



Knowledge Regarding Evidence-Based Practice among Nurses Working in Healthcare Settings using a Pretest- Posttest Study Design

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ABSTRACT

Evidence-based practice is about making decision in the clinical by means of the finest existing evidence in the perspective of different patient preferences by knowledgeable skilled clinicians. As evidence-based practice (EBP) has been becoming increasingly popular through healthcare after publication of the Institute of Medicine's (2001) report "Crossing the Quality Chasm", the emphasis in the curriculum of nursing has moved from research including utilization of research to EBP. The present study aimed to determine the effectiveness of an education program (intervention) regarding evidence-based practice among nurses working in healthcare settings. A pretest-posttest study design was used to conduct this study in a tertiary care healthcare setting. A total of 36 nurses were assessed pre & post intervention and their knowledge was compared for any difference to determine the effectiveness of the intervention. More than half of the nurses did not have proper knowledge (poor knowledge) regarding EBP but after the intervention, their knowledge improved and around 90% of the nurses had average to good knowledge. Evidence-based practice (EBP) is very important concept and gaining more popularity as it helps achieving the goal of delivering quality care to the patients. Findings of pre assessment data shows that majority of nurses lack proper information regarding the EBP but after intervention their knowledge improved drastically indicating the need of education our nurses to keep them updated.

Keywords: Evidence-based practice, evidence, research, nursing curriculum

1. Introduction

Evidence-based practice is about making decision in the clinical by means of the finest existing evidence in the perspective of different patient preferences by knowledgeable skilled clinicians (Kim, Mallory & Valerio, 2020). As evidence-based practice (EBP) has been becoming increasingly popular through healthcare after publication of the [Institute of Medicine's \(2001\)](#) report "Crossing the Quality Chasm", the emphasis in the curriculum of nursing has moved from research including utilization of research to EBP (Yancy, 2019). It can also be termed as doing the right things in a factual way but not only doing competently and to the best possible standard, but also making sure that which is performed is being effective for the clinical situation, resulting in positive outcomes (Craig & Dowding, 2019). Excellence of nursing care is a main purpose of nursing personnel, the right of patients, and an important element in hastening theoretical and clinical development of nursing profession (Pitsillidou, 2021). EBP capabilities are vital for all healthcare professionals to deliver up to date quality care, and enhanced patient outcomes. The implementation of EBP is multiphase phenomenon that necessitates complex competencies to effectively incorporate the best available evidence into routine healthcare provision (Saunders et al., 2019). Although all nurses have an obligation to device EBP at an individual patient level, nurse practitioners (NPs) as clinical leaders have added errands in leading and facilitating team work with multidisciplinary teams to improvise EBP through transverse patient groups and drive in practice conversion into daily care (Clark, Lehane & Mulcahy, 2021). The growing differentiation and enablement of nurses augments the significance of incorporating nursing research into nursing practice and— it has documented gains for healthcare workers, patients and establishments as it updates protocols for nursing practice, it progresses the excellence of care and adds to decrease expenditures through new ground-breaking practices (Chien et al, 2019). The protuberant research questions for the application of evidence-based practice in nursing in the prospect requires crucial evidence, including how to reform nursing degree curriculum to meet EBP requirements (Antunes, 2022).

The present study aimed to determine the effectiveness of an education program (intervention) regarding evidence-based practice among nurses working in healthcare settings.

2. Methodology

Research Design: Present study was designed using a pretest-posttest study design.

Setting: The study was conducted in a tertiary care healthcare setting of Lahore city.

Population and sampling: The population of interest were nurse and a total of 36 nurses were included in the study sample using a convenience sampling technique.

Inclusion Criteria: Registered nurses between the age group of 21-35 years were considered for the study.

Exclusion Criteria: Nurses having any physical or mental disability were excluded from the study.

Sample Size: Sample size was determined using probability sampling method.

Research Tool: A self-administered questionnaire having close-ended questions was used to measure the participants' knowledge regarding evidence-based practice.

Data Collection and Analysis: The participating nurses were interviewed at two intervals; 1) pre assessment and 2) post assessment. An intervention (educational program) was performed in between the assessments and the pre & post knowledge of nurses was compared to find out the effectiveness of the intervention. Statistical Package for Social Sciences (SPSS) Version 20 was used to analyse the collected data.

3. Results

First part of the research tool enquired about demographic variables (age, gender and qualification). It was observed that 50% of the participants were between the ages of 26-30 years, majority of them i.e. 78% were females and 42% of the participating nurses graduated in post RN BSN, 33% studied BSN and 25% had a qualification of diploma in general nursing. Table 1 below shows the demographic characteristics of the participants.

Table 1. Demographic characteristics of participants

	Demographic variables	Frequency	Percentage	Cumulative percentage
Age	21-25yrs	5	14	14
	26-30yrs	18	50	64
	31-35yrs	13	36	100
Gender	Male	8	22	22
	Female	28	78	100
Qualification	Diploma in General Nursing (DGN/RN)	9	25	25
	Bachelor in Science of Nursing (BSN)	12	33	58
	Post RN BSN	15	42	100

Total 36 nurses were interviewed and educational session was conducted as part of intervention and their preintervention and post intervention scores were compared. Results of the comparison are displayed in table 2 and figure 1 below.

