Original Article

Barriers in Implementing Evidence-Based Practice among Nurses at Tertiary Care Hospitals of Lahore

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ABSTRACT

Evidence-based practice is a technique used in solving clinical issues regarding patient care by integrating well-designed evidence. It also takes into account patient preferences to promote quality of care and improve patient outcomes. **Objectives:** To identify the barriers in implementing evidence-based practice among nurses and to identify personal and organizational obstacles in implementing EBP. **Methods:** A descriptive cross sectional quantitative study design was used. Total sample size was 116 staff nurses of the tertiary care hospital with experience more than three years. The study was conducted at two tertiary care hospitals of Lahore; Jinnah hospital, Lahore, Fatima Memorial hospital, Lahore. **Results:** The findings showed that biggest barrier in implementing EBP are lack of health care facilities to empower nurses with EBP environment (72.4%). **Conclusions:** This study concluded that financial situation of country which leads to inadequate health care resources and equipment's for EBP implementation. Identifying the barriers that affect the implementation of EBP can become a stepping stone for the commencement of discussion concerning the elimination of these barriers from the healthcare sector and finding ways to resolve existing problems.

INTRODUCTION

Evidence–based practice is the use of best available research data from well-defined studies. It is coupled with nurses' clinical expertise and patient's preferences in clinical practice to support clinical decision-making [1]. EBP is a combination of three core components: recent best available evidence, expertise and analysis of the clinician, and values, preferences, views, and expectations of the patient [2]. Evidence-based practice is a technique used in solving clinical issues regarding patient care by integrating well-designed evidence. It also takes into account patient preferences to promote quality of care and improve patient outcomes [3]. Globally, the World Health Organization and the European Commission stress that health care must be grounded in the most up-to-date scientific findings. The nurses' ability to execute EBP had a significant impact on their capacity to conduct EBP. Before adopting EBP, it is critical to assess the preparedness of nurses, as this will demonstrate their effectiveness and knowledge [4]. There are still gaps, between clinical practice, study findings, and better patient results. These gaps arise from nurses' lack of commitment as a result of many obstacles to EBP implementation. These challenges include a lack of time, a staffing shortage, a demanding task, and obligations to one's family. Implementing EBP among nurses is hampered by a lack of academic preparation, unfavorable attitudes toward it, and a lack of awareness about it. Another obstacle to using the best available evidence in practice is a lack of enthusiasm for the process of change [5]. Lack of awareness, knowledge and skills, few options to use EBP

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tools (lack of resources), lack of professional self-determination, lack of assistance and administration and confined environment create hurdles in implementing evidence-based practice [6]. As these barriers affect patient's quality of care and outcomes, therefore, nurses need to be careful to change their knowledge and attitude regarding EBP. To maintain a long-term competitive advantage for patients, nurses should rapidly accommodate, adjust, assimilate to the defined policy and perceive knowledge of EBP [7]. Clinical practice must be based on Evidence. Inappropriate traditional –based practices should be discontinued [8].

METHODS

A descriptive cross-sectional study design was used. The study was conducted at the tertiary care hospitals, Lahore, Jinnah hospital, Lahore and Fatima Memorial hospital, Lahore from April to June 2023 after the approval from ERC of FMH nursing college (ERC-FMH/234). Total sample size was 116 staff nurses of the tertiary care hospital with experience more than three years were included in current research. All the nurses having specialization in EBP and not willing to participate were excluded from the study. The sample size was calculated by Solevin formula:

$$\text{Sample size} = N/1 + Ne^2$$

The study population was the staff Nurses of two tertiary care hospitals, Lahore. Data were collected by using a self-modified tool of BARRIERS in implementing evidence-based practice by McKenna et al [9]. The Questionnaire consists of 15 questions. The structured questionnaire was self-administered and collected after study participants completed them. The questionnaire was divided into two sections; personal and organizational barriers. All the data were entered and analyzed by SPSS version-25.0. Descriptive analysis was conducted by using frequency and percentage.

RESULTS

Total 116 registered nurses from the Jinnah hospital and Fatima Memorial hospital, Lahore. Majority of nurses were females (92.2 %) and only (7.8%) males. The proportion of female is high due to higher percentage of female staff nurses in Pakistan health care system. The participant's age group was within 25-30 (65.5%), 31-36 (22.4%), 37-42 (6.9%) and more than 43 (5.2%) and the qualification of nurses, Diploma Nursing (54.3%), bachelor's Degree in Nursing (42.2%) and Masters in Nursing (3.4%) participate in research. The percentage of nurse's experience; from the year 3-5 (62.9%), year 6-8 (22.4%) & year 8- above (14.7%) (Table 1).

