into their practice. Notably, 74% converted information into research questions, indicating a keen interest in research integration. However, challenges persisted, including workload concerns and limited access to resources. While 65.57% acknowledged the importance of sharing information, areas needing improvement included understanding EBP improvement (37.7%) and critical analysis against standards (56%). Conclusion: The study results show that nurses strongly understand the value of evidence-based practice (EBP), with 74% incorporating research questions. Workload and resource constraints are issues that affect critical analysis and the comprehension of EBP improvement. To close these gaps and ensure that EBP is implemented in nursing practice effectively, better organizational support and resource accessibility are needed.

**Keywords:** Knowledge, Attitude, Practices Evidence Base Practices, Nurses.

## INTRODUCTION

The "cardinal objective in healthcare," evidence-based practice (EBP), is a systematic approach to tackling healthcare challenges that raise the standard of care and improve population health outcomes while cutting costs and enabling clinicians to take an active role in their profession., assisting organizations in achieving high reliability is

based on evidence (1). EBP has drawn the attention of researchers, administrators, and healthcare professionals worldwide (2). The significance of EBP in nursing has increased due to nurses' increased knowledge and expertise (3). Furthermore, evidence-based medicine is the application of the most up-to-date research to inform clinical decision-making. Because it provides so many advantages, this practice is critical to the nursing profession and nurses themselves. It helps nurses develop their knowledge, close the knowledge gap between nursing education, research, and practice, standardize nursing procedures, enhance clinical patient outcomes, raise the standard of care, and lower healthcare costs. Consequently, nurses should base their clinical decisions on the most significant and most current research information that is currently accessible (4).

Moreover, to address new clinical questions, it provides a framework for decision-making and an approach to problem-solving, taking into account the opinions of the patients as well as their values. As a result, EBP is regarded as a crucial component for raising the standard of healthcare and attaining excellence in care. Moreover, EBP is considered a cornerstone of high-quality healthcare (5). It is well recognized that Evidence-Based Clinical Practice (EBCP) enhances the standard of medical care and fosters favorable patient and clinical outcomes. Nevertheless, it hasn't proven easy to apply EBP. Current legislation supports that incorporating EBP into routine medical procedures is essential for optimal patient care (6).

Research repeatedly demonstrates that although nurses have positive opinions about EBP and its importance for patient care, they also identify numerous difficulties with its actual use in clinical settings. For example, according to a mixed-methods study, 118 American undergraduate nursing students found it challenging to discern between EBP and research. While they could locate evidence, students struggled to plan changes to EBP or spread best practices based on the information they found (7). Furthermore, a correlation study was conducted in Jordan with 612 senior nursing students. According to the survey, 75% of students believed that nursing research should be used in clinical practice and had positive attitudes toward research. Pupils have a strong belief in the value of research. But they had little faith in their abilities to carry out study (8). Another survey with a cross-sectional design was carried out with 188 Saudi nursing undergraduate students. Though they reported a low mean score in EBP implementation (22.57 out of 72), students expressed good beliefs regarding EBP. It has been noted that several important characteristics, including age, gender, awareness of EBP, and EBP training, influence its adoption (9).

The research was carried out in Pakistan using a cross-sectional survey design. According to the survey, just one respondent knew all three of the components of EBD, even though nearly half of the respondents claimed to practice it. Care professionals should regularly attend EBD conferences and seminars, and principles related to EBD should be included in undergraduate dental curricula (10). Another study from Pakistan reveals that Of the 84 participants in total, 71 (84.5%) had a positive attitude towards EBP, compared to 13 (15.5%) who had a negative attitude. 69 (82.1%) of participants had good knowledge of EBP, whereas 15 (17.9) had poor knowledge. 49 (58.3%) of participants were classified as engaging in bad practice, and 35 (41.7%) as engaging in good clinical practice (11). In this regard, numerous earlier research demonstrated that holding an EBM session raises awareness and knowledge of the subject (12). The cornerstones of EBP are skills, knowledge, and attitude. Previous

research findings suggested that nurses' beliefs, knowledge, and ability to apply EBP can be fundamental in determining how much of it is used (6).

Therefore, the present study aims to assess nurses' knowledge, attitudes, and practices regarding evidence-based practices at tertiary care hospitals.

## METHODOLOGY

This quantitative cross-sectional study was conducted in a tertiary care hospital in Khyber Pakhtunkhwa; the researchers aimed to evaluate nurses' knowledge, attitude, and practice regarding evidence-based practice. The study employed a convenient sampling technique to select participants, focusing on registered nurses with more than one year of experience at the clinical site who were present during the data collection period and directly involved in patient care at selected hospital.

