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## Knowledge & Attitude of Nurses regarding the Nursing Process in Public Sector Hospitals of Lahore

Rifat Yasmeen<sup>1\*</sup>, Prof. Dr. Samina Kausar<sup>2</sup>, Nighat Yasmin<sup>3</sup>, Sumra Javed<sup>4</sup>, Rashida Kanwal<sup>5</sup>, Noor Ul Haq<sup>6</sup>, Sobia Iqbal<sup>7</sup>

<sup>1</sup>\*MS Nursing Scholar | University of Health Sciences, Lahore Pakistan. Email: riffat07@yahoo.com Mobile # +92-303-5440525.

<sup>2</sup>Professor & Head of Nursing Department | University of Health Sciences, Lahore Pakistan. Email: saminamanzoor31@yahoo.com

<sup>3</sup>Vice Principal College of Nursing Chakwal Email: nighatfida08@gmail.com

<sup>4</sup>Principal College of Nursing Chakwal Email: sumrajaved555@gmail.com

<sup>5</sup>MS Nursing Scholar | University of Health Sciences, Lahore Pakistan. Email: kanwal188@yahoo.com

<sup>6</sup>MS Nursing Scholar | University of Health Sciences, Lahore Pakistan. Email: noorulhaq143@gmail.com

<sup>7</sup>MS Nursing Scholar | University of Health Sciences, Lahore Pakistan. Email: sobiaiqbal726@gmail.com

**\*Corresponding Author:** Rifat Yasmeen

\*MS Nursing Scholar | University of Health Sciences, Lahore Pakistan. Email: riffat07@yahoo.com Mobile # +92-303-5440525.

### ABSTRACT

**Background:** The implementation of the Nursing Process is crucial for professional nursing practice, enabling nurses to provide quality care within a systematic, goal-directed framework.

**Objective:** The study aims to assess nurses' knowledge and attitude toward the nursing process, focusing on its implementation and effectiveness in delivering quality care.

**Methodology:** A descriptive cross-sectional study design was used to collect data from 207 nurses, and convenient sampling was used.

**Results:** The findings revealed that out of 207 study participants' knowledge remains between 80-70% considered good knowledge, and 82% had a positive attitude toward the nursing process implementation.

**Conclusion:** The majority of the participants have a good level of knowledge regarding NP and showed a positive attitude toward its implementation in patient care,

**Keywords:** nursing process, implementation, knowledge, and attitude.

### INTRODUCTION

#### Background

The use of the Nursing Process (NP) plays a significant role in the quality assurance of nursing care services. The NP is the base of nursing research and different research undertaken based on the documents of the NP, but due to poor application of the NP, nursing research is still not well progressed globally (Berman, 2018, Alberta David, 2018). The demand for high-quality nursing care is increasing due to factors such as the aging population, medical technology advancements, chronic disease prevalence, preventive care, patient-centered care, global nursing shortages, and regulatory requirements. The NP is a vibrant tool for implementing nursing knowledge, utilizing systematic problem-solving to identify healthcare needs and provide personalized care (Yildiz, 2018).

The purposes of the NP are to identify a client's health status and actual or potential healthcare problems or needs, to establish plans to meet the identified needs, and to deliver specific nursing interventions to meet those needs. In the field of professional activities, nursing, as a science, aims to consolidate knowledge and practice in the field, endorsing professional identity, acknowledgment, and belonging. It seeks competencies, autonomy, respect, and decision-making support for daily nursing practices and challenges. It is well-studied that the implementation of the NP is key to the core of professional nursing practice and allows nurses to deliver quality nursing care within a systematic goal-directed framework (Hariyati, 2018). There is a demand to implement the NP in practical care in every healthcare institution and the community, but the perception remains that it is time-consuming and impractical (Doody et al, 2019).

Another research on the NP in Mekelle zone hospitals in northern Ethiopia revealed that 100% of nurses did not use the NP during the provision of care to the patients (Camargo-Figueout oa, 2021). A study on the utilization of

the NP and patient outcomes in psychiatric hospitals in Nigeria. Out of the 75 nurses who participated in the study, some (25.3%) described that the documentation of the NP is tedious, and extensive, to implement during patient care. One could infer that qualified nurses have strong theoretical knowledge of the NP, but they have struggled to translate the knowledge into action as evident from the fluctuation of the documentation quality in the study setting (Obonyo, 2019)

Moreover, a study conducted in nine hospitals measured the attitude toward the NP held by nurses who provided direct patient care. Overall, Participants were knowledgeable about the NP and had a positive attitude towards it, with higher nursing degrees having more positive attitudes . A study revealed nurses' attitudes towards the NP in three different units, revealing a positive attitude despite varying levels of planning and education .

