

## Perceived Barriers in Implementation of Nursing Process in Public Sectors of South Punjab-Pakistan

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### ABSTRACT

**Background:** The nursing process is a universal system that is essential to the nursing profession and is absolutely vital in the provision of the high quality and patient centered care. Its practical use elevates the level of patient care, whereas the inability to implement it effectively might harm the patient care outcomes. It is also important that the perceived barriers be understood individually and organizationally among nurses to facilitate the practical application of the nursing process.

**Methods:** A descriptive cross sectional study was used to establish the barriers in the implementation of the nursing process within the institutions of the public sector in South Punjab, Pakistan. The nurses working in Intensive Care Unit (ICU) and High Dependency Unit (HDU) of four tertiary care teaching hospitals as Nishtar Hospital Multan, Bahawal Victoria Hospital Bahawalpur, Sheikh Zayed Hospital Rahim Yar Khan and Teaching Hospital Dera Ghazi Khan were sampled to collect the data. There was also an application of a structured questionnaire to measure individual and organizational barriers.

**Findings:** Two hundred and thirty nurses took part in the research. In terms of the individual-level barriers, 60 percent of the nurses said they were highly hindered, and 40 percent had low perceptions. On the same note, 57% of respondents indicated that they are high of organizational barriers, and 43% of respondents indicated that they are low. These findings demonstrate that the adoption of nursing process entails major challenges in the provision of healthcare services in the general population.

**Conclusions:** The research points to the significant personal and institutional barriers to the implementation of the nursing process in the hospital of the South Punjab in the public sector. It is essential to mitigate these obstacles using specific interventions to enhance the nursing care and patient care outcomes.

**Keywords:** Nursing process, Barriers, Implementation, Individual factors, Organizational factors, Public sector hospitals, South Punjab, Pakistan.

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## INTRODUCTION

Nursing process is one of the core models that support the profession of nursing and helps to provide effective patient-centered care that is systematic. The nursing process was initially developed in 1958 by Ida Jean Orlando to focus on critical thinking, evidence-based decisions, goal-based interventions, and holistic patient care (Toney-Butler and Thayer, 2022; Shabaan et al., 2021; Stannard, 2019). It is an interactive and dynamic relationship between nurses and patients where care is responsive and individualized in terms of patient needs (DeLaune et al., 2023). The nursing process is a methodological tool in enhancing the quality of care and clinical outcomes since it integrates scientific reasoning and compassionate practice.

The nursing process is a six-stage process that is linked and connected to each other, and the stages are assessment, nursing diagnosis, outcome identification, planning, implementation, and evaluation (Ackley et al., 2021; Harrington, 2015; Moorhead et al., 2023). These stages can provide nurses with effective continuity, accountability, and facilitation of an orderly approach to care systems through effective application of stages. There is an indication that adequate adoption of the nursing process leads to enhanced patient recovery, safe care provision, and efficient utilization of healthcare resources (Potter et al., 2021; Toney-Butler and Thayer, 2022).

Although it has been realized as an essential factor, the use of the nursing process in healthcare environments is inconsistent, especially in low- and middle-income countries. Negative attitudes of the healthcare professionals to the nursing process, a lack of interprofessional collaboration and insufficient institutional support have been reported in several studies as one of the key factors hindering the effective use of the nursing process (Ajemba et al., 2023; Makota et al., 2023). Other obstacles are the inadequate workforce, excessive workload, absence of documentation resources, time-related shortages, and all these factors disgrade the consistency of nursing care plans implementation (Jamal et al., 2023; Mahmoud and Bayoumy, 2014).

The issues faced by Pakistan in the context of the practical application of the nursing process are characterized by the lack of resources, the absence of appropriate training opportunities, and the negative nurse-to-patient ratios (particularly in the hospitals of the public sector). Even though the past literature has highlighted the beneficial effects of the implementation of nursing processes to enhance patient outcomes, the current study is scarce in terms of empirical research that focuses on the barriers that may arise within the context of South Punjab (Jamal et al., 2023; Yilak et al., 2022). This research gap in the literature indicates that more region-specific studies are required to have a clearer picture of the individual and organizational factors of impact on nursing process implementation.

