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RESEARCH ARTICLE

FACILITATORS AND BARRIERS TO EVIDENCE-BASED PRACTICE AMONG NURSES WORKING IN SHEIKH ZAYED HOSPITAL, RAHIM YAR KHAN

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ABSTRACT

Objective: *The objective of this study was to identify and explore the facilitators and barriers influencing the adoption and implementation of Evidence-Based Practice among nurses working at Sheikh Zayed Hospital in Rahim Yar Khan.*

Study Design: *Observational cross-sectional study*

Place and duration of study: *This study was conducted from 23 November 2024 to 30 May 2025 at Sheikh Zayed Hospital, Rahim Yar Khan.*

Patients and Methods: *This study included non-probability convenient sampling technique to recruit 300 registered nurses with over one year of experience. Data were collected via a structured questionnaire adapted from an Evidence-Based Practice competency tool, approved by the Institutional Review Board. Quantitative data were analyzed using mean and standard deviation, while qualitative variables were analyzed using frequency and percentage in SPSS-27, ensuring informed consent and participant confidentiality.*

Results: *This study primarily surveyed female (94.7%) and married (68.7%) Registered Nurses (85%) with diverse educational backgrounds. A large proportion of nurses valued Evidence-Based Practice, with 73.7% believing it improves patient care decisions, 65.7% that it leads to better outcomes, and 68% willing to implement it. While nurses perceived strong organizational support (86.7%), significant barriers to implementation were identified, including a lack of confidence in research evaluation (44%), limited time (66.7%), inadequate access to published research (77%), and concerns about research reliability (95.7%).*

Conclusion: *Nurses perceive organizational support and have a good appreciation for Evidence-Based Practice, yet there are still many practical obstacles to overcome.*

Addressing the lack of confidence in research evaluation, time constraints, and limited access to reliable research is crucial to fully integrate EBP into nursing practice and improve patient outcomes.

Keywords: *Evidence based practice, Knowledge, Nurses, Organizational support, Pakistan*

INTRODUCTION

Nurses are an important part of healthcare structure, playing key role to improve quality of patient care.[1] Nursing serves as foundation of global healthcare framework, In Nursing Evidence based practice (EBP) is essential part in providing high quality patient care.[2] Traditionally, the focus of nurses is health promotion, disease prevention and changing the behavior of individual with respect to their health. Nurses have multidisciplinary knowledge and experience of health promotion in their nursing practice.[3]

The presence of nurses is essential in clinical trial team as they can support clinical activities and also responsible for coordination and management of research activities.[4] The involvement of clinical research Nurses (CRNs) is considered to improve quality of clinical practice and patient centered care in clinical trial. Nursing research is crucial part to nursing profession and essential for continuing advancement to

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promote optimal nursing care.[5] Evidence based practice is defined as union of best available resources with clinical expertise and patient values to inform decision making in healthcare.[6]

High quality nursing care is emerging need in current health care structure and this demand is spreading globally. Evidence based practice in nursing involve providing holistic quality care based on the current research and knowledge rather than following traditional methods and seniors, personal beliefs and advice from college. EBP has multiple advantages. Enhancing the nurses' ability to make decisions, think critically, and serve patients with clinical experience is one way to advance their intellectual capability.[7]

Various researches show that nurses don't have complete knowledge about EBP. Nurses don't have broad range of abilities to formulate a question at work, analyze, critically evaluate and intervene to improve patient care. There is shortage of nurses in hospitals.[7] Due to shortage of staff and high patient ratio patient quality of care is compromised. For knowledge development, evidence synthesis is important but this is top down process. Knowledge is generated by few, synthesized by small group and disseminated to the large number of staff providing direct care. Those who are the recipient of knowledge may not be the same individuals who posed the original question.[8,9]

The objective of this study was to identify and explore the facilitators and barriers influencing the adoption and implementation of Evidence-Based Practice among nurses working at Sheikh Zayed Hospital in Rahim Yar Khan.