The data collection instrument was divided into two parts. The first section gathered demographic information, gender, age, marital status and qualification. The second section comprised 27 items related to nurses' knowledge, attitude, and practice toward evidence-based practice. Specifically, the knowledge section included ten items, while the attitude and practice sections consisted of 8 items each. A pilot study was done on the 10% of total sample size and the Cronbach alpha value is 0.74.

Exclusion criteria were applied to individuals unwilling to share their experiences, nurses who were interns, and those with mental disabilities. The study involved 61 participants, determined through sample size calculation using ROASOFT. Data collection permission was obtained from the selected hospital. Written consent was acquired from all participants, ensuring that they fully understood the informed consent and that there were no risks or harms associated with their participation. Additionally, participants were assured that all data would be securely stored. Data analysis was performed using SPSS software (version 22). Descriptive statistics were used to summarize demographic variables; for other variables such as knowledge, attitude, and practice, frequency and percentage were employed to present the data. The study findings were derived from the analyzed data, providing valuable insights into the nurses' perspectives on evidence-based practice.

## RESULT

**Table 1: Result of Demographic Data n=61**

Demographic Variables	Frequency	Percentage
<b>Gender</b>		
- Male	37	60.7%
- Female	24	39.3%
<b>Age Group</b>		
- 25 to 30 years	45	73.7%
- 31 to 45 years	17	27.3%
<b>Marital Status</b>		
- Married	33	54.1%
- Unmarried	28	45.9%
<b>Qualification</b>		
- BScN degree	35	57.4%
- Msn degree	3	4.9%
- Diploma of Nursing	23	37.7%

The study's demographic analysis revealed 61 participants, comprising 37 males (60.7%) and 24 females (39.3%). Regarding age distribution, the majority fell within the range of 25 to 30 years, accounting for 73.7% of the participants, while 27.3% were aged between 31 to 45 years. Regarding marital status, 54.1% of the participants were married, whereas 45.9% were unmarried. With qualifications, 57.4% held a BScN degree, 4.9% had an MSN degree, and 37.7% possessed a Diploma in Nursing.

**Table 2: Knowledge about EBP**

S no	Statements	Yes	No
1	Do you know the importance of assessing patients as per evidence-based protocol?	62.3%	37.7%
2	Do you have converted your information into research questions?	74%	26%
3	Do you have to share information and new ideas with colleagues?	65.57%	34.42%
4	Do you believe that evidence-based practice is a favorable outcome for patients?	57.3%	42.7%
5	Do you know about the improvement of evidence-based practice?	37.7%	62.3%
6	Do you think it is essential that the nurses update their knowledge regarding evidence-based practice?	61%	39%
7	Did you determine the material's validity (close to the truth)?	81.96%	18.03%
8	Did you identify gaps in nursing practice?	63.9%	36.7%
9	Did you critically analyze evidence-based practice against set standards?	56%	44%
10	Do you know how to retrieve information and evidence?	63.9%	36.6%

According to the findings, most nurses, ranging from 56% to 81.96%, demonstrated a strong understanding of various aspects of evidence-based practice. Most notably, over three-quarters of the participants (74%) converted their information into research questions, indicating a proactive approach toward integrating research into their practice. Additionally, a substantial portion of nurses acknowledged the importance of sharing information with colleagues (65.57%) and believed in the favorable outcomes of evidence-based practice for patients (57.3%). However, there were areas where improvement was needed, such as understanding the advancement of evidence-based practice (37.7%) and critically analyzing evidence-based practice against established standards (56%).

**Table 3: Questioner about Attitude**

1.	Statements	Yes	No
2.	Do you change practice while finding evidence?	78.68	21.31%
3.	Do you believe workload is the main barrier to evidence-based practice?	49.12%	50.81%
4.	Do you need support from a higher authority to remove these barriers?	67.21%	32.78
5.	Do you have sufficient time to read relevant literature?	45.90%	54.09%
6.	Do you feel the nurse has enough authority to change patient care procedures based on evidence?	34.42%	65.57%
7.	Did you mark questions from your practice?	57.37%	42.62%
8.	Did you research the report/article reading available to you?	32.78%	67.21%

Table 2 shows nurses' attitudes towards evidence-based practice (EBP). The data reveals that most nurses (91.80%) recognize EBP as fundamental to their professional training, and 78.68% are open to changing their practices based on evidence. However, significant challenges exist, including workload concerns (49.12%) and limited time for reading relevant literature (45.90%). A noteworthy finding is that 67.21% of nurses feel they need support from higher authorities to overcome these obstacles. Additionally, only 32.78% have easy access to research reports or articles.