Thus, the proposed research will address the perceived obstacles to the introduction of the nursing process among nurses in the context of South Punjab state hospitals in the country. These barriers must be identified to inform specific interventions, enhance nursing practice, and, lastly, enhance the quality of patient care in resource-constrained healthcare environments.

## LITERATURE REVIEW

The nursing process (NP) is well known internationally as a systematic and evidence-based framework for improving clinical judgment, continuity of care and patient centered outcomes. Recent literature continues to up-date that effective implementation of the nursing process enhances the quality of nursing documentation, enhances clinical decision-making and promotes accountability in patient care (Makota et al., 2023; Potter et al., 2021). Despite these recognized benefits, the fact remains that translation of the nursing process from theory into consistent clinical practice has remained a global challenge, especially in the public sector healthcare institutions.

Studies published in the timeframe between 2023-2025 highlight workload pressure and staffing shortages as the most constant barriers to implementation of the nursing process. High patient to nurse ratios significantly reduce the time available for thorough assessment and care plan and evaluation, which leads to partial or superficial application of the nursing process (Tolera et al., 2025; Ojo and Olaogun, 2023). Nurses working in high acuity units are often focused on immediate clinical issues and may de-emphasize the use of structured documentation, which undermines the use of the entire cycle in the nursing process (Makota et al., 2023).

Another pertinent issue and problem that has been integrated in recent research efforts is the poor competency in nursing process documentation and standardized nursing languages. Although nurses may have theoretical knowledge of nursing process, the challenges in formulating nursing diagnosis and relating it to suitable interventions and outcomes continue because of lack of practical training and institutional guidance (Rodríguez-Suárez et al., 2023). Systematic reviews show that lack of confidence, terms ambiguity, and inadequate integration of standardized frameworks like NANDA-I, NIC and NOC lead to poor effectiveness of the nursing process utilization in routine care (Spazapan et al., 2022).

Organizational factors only make these challenges more difficult. Studies have continually reported on the negative effects of lack of administrative support, lack of formal evaluation systems, and lack of recognition of nursing documentation efforts on the motivation of nurses to implement the nursing process (Jamal et al., 2023; Yilak et al., 2022). Additionally, lack of access to the materials of documentation and regular in-service training programs further compromise institutional commitment to the nursing process as a standard of care.

In Pakistan, recent evidence suggests that nursing process implementation is impeded by barriers that are especially high in hospitals of the public sector because of limited resources and high workloads. In fact, Pakistani studies published in 2023 found that despite the general realization of the importance of the nursing process among nurses, the application of the process is affected by factors such as time constraints, inadequate staffing, and inadequate monitoring mechanisms (Jamal et al., 2023). Context-specific studies add further emphasis to the sociocultural perceptions, limited managerial encouragement, and suboptimal opportunities for professional development that influence attitudes toward nursing process implementation by nurses.

Overall, the literature for the 2023-2025 shows that barriers to nursing process implementation are multifactorial and include individual knowledge and motivation deficits and systemic organizational deficiencies. Addressing these barriers requires that integrated strategies are employed including workforce strengthening, continuous professional training, supportive leadership, and

institutionalization of nursing process evaluation mechanisms to improve patient care outcomes and professional nursing practice;

### Research Gap

Although the nursing process has become widely recognized as a basic framework for providing quality patient-centered care, recent literature (2023-2025) has reflected an ongoing disparity between theoretical support and implementation, especially in public healthcare sector environments. Existing studies have largely been conducted on general knowledge levels, attitudes or isolated barriers, paying little attention empirically to the simultaneous influence of both individual and organizational factors in particular regional contexts. In Pakistan, and more specifically in the South Punjab, there is still a remarkable scarcity of context-specific, hospital-based evidence exploring the perceived barriers among nurses across high acuity settings (e.g. intensive care and high dependency units). Moreover, recent research has not given adequate attention to the interplay between workload pressures, institutional support mechanisms and documentation infrastructure and training culture in terms of implementation of the nursing process. This gap highlights the need for focused and regionally grounded research in generating research evidence that can be used to guide targeted policy interventions, management strategies and capacity building interventions with the goal of strengthening nursing practice and improving patient care outcomes in resource constrained public hospitals.