PATIENTS AND METHODS

This observational cross-sectional study took place at Sheikh Zayed Hospital, a 1000-bed tertiary care facility in Rahim Yar Khan, Pakistan, which also serves patients from nearby areas like Rajanpur and Sadiqabad from 23 Nov 2024 to 30 May 2025. Ethical approval for the study was granted by the Institutional Review Board of Sheikh Zayed Medical College on November 22, 2024, under reference number 156/IRB/SZMC/SZ.

Using the formula for a cross-sectional study, the sample size was determined. The recommended sample size was determined to be 300 based on a 95% confidence level, a 5% margin of error, and a prior prevalence of 73.4% reported by Abu-Baker, et al. in a study on evidence-based practice among nurses in Jordan.[10,11]

Using a non probability convenient sampling technique, data were collected by the researchers themselves through a structured questionnaire, adapted from an 83-variable EBP competency questionnaire with domains covering working times, facilitators, and barriers to EBP. Inclusion criteria comprised registered nurses and head nurses with over one year of ward experience who provided informed consent, while student nurses, doctors, paramedics, and those on leave were excluded. Participants were briefed on research objectives and assured of voluntary participation and data confidentiality.

Data were organized and analysed using SPSS-27, with mean and standard deviation for quantitative variables (age, years of experience) and frequency and percentage for qualitative variables (demographics, research details, EBP barriers and facilitators).

RESULTS

The results showed that the majority of respondents were female (94.7%) and married (68.7%). Most participants were Registered Nurses (85%), while 15% were Head Nurses. Regarding education, 52% held General Nursing qualifications, 45.3% had a BSN, and 2% MSN (Table I). A large proportion of nurses valued EBP, with 73.7% indicating it improves patient care decisions, 65.7% believing it leads to better outcomes, and 68% expressing willingness to implement it in their practice (Table II). Furthermore, 77% perceived EBP as enhancing professional autonomy. Organizational support was reported by 86.7% of participants, and 91.7% confirmed the existence of an EBP committee, while 90.7% stated that research findings were easily accessible (Figure-1). Despite this support, 44% lacked confidence in evaluating research articles, and 66.3% felt uncomfortable searching databases. Time constraints were commonly cited, with 66.7% reporting insufficient time to review and apply evidence, and 91.7% indicating difficulty in testing new ideas. Additionally, 77% noted inadequate access to published nursing research, 88.3% observed limited communication with researchers, and 95.7% questioned the reliability of research findings (Figure 2).

Research Engagement:

Only 32% of the participants reported taking a formal research course. Engagement with research activities was moderate, with 35% of participants never publishing in academic journals and 30% publishing only occasionally. Regarding evidence-based

Table I: Demographic profile of the participants.

CATEGORY	Frequency (No.)	Percentage (%)
Gender		
Female	284	94.70
Male	16	5.30
Marital Status		
Married	206	68.70
Single	92	30.70
Current Position		
Registered Nurse	255	85.00
Head Nurse	45	15.00
Highest Level of Education		
BSN (Bachelor of Science in Nursing)	136	45.30
General Nursing	156	52.00
MSN (Master of Science in Nursing)	6	2.00

information sources, 31% relied on online databases such as PubMed and Google Scholar, while 16.2% used institutional guidelines. Only a small proportion (4.9%) reported seeking guidance from colleagues or mentors. Regular engagement with research-related activities was limited. For instance, 35% of participants reported sometimes reading academic papers, while 28.3% sometimes accessed websites for research. Notably, 22% never accessed research websites, and 18.3% never read academic papers.

Table II- Research engagement among nurses

RESEARCH ENGAGEMENT	Frequency (n)	Percentage (%)
Taken a Research Course		
Yes	96	32.00
No	204	68.00
Primary Resources for Evidence-Based Information		
Online Databases	88	31.00
Institutional Guidelines	46	16.20
Colleagues/Mentors	14	4.90
Publish in Journal		
Never	105	35.00
Rarely	91	30.30
Sometimes	90	30.00
Regularly Read Papers Published in Academic Journals		
Never	55	18.30
Rarely	97	32.30
Sometimes	105	35.00
Present/Attend Academic Conferences		
Never	47	15.70
Rarely	81	27.00
Sometimes	118	39.30
Regularly Access Websites to Read Research Papers		
Never	66	22.00
Rarely	81	27.00
Sometimes	85	28.30

