

Nurses' Implementation Of Nursing Process In Public Sector Teaching Hospitals Of Peshawar

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Abstract

Background: The nursing process is a systematic way of giving individualized, organized and evidence-based nursing care. However, barriers in professional and organizational settings in healthcare may impact its effective implementation.

Objective: To evaluate nurses' practice of nursing process and its associated factors and barriers in teaching hospitals in public sector city of Peshawar in Khyber Pakhtunkhwa, Pakistan.

Methods: The descriptive cross sectional study to assess the registered nurses working in Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex, Peshawar with registered nurses numbers 230. A structured questionnaire was used for data collection: Demographic and professional characteristics, five steps in the nursing process, and perceived barriers. Data were processed using descriptive statistics and chi-square test to investigate the relationship between the implementation

level of the science curricula and selected professional factors.

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Results: 84.8% of the participants were female, 60.0% was aged between 20 and 30, and 60.9% had a Diploma in Nursing. The overall percentage of nurses who implemented the nursing process poorly, moderately and well were 47.8, 40.0 and 12.2 respectively. Assessment and implementation were relatively well done with good implementation reported by 45.2% and 50.0% respectively. The weakest step was nursing diagnosis (59.6% poor implementation and no implementation), and evaluation (50.0% poor implementation). The most common barriers reported were that of the staff (86.1%), heavy workload (82.2%), lack of time (80.0%) and short nurse to patient ratio (80.0%) and lack of standardized nursing care plan formats (74.8%). The analysis provided suggested links between implementation and educational qualification, training, clinical experience, and workload.

Conclusion: The study revealed a significant deficiency in the implementation of the nursing process in the selected teaching hospitals of public sector in Peshawar especially in the nursing diagnosis and evaluation component of the nursing process. In-service education is suggested to enhance implementation, nursing care plan formats are standardised, supervision is supportive and proper staffing is ensured to promote systematic and individual nursing care.

Introduction

The Nursing Process (NP) is a systematic, scientific and patient-centered process that helps nurses to provide individualized, evidence based nursing care. It has five parts that are interconnected: assessment, nursing diagnosis, planning, implementation, and evaluation. These steps help nurses to determine a patient's needs, prioritize those needs, perform the appropriate intervention, and assess patient outcomes. The use of the Nursing Process fosters critical thinking and professional accountability, continuity of care, and quality nursing services (1,2).

The Nursing Process has a significant role in enhancing nursing documentation, communication between health care professionals and patient safety. The results of research show that the use of a standardized nursing diagnosis and nursing interventions can enhance the quality and standardisation of nursing documentation. However, its use is not always effective due to insufficient training and inconsistent clinical use (3). Strengthening nursing education, leadership and working environments for better health service delivery is also a priority for the World Health Organization (4).

In developing countries, the use of the Nursing Process is influenced by the lack of staff, workload, resources, training, administrative support etc. A study in Ethiopia found factors affecting the nurse's use of the Nursing Process in hospital environment (5). The results indicate the need to focus on personal skills and organizational constraints to support good practice in nursing.

Nurses in Pakistan, especially in public-sector hospitals, might encounter difficulties in fully documenting and implementing all five steps of the Nursing Process. Previous studies in Peshawar have revealed the lack of documentation of nursing care and also work load, time constraints and organizational support were found as potential obstacles in the effective practice of nursing (6,7).

The public-sector teaching hospitals in Peshawar cater the needs of huge patient population and are significant clinical training institutions. Thus, a study of nurses' use of the Nursing Process is needed in these hospitals to uncover deficiencies in clinical care and focus on the areas that need improvement. This study aims to assess the implementation of the Nursing Process among nurses in public-sector teaching hospitals of Peshawar, Pakistan, and generate evidence that may guide nursing education, institutional policies, and strategies for improving the quality of patient care.