## METHODOLOGY

### Study Design and Setting

This research was based on the cross-sectional study design. The study was conducted at Multan College of Nursing Multan Medical and Dental College (MMDC) Multan University of Health Sciences in tertiary care hospitals of the South Punjab region of Pakistan. These hospitals were; 1) Nishtar Hospital Multan, 2) Bahawal Victoria hospital Bahawalpur, 3) Sheikh Zayed hospital Rahim Yar Khan and 4) Teaching Hospital Dera Ghazi Khan.

### Study Population, Study Duration

The study population was nurses working at intensive care units (ICU) and high dependency units (HDU) in these four teaching hospitals. The time of the study was between March 2023 to December, 2023.

### Study Sample

The sample size was calculated by the following formula, keeping on the confidence interval equal to 95% and the margin of error equal to 5%.

$$n = \frac{Z^2_{1-\alpha/2} P (1 - P)}{d^2}$$

$Z^2_{1-\alpha/2}$  = for 95% confidence level = 1.96

P = assumed proportion of barriers in implementation of nursing process 81% (14).

d = Margin of error = 5%, n = Sample Size = 230

## **Sampling Criteria**

### **Inclusion criteria**

- Nurses involved in bed side care
- Nurses age 22 -45 years
- At least one year of experience

### **Exclusion Criteria**

- Nurses who have worked abroad.
- Nurses who have attended workshop on the nursing process.

## **Data Collection Procedure and Analysis**

Initially, approval was obtained from the university ethical review board and advance review board. After ethical review board approval, permission was obtained from the medical superintendent of four hospitals. All participants in the relevant units provided written informed consent after a detailed explanation of the study's aims and objectives. Data was collected by the primary investigator and help of a research helper. Data analysis was done with the help of SPSS. Percentage of the variables and their frequencies were calculated. Data was exhibited in tables and figures. Various steps were involved in the process of data analysis for this study on the individual barriers, and organizational barriers in the implementation of the nursing process. Firstly, collection and tabulation of the responses from 230 nurses across different hospitals was done. The responses were divided into various categories based on the perceived individual barriers, and organizational barriers regarding the implementation of the nursing process.

## **Data Collection Tool**

Data were obtained by a self-administered structured questionnaire. The instrument was adapted and modified from a previously validated questionnaire developed by Mahmoud and Bayoumy (2014) that was designed to assess perceived individual and organizational barriers for the implementation of the nursing process. Minor changes were made so that it would resonate with public-sector hospitals in the southern province of Punjab, Pakistan, but without compromising the framework and content of the original tool.

## RESULTS

### Perceived Individual Barriers in Implementation of Nursing Process

Table 1.1, reported the participants responses to the questions regarding perceived personal Barriers in Implementation of Nursing Process.