In Pakistan, nurses represent a significant portion of the healthcare workforce, most of them work in public sector healthcare institutions, where due to multiple challenges access to care is limited and the standards of care are inadequate. Although, the implementation of the NP has been well investigated in many developed countries, but handful of data is available in Pakistan. Therefore, the current study aimed to assess the knowledge and attitude among nurses regarding NP in Public Hospitals of Lahore.

### **Problem Statement**

Ineffective implementation of NP can lead to poor quality care, knowledge gaps, service disorganization, medication errors, poor disease prognosis, increased readmission rates, and increased morbidity and mortality (Jamal, 2023).

The documentation and implementation NP must be ensured in clinical care, healthcare organizations, and the community. Nonetheless, none of the Procedures are followed systematically, because it is always perceived to be difficult and time-consuming. Nurses can use the nursing process to prioritize the needs of specific patients (Gilani, 2018).

Above mentioned problems can be minimized if the NP is properly implemented by nurses. Therefore, the main aim of this study is to assess the knowledge and attitude of nurses toward nursing process implementation.

### **Objectives**

- To assess the knowledge of nurses regarding nursing process working in public sector hospitals of Lahore.
- To assess the nurses' attitude toward implementation of nursing process in public sector hospitals of Lahore.

### **Significance of the Study**

The study assessed the implementation of the NP and patient outcomes in a hospital setting. Healthcare is changing, and the traditional roles of nurses are transforming to meet the demands of this new healthcare environment.. This study evaluates the knowledge and attitude of nurses in four public hospitals of Lahore Pakistan, focusing on their role in promoting and influencing patient delivery care models in the future and identifying and managing a patient's problem will become systematic and holistic. Implementing the NP requires constant documentation as it accounts for actions taken by the nursing team to resolve patient problems.

## **METHODOLOGY**

### **Study Design**

A cross-sectional descriptive design was used to evaluate the knowledge, and attitude of nurses toward the NP.

### **Study Setting**

The study was conducted at the Institute of Nursing University of Health Sciences Lahore in collaboration with public sector hospitals in Lahore.

- Jinnah Hospital, Lahore.
- Services Hospital, Lahore.
- Sheikh Zayed Hospital, Lahore.
- Lahore General Hospital, Lahore.

### **Duration**

The duration of the study was 06 months after approval of the synopsis from the Advanced Studies & Research Board (ASRB)

### **Study Population**

All registered nurses who have been working in 04 Public sector Hospitals in Lahore.

### **Sample Size Calculation:**

The sample size was calculated by the following formula assuming the good awareness level is equal to 80% and above with the confidence level equal to 95% and the margin of error equal to 5%.

Sample Size (**n= 207**)

### **Sampling Technique**

A convenient sampling technique was used to select the participants according to the inclusion and exclusion criteria.

### **Sample Selection**

The following selection criteria were used to select participants:

#### **Inclusion Criteria**

- All registered nurses working in the medical and surgical unit of 04 Public Sector Hospitals in Lahore.
- All registered male/female nurses with diplomas, BSc, and MSN nurses were included with one year of experience.

#### **Exclusion Criteria**

- Unit Nurse Manager/ Head Nurse and Nurse supervisors

### **Data Collection Tool**

A self-structured questionnaire was employed to collect information about the socio-demographic characteristics of nurses, knowledge, and attitude toward NP implementation. The validity and reliability of the study questionnaire were investigated and confirmed about NP implementation and its relationship with work conditions. The questionnaire consisted of 4 parts.

**The First Part-A** includes the socio-demographic characteristics of the study participants, such as name (optional) age, gender, hospital, marital status, educational level, and years of work experience in nursing.

**The second Part-B** includes twenty-one (21) items designed to assess the knowledge regarding the NP on five-point Likert scale knowledge-based questions ranging from strongly agree to strongly disagree.

**Third Part-C** consisted of ten (10) items designed to determine the attitude of nurses toward NP implementation on the 5 points Likert scale attitude-based questions ranging from strongly agree to strongly disagree.