Perceptions of organizational support for EBP were mixed. Only 8% of participants noted the presence of an EBP committee within their organization, and collaboration with universities on research projects was

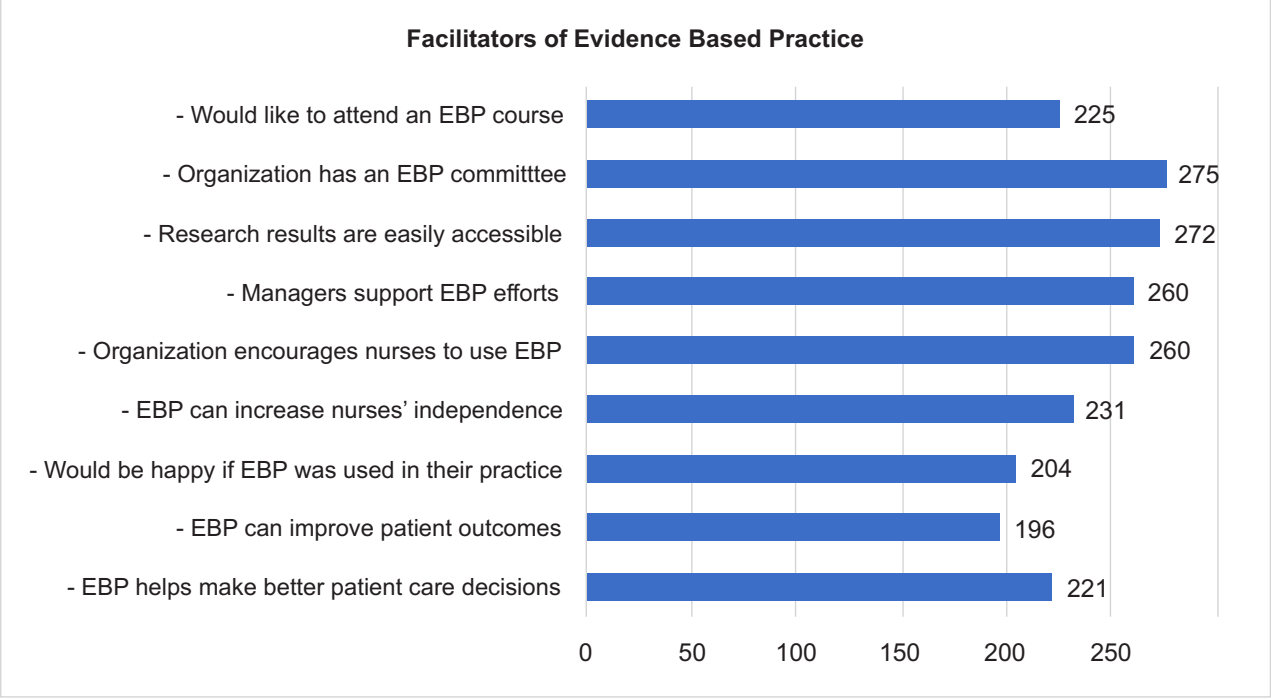

Figure 1: Facilitators of Evidence Based Practice among nurses

limited. Furthermore, access to institutional resources was inadequate, with participants reporting limited library access to relevant journals. Reward systems for using research findings were minimal, and structural support for integrating EBP into routine practice appeared insufficient.

DISCUSSION:

This study, which included 300 nurses from Sheikh Zayed Hospital, provides a comprehensive demographic profile and insights into their use of evidence-based practice (EBP). Table 1 indicates that the majority of our participants were married (68.7%), female (94.7%), and registered nurses (85%). General nursing qualifications accounted for the largest educational group (52%), followed by BSN (45.3%), and MSN degrees (2%) were the least common. In contrast to studies on Spanish nurses, where males were marginally more prevalent (57.1%) in EBP studies[12, 13], this demographic mix, especially the large percentage of female nurses, is noteworthy.