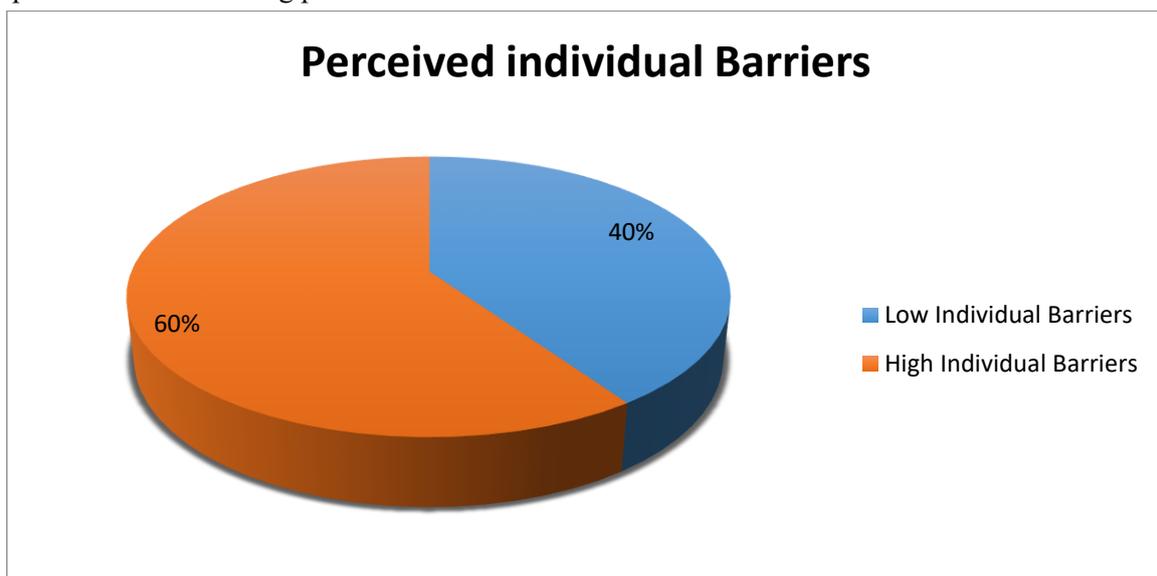
Table 1.1: Perceived individual barriers in implementation of nursing process, n=230

Description		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I think the practice of nursing process makes no difference in patients' recovery	F	36	43	10	57	84
	%	15.7%	18.7%	4.3%	24.8%	36.5%
I have no interest/ motivation to include nursing process to the care of patients.	F	38	40	18	61	73
	%	16.5%	17.4%	7.8%	26.5%	31.7%
Nursing process should be implemented by nurse managers alone	F	53	34	13	60	70
	%	23.0%	14.8%	5.7%	26.1%	30.4%
Nursing process is confusing	F	47	58	24	36	65
	%	20.4%	25.2%	10.4%	15.7%	28.3%
I am convinced that I do not have adequate knowledge in the design and implementation of the nursing process	F	50	49	10	57	64
	%	21.7%	21.3%	4.3%	24.8%	27.8%
Nursing process requires tedious documentation that I cannot sustain	F	47	60	15	42	66
	%	20.4%	26.1%	6.5%	18.3%	28.7%
Nursing process should only be taught in school and not applied in the clinical area due to time constraints	F	48	55	18	43	66
	%	20.9%	23.9%	7.8%	18.7%	28.7%
I perceive the nursing process as a foreign culture that should not be practice in our hospitals	F	46	52	14	56	62
	%	20.0%	22.6%	6.1%	24.3%	27.0%
Information from patients is insufficient to develop a comprehensive nursing care plan for their care	F	43	61	19	39	68
	%	18.7%	26.5%	8.3%	17.0%	29.6%
It is time consuming	F	43	61	12	54	60
	%	18.7%	26.5%	5.2%	23.5%	26.1%
I am not confident enough to design and implement the nursing care plan for my clients	F	32	57	10	59	72
	%	13.9%	24.8%	4.3%	25.7%	31.3%

The results, which were obtained from 230 nurses working at four different hospitals, show different perceptions regarding the implementation of the nursing process. A good discovery was the strong degree of skepticism on the effectiveness of the nursing process in the process of recovery of patients with 15.7% are strongly disagreed and 18.7% disagree. Additionally, a large proportion of the participants indicated their disinterest or lack of motivation (16.5%) to integrate the nursing process into patient care. There was an existing feeling (23.0%) that it was nurse managers alone to implement the nursing process; this opens up the possibility of misunderstanding or lack of acceptability by the nursing staff. The perception of the process of nursing as confusing (20.4%) and the perception of some tedious documentation (20.4%) is of note.