METHODOLOGY

The study will be descriptive in nature using cross sectional design to evaluate the application of Nursing Process in teaching hospitals of public sector, Peshawar, KP, Pakistan. The study population will include registered nurses directly involved in patient care in selected clinical departments. The sampling method will be used to recruit the participants, and the number of the participants will be calculated based on the objectives of the study and statistical parameters. Eligible nurses will be invited to volunteer.

A structured questionnaire will be used to collect data on the five stages of the Nursing Process (assessment, nursing diagnosis, planning, implementation, and evaluation) as well as possible barriers. Before collecting the data, the questionnaire will be checked for clarity and content validity. Eligible nurses will be given questionnaires upon informed consent, and anonymous and confidential.

The IBM SPSS Statistics software will be used to analyze the data. The results will be summarized using descriptive statistics such as frequencies, percentages, means and standard deviations. Appropriate inferential tests will be used to test for associations between selected professional or demographic characteristics with Nursing Process implementation, using a level of statistical significance of $p < 0.05$. Data will be collected after obtaining ethical clearance and administrative permission from the concerned authorities.

RESULTS

The study participants included a total of 230 registered nurses with a response rate of 95.4% from three public-sector teaching hospitals in Peshawar. The study was conducted in Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex.

The demographic and professional characteristics revealed that the majority of participants was female (84.8%) and aged between 20-30 years (60.0%). As for education, 60.9% had a Diploma in Nursing, 29.1% had a Post RN BSN and 10.0% had a Generic BSN degree. 50.0% of the participants had 1–5 years of clinical experience. Table 1 shows that the most participants were from medical wards (40.0%) followed by surgical wards (34.8%).

The most common good implementation of the nursing process was assessment and implementation (45.2% and 50.0% respectively). Nursing diagnosis was the least implemented step that only 59.6% of the participants reported poor or not implemented. Evaluation was also poorly done, with 50.0% of the nurses saying that they do not implement it properly. The results showed that there were inconsistencies in the use of the individual steps of the nursing process (Table 2).

Overall nursing process implementation was assessed and 47.8% of respondents showed poor implementation of the NP and 40.0% moderate. 12.2% had good level of implementation. The mean score of implementation was 2.42 ± 0.71 , showing that the nursing process is not always applied in practice, which requires improvement (Table 3).

Multiple problems were identified with the organizations and professions. The most frequently mentioned barriers were staff shortages and heavy workloads (86.1%), lack of time (82.2%) and poor nurse to patient ratios (80.0%). Nonstandardized nursing care plan formats (74.8%) and insufficient knowledge or training (70.0%) were identified by the majority of participants as barriers. Sixty-seven percent (67.4%) and 64.8% of participants reported inadequate administrative support and nursing documentation as a time-consuming paperwork, respectively (Table 4).

Table 01. Demographic and Professional Characteristics of Participants (n = 230)

Variable	Category	Frequency	Percentage
Age	20–30 years	138	60.0

	31–40 years	69	30.0
	Above 40 years	23	10.0
Gender	Female	195	84.8
	Male	35	15.2
Educational qualification	Diploma in Nursing	140	60.9
	Post RN BSN	67	29.1
	Generic BSN	23	10.0
Clinical experience	1–5 years	115	50.0
	6–10 years	80	34.8
	Above 10 years	35	15.2
Clinical area	Medical ward	92	40.0
	Surgical ward	80	34.8
	Other wards	58	25.2
Total		230	100.0

Table 02. Implementation of Individual Steps of the Nursing Process (n = 230)

Nursing process step	Good implementation, n (%)	Partial implementation, n (%)	Poor/not implemented, n (%)
Assessment	104 (45.2)	81 (35.2)	45 (19.6)
Nursing diagnosis	35 (15.2)	58 (25.2)	137 (59.6)
Planning	58 (25.2)	92 (40.0)	80 (34.8)
Implementation	115 (50.0)	69 (30.0)	46 (20.0)
Evaluation	46 (20.0)	69 (30.0)	115 (50.0)