Table 1: Demographic Characteristics of Nurses Having 3 Years and Above Experience Regarding EBP

Demographic Characteristics	Frequency (%)
Age	
25-30	76 (65.5)
31-36	26 (22.4)
37-42	8 (6.9)
> 43	6 (5.2)
Gender	
Male	9 (7.8)
Female	107 (92.2)
Qualification	
Diploma Nursing	63 (54.3)
Bachelor's degree in Nursing	49 (42.2)
Masters in Nursing	4 (3.4)
Experience of nurses	
3-5	73 (62.9)
6-8	26 (22.4)
8-Above	17 (14.7)
Marital status	
Single	68 (58.6)
Married	48 (41.4)

Table 2 shows the personal barriers regarding EBP of nurses. Only 15 nurses responded that they are unassured about the quality of researches, 40 considered that the time is a major barrier for their research, majority disagree that EBP research doesn't align with my professional needs, 32 feel isolated between the knowledgeable colleagues and only 15 considered that implementation of EBP not enhance their professional growth. It was estimated that nurses faced fewer personal barriers.

Table 2: Personal Barriers Faced by Nurses in Evidence-Based Practices

Personal Barrier	Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
Feeling unsure about assessing research quality	31	36	4	30	15
Time limitations	20	29	6	40	21
EBP research doesn't align with my professional needs	50	36	5	12	13
Difficult to understand articles regarding EBP	33	37	7	22	17
Feel isolated from knowledgeable colleagues	30	29	10	32	15
Often feel demoralizing for not using EBP	23	32	13	35	13
EBP implementation won't enhance my professional growth	55	33	3	11	14

Table 3 outlines organizational barriers faced by nurses in promoting EBP. Of the respondents, 27 mentioned lack of management support for EBP skills, 39 cited a lack of research incentives along with inadequate library and internet facilities, a majority perceived the unrealistic nature of research due to heavy workloads, and 66 reported insufficient healthcare facilities as a hindrance to

EBP empowerment. The findings highlight significant organizational barriers confronting nurses in EBP implementation.

Table 3: Organizational Barriers Faced by Nurses in Evidence-based Practices

Organizational Barriers	Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
Management lacks support for evidence-based care	20	28	6	35	27
No research skill incentives	22	15	8	32	39
Inadequate digital and library facilities for EBP	11	19	4	43	39
Unrealistic due to workload	18	36	9	27	26
Colleagues resist EBP support	13	23	2	39	38
limited authority prevents to do research on EBP	13	15	4	35	49
Insufficient healthcare facilities hinder EBP empowerment for nurses	2	11	7	30	66

DISCUSSION

The purpose of this study was to identify the factors that influence the implementation of Evidence-Based practice among staff nurses. The study sample included 116 registered nurses from two tertiary care hospitals of Lahore, Jinnah Hospital and Fatima Memorial hospital. Simple random sampling technique was used for nurses to participate in research. Barriers to implementing EBP scale was used for data collection. The findings showed that biggest barrier in implementing EBP is lack of health care facilities to empower nurses with EBP environment, followed by onsite computer facilities and library are not adequate for searching EBP and that limited authority is obstacle in implementing EBP. Another study showed that 54.4% of the participating nurses believed that a typical obstacle to putting EBP into practice is a lack of expertise [10]. The majority of recent studies offer comparable results about obstacles, albeit with varying degrees of severity for each component. The findings of a survey carried out in six public hospitals in Cyprus showed that 81.5% of the participants did not think that EBP applied to the workplace for nurses. The largest obstacle, in the opinion of nurses, was the lackluster medical facilities. This appears to be connected to additional implementation-difficulty factors [11]. It is believed that results will be improper when nurses are unaware of the stages of the operation or even that they exist [12, 13]. According to Uysal et al., insufficient computer facilities and a library are further barriers to the application of EB [14]. According to a study, 30.5% of nurses are resistant to trying novel approaches or making changes. Furthermore, nurses did not believe that research was a crucial component of their work [15]. According to Brown et al.,

the nation's financial status—which includes limited funding for the health sector also matters [16]. According to another study, 83.8% of respondents indicated that a key obstacle to adopting EBP is a lack of authority [17]. A review article revealed four organizational barriers: time constraints, a lack of resources, supervision, and support, and training and education deficiencies [18]. These findings highlight systemic problems that businesses must resolve if they are to successfully implement evidence-based practices [19].

Determining the obstacles preventing the application of EBP can serve as an introduction for discussions about removing these obstacles from the healthcare industry and coming up with solutions for current issues [20].

CONCLUSIONS

This study found that the main obstacle to EBP implementation is the lack of healthcare facilities that can provide nurses with an atmosphere that supports EBP. This is because of the nation's financial dilemma, which results in insufficient medical supplies and equipment for the application of EBP.

Authors Contribution

Conflicts of Interest

Source of Funding

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