The notion that the nursing process should only be taught in educational establishments rather than being implemented in clinical settings on grounds of time limitation (20.9%), further underscores the difficulties in the integration of theoretical knowledge into practical situations. Moreover, there was also a significant portion of respondents found to Sensed that patients provide information that is insufficient to form complete nursing care plans perhaps reflecting communication barriers and or inadequacies in patient data. (18.7% of the sample) The perception of as a worldwide culture that is not suitable for practice in the hospital (20.0%) was a cultural resistance that may affect its successful implementation. Time-consuming nature (18.7%) and lack of confidence (13.9%) for designing and implementing the nursing care plans also come out as barriers. Overall, these findings underscored a variety of individual barriers to overcome that healthcare institutions should consider in order to make a more seamless and effective integration of the nursing process into daily practice.

Figure 1.1, reported the overall perception of the participants on perceived individual barriers in implementation of nursing process. The majority (60%) of the participants reported high perceived individual barriers while 40% of the participants were reported low individual barriers in implementation of nursing process.



**Figure 1.1:** Pie-chart depicting overall perception about perceived individual barriers in implementation of nursing process.

### Perceived Organizational Barriers in Implementation of Nursing Process

Table 1.2, as given below reported the participant's responses to the questions regarding perceived organizational Barriers in Implementation of Nursing Process.

**Table 1.2. Perceived organizational barriers in implementation of nursing process, n=230**

Descriptions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Work overload and multiple functions (e. g. administrative work, requisition, and inventory) impede the implementation of nursing process.	<i>F</i>	32	53	15	53	77
	%	13.9%	23.0%	6.5%	23.0%	33.5%
High number of patients hinders the implementation of nursing process.	<i>F</i>	49	35	15	58	73
	%	21.3%	15.2%	6.5%	25.2%	31.7%
Non-availability of materials for documentation including printed care plan on the wards	<i>F</i>	51	46	21	41	71
	%	22.2%	20.0%	9.1%	17.8%	30.9%
Absence of evaluation system on implementation of the nursing process exist in my hospital	<i>F</i>	46	62	18	49	55
	%	20.0%	27.0%	7.8%	21.3%	23.9%
There is no appraisal /appreciation from organization on using nursing process.	<i>F</i>	44	56	8	60	62
	%	19.1%	24.3%	3.5%	26.1%	27.0%
Training of nurses on nursing process is not the culture of the hospital (no	<i>F</i>	37	62	18	45	68
	%	16.1%	27.0%	7.8%	19.6%	29.6%

periodic seminar on the topic)						
Hospital administration does not recognize nursing process as a framework of care delivery	<i>F</i>	44	43	16	56	71
	%	19.1%	18.7%	7.0%	24.3%	30.9%
Hospital administration does not support implementation of nursing process	<i>F</i>	49	54	17	46	64
	%	21.3%	23.5%	7.4%	20.0%	27.8%
There is no regular in-service training on the nursing process for nurses.	<i>F</i>	44	61	20	45	60
	%	19.1%	26.5%	8.7%	19.6%	26.1%

The information gathered from the subject population of 230 nurses is useful in gaining insights about the organizational barriers of the implementation of the nursing process. The 1st statement related to work overload and multiple functions showed a combined 56.5% of the respondents agreeing or strongly agreeing that these elements make it a hindrance for implementing the process of nursing. This implies that the wide range of responsibilities and administrative load that nurses are saddled with may affect their ability to effectively engage themselves in the nursing process. The second question represented 46.2% of respondents were agreed or strongly agreed, that of high number of patients hinders the implementation of nursing process. This means that staffing level and patient to nurse ratio may not be sub-optimal leading to utilization of the nursing processes.