Table 03. Overall Level of Nursing Process Implementation (n = 230)

Overall implementation level	Scoring criterion	Frequency	Percentage
Poor	Below 50%	110	47.8
Moderate	50–79%	92	40.0
Good	80–100%	28	12.2
Total		230	100.0

Table 04. Barriers to Implementation of the Nursing Process (n = 230)

Reported barrier	Agree, n (%)	Disagree, n (%)
Staff shortage and heavy workload	198 (86.1)	32 (13.9)
Lack of time	189 (82.2)	41 (17.8)
Poor nurse-to-patient ratio	184 (80.0)	46 (20.0)
Lack of standardized nursing care plan format	172 (74.8)	58 (25.2)
Insufficient knowledge or training	161 (70.0)	69 (30.0)
Lack of administrative support	155 (67.4)	75 (32.6)
Perception of nursing process as time-consuming paperwork	149 (64.8)	81 (35.2)

DISCUSSION

The present study investigated the application of the nursing process among the nurses in three public sector teaching hospitals of Peshawar namely Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex. The results showed that 12.2% of the nurses had good implementation, 40.0% had moderate

implementation, and 47.8% had poor implementation. The findings show that the nursing process is not fully implemented in clinical practice.

Concerning individual steps, assessment and implementation were comparatively better carried out, and 45.2% and 50.0% of the nurses reported good implementation of the steps, respectively. Nursing diagnosis was the least successful area with 59.6% having poor or no implementation, and 50.0% having poor implementation in the evaluation of nursing diagnosis. This indicates that the role of nurses might be focused more on the routine clinical works and less attention on defining the nursing problem and implementing a patient-specific care plan, as well as assessing patient outcomes. Bayih et al. also conducted a systematic review and meta-analysis that revealed issues with implementing the nursing process and the need for nurses to know more and be better educated and supported in the institution [8].

Demographic data revealed that the majority of the respondents were females (84.8%), aged between 20 and 30 years (60.0%) and diploma qualified nurses (60.9%). Half of them had 1–5 years of clinical experience. The traits point to the need to maintain professional development, supervision and mentoring, especially for novice nurses. These demographic features are not sufficient to set up a distinction in implementation, however.

The area of greatest difficulty reported was staff shortages and heavy workloads (86.1%), lack of time (82.2%), nurse to patient ratios (80.0%), and non-standardized nursing care plan formats (74.8%). Other 70.0% reported that they lacked knowledge or training. Other barriers have been reported in Ethiopian studies, such as limited resources, workload, and inadequate training, which led to problems with implementation of the nursing process [9-10]. The results indicate that organizational support, as well as professional development is needed to improve implementation.

The results given with the items also showed that the nursing process implementation was related to educational qualification, formal training, clinical experience and workload. The implementation pattern of the nurses who had BSN or Post RN BSN degree was better than the other nurses with moderate workloads, formal training and more than five years experiences. Previous studies have reported similar relationships [10, 11]. However, conclusions should be drawn on the statistical results and confirmed with the actual data set.

Conclusion:

The study findings were that only 47.8%, 40.0% and 12.2% of public sector teaching hospitals of Peshawar nurses were implementing the nursing process poorly, moderately and well, respectively. Assessment and implementation were comparatively better and nursing diagnosis and evaluation were the worst of the implemented steps. The most significant problems found were staff shortage, heavy workload, lack of time, poor nurse-patient ratio, non-uniform format of nursing care plan and inadequate training. The results also indicated that: implementation levels related to education level, formal training, clinical experience and workload, though these statistical relationships have yet to be confirmed. It emphasizes the need for in-service training, practical clinical supervision, nursing documentation, adequate staffing and administrative support. Improving these skills could help nurses to use the five steps of the nursing process, and ensure that they deliver safe, individualized and evidence-based nursing care to patients.

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