### **Data Collection Procedure**

After approval from the institutional review board (IRB), ethical review committee (ERB), and Advanced Studies & Research Board (ASRB) of the University of Health Sciences, Lahore, the data was collected after administrative approval from four public sector hospitals of Lahore. A self-administered questionnaire was used for the study, participants were selected based on inclusion and exclusion criteria, and informed consent was obtained

### **Validity & Reliability of the Questionnaire/Tool**

A pilot study involved 21(10%) nurses from Medical/surgical wards, who were asked to complete a questionnaire before data collection. The questionnaire was checked for face and content validity checks by subject specialists, experts, and peer review, with Cronbach's alpha test ratifying its reliability at 0.90.

### **Statistical Analysis**

The data was analyzed using SPSS version 25.0. The questionnaire shows 21 knowledge-related items 5-point Likert scale, highly knowledgeable nurses were those who answered >80% of the questions, moderately knowledgeable nurses were those who answered between 60-79.9%, and low knowledgeable nurses scored < 60%. The attitude of nurses toward NP implementation for rendering patient care, the questionnaire consists of 10 questions on a 5-point Likert scale. The overall attitude was categorized using the bloom cut-off value, >60 shows a positive attitude, and <60 negative attitude .

### **Ethical Consideration**

Ethical considerations were followed according to the ethical review board of the University of Health Sciences,;

1. An approval to conduct the study was taken from the ERB of UHS, Lahore
2. Proper written consent were taken from all the participants to take their voluntary participation in the study
3. Confidentiality and privacy of the participant were taken care.

4. The collected information was used for statistical analysis for thesis and research work only
5. Any risk or harm to the participant was evaded.

## RESULTS

### Demographic Analysis

**Table 4.1: Distribution of nurse's socio-demographics regarding the nursing process**

S/No	Variable	Frequency	Percentage
<b>1</b>	<b>Age</b>		
	21-30	120	58.0
	31-40	74	35.7
	41- 50	11	5.3
	>51	2	1.0
<b>2</b>	<b>Gender</b>		
	Male	4	1.9
	Female	203	98.1
<b>3</b>	<b>Marital Status</b>		
	Single	68	32.9
	Married	136	65.7
	Widowed	3	1.4
<b>4</b>	<b>Level of education</b>		
	Diploma	38	18.4
	Post Basic Specialization	75	36.2
	BSc Nursing/PRN	89	43.0
	MSc Nursing	5	2.4
<b>5</b>	<b>Work experience years</b>		
	1 to 5 years	59	28.5
	5 to 10 years	91	44.0
	10 to 15 years	41	19.8
	15 to 20 years	9	4.3
	20 years and above	7	3.4
<b>6</b>	<b>Name of the hospital where currently working</b>		
	Jinnah Hospital Lahore	50	24.2
	Services Hospital Lahore	55	26.6
	Lahore General Hospital Lahore	48	23.2
	Shaikh Zayed Hospital Lahore	54	26.1

Table 4.1 shows the demographic characteristics of nurses who participated in the study. Among participants, the majority were female (98.1%), married (65.7%) falls between the age of 21-30 years (58.0%), having an education of BSc Nursing 4 years (43.0%), with working experience of 5 to 10 years (44.0%), employed in different hospitals but majority was working in Services hospital of Lahore (26.6%).

### Knowledge of nurses regarding the nursing process

The knowledge of nurses regarding the NP. Among 207 study participants, the majority (55.6%) of nurses strongly agreed that 'the NP is a systematic problem-solving approach toward providing individualized nursing care'. 46.9% of nurses strongly agreed that 'the nursing diagnosis differs from the medical diagnoses. About more than half of nurses (51.2%) agreed that 'the association established to develop, refine, and promote the taxonomy of nursing diagnostic terminology used by nurses is North American Nursing Diagnosis'. 52.2% of nurses strongly agreed that 'the purpose of the NP is to provide nurses with a framework to aid in delivering comprehensive patient care'. About 49.8% of nurses agree that 'the NP must be used in any clinical setting/environment'. 49.3% of nurses strongly agree that 'the steps of the NP should always be used in an orderly way in daily patient care'. In this study, 53.1% of nurses strongly agree that 'the NP enables quality care and improves communication between HCP. Only 49.8% of nurses strongly agreed that 'objective data is observable and measurable information'. About half of nurses (53.1 %) strongly agree that 'subjective data is the client's point of view (symptoms), including feelings, and perceptions. The majority of nurses (46.9%) strongly agree that 'the assessment data is used to create the nursing diagnoses. Only 44.0% of nurses strongly agree that 'according to the NANDA-I, there are 4 types of nursing diagnoses, these are Actual, Potential, Well-being, and Syndrome'. 44.0% of nurses agree that 'there are three different categories of nursing interventions: independent, dependent, and interdependent'.