**Table 4: Questioner about Practice**

S no	Statements	Yes	No
1	Did you integrate evidence with expertise?	32.78%	67.21%
2	Have you formulated an answerable question to fill the gap?	40.98%	59.20%
3	Did you feel difficulty in providing nursing care on EBP?	67.21%	32.78%
4	Do you read nursing literature on EBP?	59.98%	40.98%
5	Do you assess patients on evidence-based practice guideline protocol?	54.09%	45.90%
6	Did you apply an intervention based on the most applicable evidence?	63.39%	36.70%
7	Did you evaluate your intervention and identify the area of improvement?	85.2%	14.8%
8	Do you share your information with colleagues?	49.1%	50.9%

Table 4 outlines nurses' practices related to evidence-based care. The findings show that 57.37% of nurses evaluate their practice outcomes, indicating a self-reflective approach. However, integrating evidence with expertise is challenging, with only 32.78% achieving this balance. While 40.98% formulated answerable questions, 67.21% faced difficulties providing nursing care based on EBP. Most (59.98%) read nursing literature on EBP, yet 54.09% assessed patients following evidence-based guidelines. Notably, 63.39% applied interventions based on applicable evidence, and 85.2% evaluated interventions for areas of improvement. Sharing information with colleagues was evenly split, with 49.1% doing so.

## DISCUSSION

EBP is fundamental to ensuring high-quality patient care (13). As frontline healthcare providers, nurses are pivotal in translating research findings into practical clinical interventions (14). Understanding their knowledge, attitudes, and practices regarding EBP is essential to bridge the gap between research and patient care, thereby enhancing the quality and safety of healthcare services.

The current findings show that over three-quarters of the participants (74%) converted their information into research questions. In this regard, another study found that only 33.6% converted their information into research questions (5). This propensity to translate data into research questions indicates a desire to investigate and resolve clinical ambiguities. It might show an encouraging culture inside the company that values inquiry and curiosity, potentially creating a setting where nurses feel empowered to participate in research-related activities.

Current findings show that 56% critically analyze evidence-based practice against set standards. Another study found that 40.8% critically analyze evidence-based practice against set standards (5). This tendency towards critical analysis denotes a dedication to maintaining the best standards of care and coordinating their actions with recommendations based on empirical data. It indicates that these nurses are deeply committed to evidence-based nursing and diligently try to ensure their clinical judgments are based on the best available evidence (15).

Additionally, a substantial portion of nurses acknowledged the importance of sharing information with colleagues (65.57%). Another study found that 41.8% recognized the importance of sharing information with colleagues (5). It shows attitudes toward information sharing and collaboration among nurses in different contexts. It emphasizes the importance of fostering a culture of teamwork and encouraging the exchange of information and knowledge among colleagues (16). By nurturing a

collaborative environment, healthcare institutions can enhance the collective expertise of their staff, ultimately leading to improved patient outcomes and a more cohesive and effective healthcare team (17).

In the current study, the majority (59.98%) read nursing literature on EBP. At the same time, another study found that the majority, 65%, don't have time to read the nursing literature on EBP (1). In addition to being a barrier, a lack of time can signify ignorance, disinterest, or the need for fresh knowledge. One or more responsibilities that nurses could want to avoid is applying study results for one's benefit. According to a study, research is the foundation for evidence-based nursing practice. Nursing practitioners are expected to comprehend how evidence is created and evaluated (18, 19).

In the present study, 63.9% can identify gaps in nursing practice. At the same time, another study found that 40% can identify gaps in nursing practice (5). The capacity to recognize deficiencies in one's methodology implies a proactive approach to ongoing enhancement. When nurses are aware of these gaps, they can actively look for solutions, which could foster a culture of continuous professional development in the hospital environment. This self-awareness is essential for improving knowledge, honing abilities, and improving patient care (20).

## CONCLUSION

The study's conclusion emphasizes that nurses use evidence-based practice (EBP) presents various opportunities and difficulties. Even though the value of EBP is widely acknowledged, and there is a proactive approach to incorporating research, issues, including workload worries and resource scarcity, still exist. The results highlight the necessity of focused interventions to improve nurses' EBP implementation, such as expanding access to research resources and offering organizational support. By addressing these issues, nurses will be better equipped to apply evidence-based practices with more consistency and efficacy in their daily work.

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