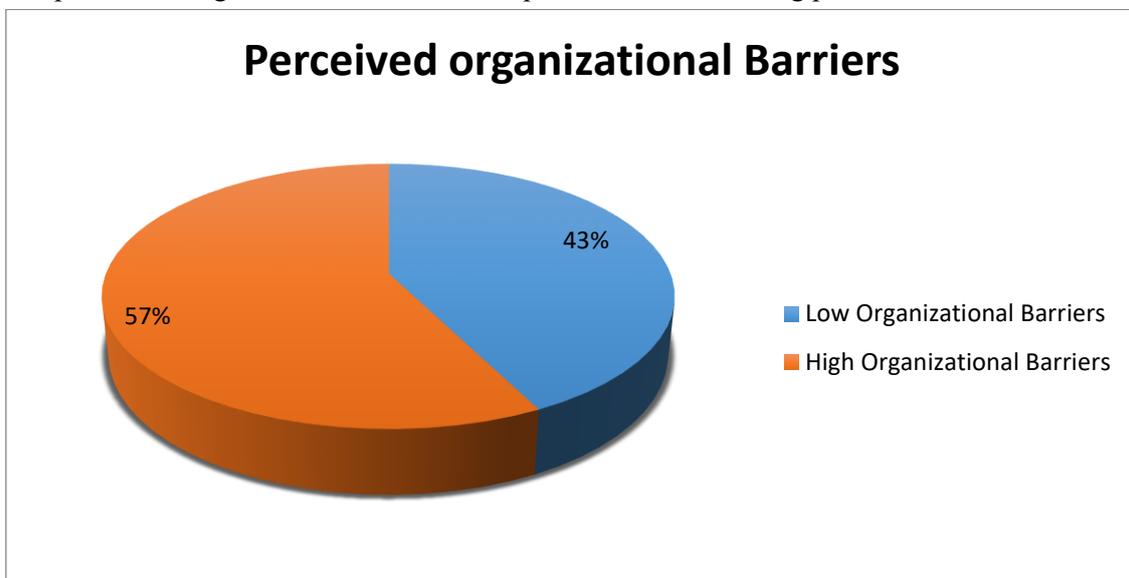
A paramount barrier found was the limited resources for documentation including physical care plans in print format with 42.2% of respondents agreeing or strongly agreeing response rate. The lack of an evaluation system was a concern for 48% of respondents, which indicated that a lack of a structured feedback mechanism in the hospital.

In the fifth statement there was absence of organizational appraisal or appreciation for the use of the nursing process and 50.2% of the respondents agreed with or had strong agreement to it. This suggests that there may be a lack of recognition for the efforts made by nurses in devising the NP in their day-to-day practices. The training culture within the hospital is mentioned on the sixth statement, in which 43.7% of the respondents agreed or strongly agreed that training on the nursing process is not a cultural norm. The seventh and eighth statements deal with the recognition and support from the administration of the hospital for the nursing process. A combined 50% of the respondents either agreed or strongly agreed that the administration has not recognized the nursing process as a structure for delivering patient care and has not supported the execution of the process.

The last statement shows that 45.7% of the respondents feel that there was no consistent training on the nursing process for nurses throughout their services. This raises possible deficiency with

continuous professional development of the nursing staff which could be improved by the establishment of regular in-service training programs. In sum, the data reveals several organizational barriers such as workload, lack of evaluations systems, inadequate recognition, resource availability and support from administration, and a poor training culture. Dealing with these issues is essential to optimizing how the nursing process is applied in the hospital and how overall patient care outcomes are achieved.

Figure 1.2, reported the overall perception of participants regarding perceived organizational barriers in implementation of nursing process. The majority (57%) of the participants reported high perceived organizational barriers in implementation of nursing process while 43% of the participants were reported low organizational barriers in implementation of nursing process.



*Figure 1.2:* Pie-chart depicting overall perception about perceived organizational barriers in implementation of nursing process.