One important area for improvement is highlighted by our findings on prior EBP knowledge. Only 32% of our nurses had completed a formal research course, highlighting a significant deficiency in basic EBP training. Approximately two-thirds (65.3%) of nurses were confirmed to have prior EBP information and instructions on how to use electronic resources in an earlier survey, which stands in stark contrast to this.[14, 15]

Just 4.9% of nurses in our survey sought advice from mentors or colleagues, whereas 31% of nurses mainly relied on internet databases for evidence-based information. Additionally, 35% of participants never published in scholarly publications, and 30% only infrequently did so, indicating a lack of engagement with research dissemination. Likewise, 22% of our participants had never visited a research website, and 18.3% had never regularly read scholarly papers. This is consistent with a thorough survey of US registered nurses that found that 77% had never received instruction on how to use electronic health records, and 58% had never accessed research publications to support clinical practice.[16,17]

Important facilitators and barriers to the adoption of EBP were also discovered by our investigation. Our findings show substantial organizational support for the notion that EBP should be a core part of professional nursing training. Majority of nurses believed that management supported their EBP efforts and that their organization promoted the usage of EBP. Additionally, 91.7% of respondents stated that their company had an EBP committee, and 90.7% said that study findings were readily available. The vast majority of nurses also had

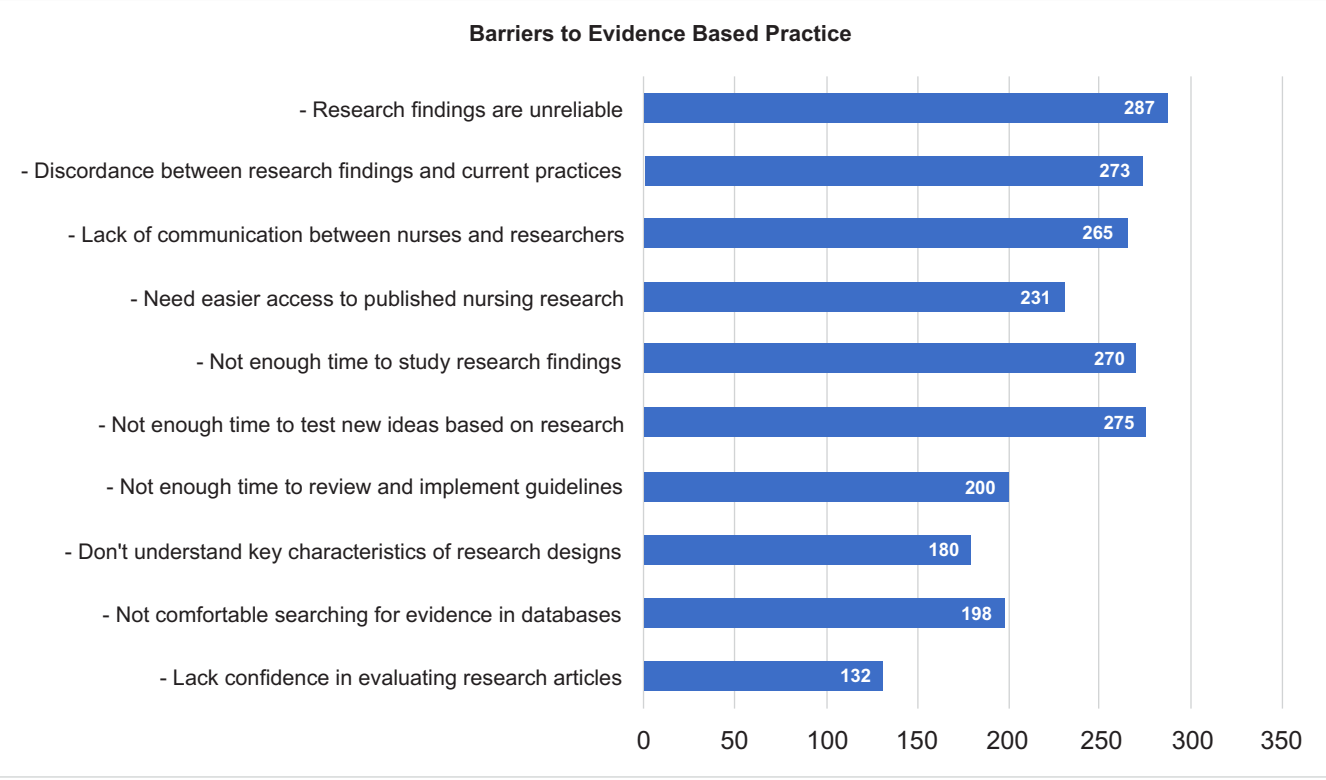

Figure 2: Barriers to Evidence Based Practice among nurses

favorable opinions about EBP, with 77% saying it boosts nurses' freedom and 73.7% saying it helps them make better decisions about patient care. A sizable portion (75%) also said that they wanted to learn more, saying they would like to take an EBP course. In contrast, a study carried out in the Amhara region revealed limited effectiveness of support for research provided.[18]

Time restrictions and certain knowledge/skills deficiencies are the main causes of the substantial hurdles that still exist in spite of these facilitators. Ninety percent of our participants claimed they lacked sufficient time to review research findings, and 91.7% claimed they lacked the time to test novel concepts derived from research. This is consistent with the Amhara study's findings, which showed that time constraints were cited by all participants as a hindrance to the adoption of EBP.[18] In a similar vein, 66.7% of respondents said they did not have enough time to review and apply the recommendations.