Table 2. Nurses' knowledge regarding EBP pre and post intervention

Knowledge Categories	Pre intervention	Post intervention
	f (%)	f (%)
Poor	21(58.3)	4 (11.1)
Average	11 (30.5)	15 (41.6)
Good	4(11.1)	17 (47.2)

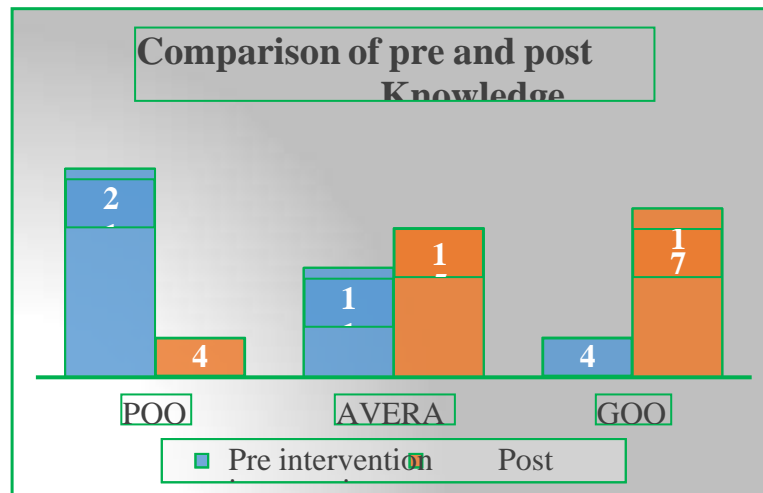


Fig.1 Nurses' knowledge regarding EBP pre and post intervention

4. Conclusion

Evidence-based practice (EBP) is very important concept and gaining more popularity as it helps achieving the goal of delivering quality care to the patients. Findings of pre assessment data shows that majority of nurses lack proper information regarding the EBP but after intervention their knowledge improved drastically indicating the need of education our nurses to keep them updated. Our nursing curriculums are improving and include EBP in their content which is a positive highlight for the healthcare. More prospective studies must be planned to assess the compliance of nurses to the guidelines of evidence-based practice (EBP).

5. Reference

- [1] Antunes, V. (2022). On Nursing Research And Evidence-Based Practice: Topics For Researchers And Practitioners. *International Healthcare Review (Online)*, 1(1).
- [2] Boswell, C., & Cannon, S. (2022). *Introduction To Nursing Research: Incorporating Evidence-Based Practice*. Jones & Bartlett Learning.
- [3] Chien, L. Y. (2019). Evidence-Based Practice And Nursing Research. *The Journal Of Nursing Research*, 27(4), E29. <https://doi.org/10.1097/Jnr.0000000000000346>
- [4] Clarke, V., Lehane, E., Mulcahy, H., & Cotter, P. (2021). Nurse Practitioners' Implementation Of Evidence-Based Practice Into Routine Care: A Scoping Review. *Worldviews On Evidence-Based Nursing*, 18(3), 180-189.
- [5] Craig, J. V., & Dowding, D. (Eds.). (2019). *Evidence-Based Practice In Nursing*. Elsevier Health Sciences.
- [6] Hosseinzadeh, T., Ghanbari, A., Paryad, E., Maghsoudi, S., & Alizadeh, M. P. (2019). Research Priorities In Evidence-Based Nursing Cares: A Delphi Survey. *Journal Of Health Sciences*, 9(1), 9-16.
- [7] Kim, M., Mallory, C., & Valerio, T. (2020). *Statistics For Evidence-Based Practice In Nursing*. Jones & Bartlett Publishers.
- [8] Melnyk, B. M., & Fineout-Overholt, E. (2022). *Evidence-Based Practice In Nursing & Healthcare: A Guide To Best Practice*. Lippincott Williams & Wilkins.
- [9] Pitsillidou, M., Roupa, Z., Farmakas, A., & Noula, M. (2021). Factors Affecting The Application And Implementation Of Evidence-Based Practice In Nursing. *Acta Informatica Medica*, 29(4), 281.
- [10] Saunders, H., Gallagher-Ford, L., Kvist, T., & Vehviläinen-Julkunen, K. (2019). Practicing Healthcare Professionals' Evidence-Based Practice Competencies: An Overview Of Systematic Reviews. *Worldviews On Evidence-Based Nursing*, 16(3), 176-185.
- [11] Stannard, D. (2019). A Practical Definition Of Evidence-Based Practice For Nursing. *Journal Of Perianesthesia Nursing*, 34(5), 1080-1084.
- [12] Yancey, N. R. (2019). Evidence-Based Practice In Nursing For Teaching-Learning: But Is It Really Nursing?. *Nursing Science Quarterly*, 32(1), 25-28.