A considerable percentage of nurses (25.1%) disagree that 'the implementation of the NP depends on the physician's judgment'. 48.3% of nurses agree that 'the nursing process is designed to ensure continuity of care and is key to maintaining confidentiality'. About 46.4% nurses agree that 'the NP is a key to developing therapeutic

relationships. While 44.9% nurses agree that 'the NP is a tool to achieve treatment results. Only 29.5% nurses strongly disagree that 'during the assessment step, the nurse does not need to collect data'.

About half of the nurses (52.7%) agree that 'the nurse identifies human responses to actual or potential health problems during the nursing diagnoses step of the NP. 48.8% of nurses strongly agree that 'during the planning step, the nurse develops strategies to resolve or decrease the patient's problem'. About 49.3% of participants agree that 'during the evaluation, the nurse determines the effectiveness of the plan of care. 28.5% of nurses disagree that 'the nursing process can be completed without any documentation'.

**Table 4.2: Knowledge of nurses regarding nursing process**

Knowledge status	Cutoff value	Percentage
Good	>80-70	32.9
Average	>70-60	60.9
Poor	<60	6.3

Table 4.2 shows the knowledge of nurses about caring for patients. According to Bloom cut-off value >80 shows good knowledge (32.9%), 70-60 shows moderate (60.9%), and <60 shows poor (6.3%).

#### **Attitude among nurses toward implementation of the nursing process:**

The attitude of nurses towards the NP while caring for the patient. Out of 207 respondents 105 (50.7%) of nurses strongly agree that they are willing to apply the NP during patient care. Half of the participants agree (54.6%) that it should be used as an evaluation tool for providing holistic patient care. However, 50.2% of nurses agree that it 'must be used in all clinical settings. About 52.2% of nurses agree that 'they are involved in the NP'. 30.9% of nurses strongly disagree that 'the implementation of the NP is an extra burden on nurses in clinical areas. 41.1% of nurses strongly disagree that 'the application of the NP is just a waste of paper'. 38.6% of nurses agree that 'there is not enough time to apply the NP during the care'. About 36.2% of nurses strongly disagree that the use of the NP is a waste of time. About half of the (52.7%) participants agree that 'the NP should be used as an evaluation tool for providing holistic patient care'. 47.3% of nurses agreed with 'I think patients will not like to be cared for using the NP'.

**Table 4.3: Attitude toward caring for patients**

Attitude status	Cutoff value	Percentage
Negative attitude	<60	18%
Positive attitude	>60	82%

Table 4.3 shows that mainstream of the study participants 82% had positive attitude toward the nursing process, while only 18% of the participants had a negative attitude toward the NP implementation.

## **DISCUSSION**

The present study was carried out to assess the knowledge, and attitude of nurses toward the implementation of the NP. The study's findings suggest that most of the nurses had good knowledge and positive attitude toward the NP, but their compliance with the utilization of this tool in patient care was poor. This chapter consists of three sections namely demographic variables, nurses' level of knowledge regarding the nursing NP, and attitude toward the NP implementation.

### **Demographic Variables**

Under this section information regarding age, gender, marital status, educational attainment, and years of work experience in nursing are discussed.

The age of study participants, in this study, fell between the class ranges of age 21-30. Overall, job security, career prospects, and population demographics all contribute to the frequency of nurses aged 21 to 30 in Lahore's public sector hospital. The age of the participants in the current study is consistent with the findings of a previous study (71.3%) were between the ages of 21-30. Comparable findings were reported in a study participants' age falls between 25-29 years. Another study have contrary findings to the current study, most participants were aged between 31-40 years. The majority 203 (98.1%) were female nurses. Congruent with findings, the number of female respondents was higher (72.5%) compared to male participants (27.5%). Similarly, in another study out of 138 participants, the female participants were the majority (70.6%). Comparable findings were also found where the majority 61.3% of the participants were females. Likewise, Out of 82 sampled respondents were participated in the quantitative study during the study period a total of 43 (52.4%) were females and 39 (47.6%) were males. Contrary to the current study among the total respondents, 74 (53.6%) were males. In the current study marital status, most of the participating nurses 136 (65.72%) were married, and 68(32.9%) and 3 (1.4) were widows.