Important skills and knowledge gaps were also revealed by the fact that 60.3% of nurses in our study did not comprehend the essential features of research designs, and 66.3% of nurses were uncomfortable looking for evidence in databases. A lack of contact between nurses and researchers was mentioned by 88.3% of respondents, and 77.7% of respondents said they needed easier access to published nursing research. Remarkably, 95.7% of respondents thought research conclusions were untrustworthy, and 91% thought there was a discrepancy between them and existing behaviors. These numbers highlight a significant obstacle in putting research into practice. More than 54% of clinical nurses in the US who participated in a survey said they had never heard of "Evidence-Based Practice," which is consistent with the knowledge gaps on research topics that our study found.[19]

Our research revealed that online databases (31%) and institutional guidelines (16.2%) are the main sources of evidence-based knowledge when it comes to clinical practice decisions. The results also points out that nurses, mentors, and coworkers regularly attend conferences and visit websites to read research publications, even though only 4.9% of them asked for advice from their peers. This is consistent with results from other researches in which participants listed the internet, social media apps, head nurse and clinician peer experience, and educational seminars and conferences as their main sources of information.[20,21]

CONCLUSION

Nurses perceive organizational support and have a good appreciation for Evidence-Based Practice, yet there are still many practical obstacles to overcome.

Addressing the lack of confidence in research evaluation, time constraints, and limited access to reliable research is crucial to fully integrate EBP into nursing practice and improve patient outcomes. The primary barrier to evidence-based practice, according to nurses, is deficiencies in knowledge and skills as well as time and resource constraints.

LIMITATIONS

Cross sectional study design, convenient sampling and small sample size are the limitations of our study. Although we used a validated tool to assess Evidence Based Practice among nurses using self-reported questionnaires, might have introduced possibility of erroneous or socially acceptable answers. Furthermore, the data were collected only from the nurses of Sheikh Zayed Hospital Rahim Yar Khan and the nurses from the other regions were not included. As a result, the findings may not accurately reflect the opinions of staff nurses in other cities and their generalizability may be impacted.

RECOMMENDATIONS

To improve the generalizability of the results and investigate the factors impacting nurses' evidence-based practice efforts at several time points, future study with a more rigorous design—that is, longitudinal—is advised. It is advised to use the probability sampling technique with a larger sample size involving multi-centers to enhance generalizability.

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Authors' Contribution

Sana Shaukat Siddiqui: Conception of study / Designing / Planning, Experimentation / Study Conduction, Analysis / Interpretation / Discussion, Manuscript Writing, Critical Review

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Qurat ul Ain Mustafa: Manuscript Writing, Critical Review, Material Analysis
Nida Jameel: Manuscript Writing, Critical Review, Material Analysis

Rimsha Fatima: Manuscript Writing, Critical Review, Material Analysis

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