Comparable findings were reported in another study conducted at Mansoura University Hospital disclosed that 83% of participating nurses were married. Dissimilarity is seen in the Cross-sectional, descriptive, study in which 60% nurses were single, was conducted in three tertiary care hospitals of Peshawar.

Considering the education level, the findings of the current study showed that most of the study participants 89 (43%) had a level of education B.Sc. Nursing level, post-basic specialization 75 (36.2%), diploma of nursing 38 (18.4%) MSc nursing 5 (2.4%). Comparable findings were reported in another study conducted on nursing process implementation that 53.7% of the participants had B.Sc. nursing in a health institution Nigeria. A contrast study revealed that majority (71.6%) of nurses indicated that they are diploma holders followed by Bachelor's degree (19.6%).

Work experience of participating nurses in current study was 5 to 10 years (44%). Congruent to current findings about 60.2% of the respondents had a working experience of more than six years in county referral hospital Kenya. Another comparable study showed 6-10 years of nurse participants work experience. A contrast study revealed the duration of participants' work experience was less than 5 years. Of the total number of participants in the study

### **Level of knowledge regarding the nursing process**

The results of the current study showed that the respondents' overall knowledge level about the NP was good. Only 6.3% of study participants had poor knowledge. This knowledge score on the implementation of the NP was somehow compatible with the initial assumption that nurses have good knowledge regarding the NP because the nursing process was part of the basic professional educational program.

The parallel finding revealed that the knowledge on the NP, more than half of the nurses rated their knowledge as very good; however, the study results revealed there was no significant association between knowledge and implementation of the NP. Similarly, it was revealed from the study in Ghana tertiary hospitals that NP a relatively high level of knowledge (fair to good) regarding the NP.

Dissimilarity found that 90% of participants scored below 50% on knowledge-related questions, demonstrating that nurses lack the necessary knowledge to implement the NP effectively. Contrary to the current study, a study conducted in County Referral Hospital Kenya concluded that more than two-thirds of the nurses had poor knowledge of the NP, hence the need to take measures to promote the nurses' knowledge of the NP in the country.

Contrary to the current study it found that out of 102 respondents, only 15.7% had high knowledge of the NP, and 10.8% had high practice, but few understood its importance in patient care. A revealed that despite having theoretical knowledge of the NP, trained hospital nurses failed to efficiently, care for their patients.

### **Attitude of nurses toward the nursing process**

The current study revealed that nurses of the four study sites working in medical/surgical units have positive attitudes (82%) towards the NP. Similar to the current study, the attitude of nurses in another study conducted on the NP was positive, indicating the efficiency and effectiveness of this framework in the field of learning and care. The comparable study revealed the knowledge, attitudes, and skill level of nurses are important for understanding and integrating documentation into the NP in daily practice and ensuring positive outcomes for patients. Although nurses seem to have a positive attitude toward documentation and the NP, a significant gap in knowledge and skills regarding planning and documentation of nursing care remains.

Similar findings of another study suggest that there was a moderately positive attitude among nurses towards the nursing process in terms of quality care provision. The majority of the respondents indicate that the nursing process brings awareness to clients' needs prioritization. Differing to current study's finding, a study revealed that the majority of the participants 78.76% had a negative attitude towards the nursing process, while 21.33% of the participants had a positive attitude towards the nursing process.

### **Recommendations**

Based on the study findings, the following are the recommendations:

1. There should be a documented nursing process care plan in patient records.
2. Health institutions/managers should adapt appraisal procedures motivating measures toward nursing process implementation.
3. The hospital management should put strict measures and guidelines in place to ensure that nurses are held accountable for poor quality services including but not limited to non-implementation of NP in nursing care delivery.
4. Researchers also need to look critically into the role played by health institutions/healthmanagers in nursing process implementation as it came out clearly from this study that nurses are knowledgeable, positive intentions to implement but they needed support from their various health institutions to cuddle said process in health service delivery.

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