## DISCUSSION

The nursing process is a core foundation of professional nursing practice that provides for individualized, systematic, and goal-directed patient care. However, in reality, it is predominantly implemented differently in different healthcare systems and regions based on local contextual, organizational, and individual factors. The evidence in studies done in Nigeria, Ethiopia, Sweden, Brazil and Namibia has shown that the successful adoption of the nursing process depends on the work experience, institutional support, and the level of knowledge of nurses and the congruence between the theoretical teaching and clinical practice. In congruence with these results, the current study has identified workload and various assigned responsibilities as barriers to implementation of the nursing process with 56.6% of the participants agreeing or strongly agreeing that these are challenges that prevent proper implementation of the nursing process. At the same time, a significant proportion of nurses in this study accepted the nursing process as an important mechanism for integrating nursing practice which reflects a positive professional orientation to its conceptual value.

The current study gives an in-depth look at both the implementation issues and the perceived impact of the nursing process on the clinical workflow. Organizational barriers were especially prevalent, with 57% of them saying high organizational-level obstacles were prevalent. This finding is consistent with previous studies that reported workload as a primary impediment where up to 83.75% of nurses had identified excessive workload as a significant barrier to the utilization of nursing process (Mahmoud & Bayoumy, 2014). Similarly, lack of time and administrative burdens came out as major constraints from previous studies. 68.2% of nurses reported lack of time while 62.8% reported problems with administration as constraints in earlier studies (Jamal et al., 2023). This parallelisms therefore suggest that systemic pressures of workload are a persistent problem in diverse healthcare contexts.

The effective implementation of the nursing process has been shown to rely greatly on the clinical experience of nurses, the support of institutions and professional knowledge (Yilak et al., 2022). In the current study, over half of the study participants had less than three years of work experience yet many showed they had a positive view of the nursing process and its potential benefits. This finding suggests that there may be relatively inexperienced nurses who have positive attitudes toward the nursing process; however, there may be barriers of practicality which prevent the consistent application of the process. Similar problems have been reported internationally such as lack of motivation, lack of adequate staffing, lack of knowledge of standardized nursing languages, and the lack of a link between theoretical education and the realities of clinical practice (Munangatire & Nambuli, 2022; Spazapan et al., 2022).

In contrast to the studies that focused on the clinical value of nursing care plans, the nurses in the current study perceived the implementation of nursing care plans to be time consuming and in some cases inadequate in improving patient outcomes. This perception can be attributed to the high patient loads, documentation requirements and lack of institutional reinforcement rather than limitations within the nursing process itself. Supporting this interpretation, a study conducted in Nigeria reported a significant number of nurses had failed to fully incorporate the nursing process into their daily work, including poor collaboration among colleagues (Ajemba et al., 2023), the main obstacle. Similarly, the present study showed that the approval of 23% of the participants showed that nursing process implementation should be the sole responsibility of nurse managers, implying that there may be a gap in responsibility sharing and professional ownership among the staff nurses.

Furthermore, both individual and organizations barriers were clearly seen in this study. Individual level barriers were insufficient motivation, confusion about nursing process steps, lack of confidence, and knowledge. These findings are aligned with other studies conducted in Iran and Ethiopia, that reported limited training exposure and inadequate awareness as a major constraint that affect nurses ability in implementing the nursing process effectively (Rajabpoor et al., 2018; Yilak et al., 2022). Organizational barriers found in the current study were high patient-to-nurse ratios, work overload, inadequate resources for documentation, failure to be recognized by administration, and no system for evaluation. Collectively, these barriers affect consistent use of the nursing process as well as potentially adversely affect quality of care and patient outcomes.

Overall, the results of this research support the evidence that barriers to nursing process implementation are multifaceted and interrelated. Addressing these challenges requires commitments by institutions and sufficient human resources, at the same time as continuous professional development and working with leadership, and the inclusion of controls and evaluation mechanisms, in order to reinforce the practical application of the nursing process in public-sector hospitals.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The nursing process is a key element of professional nursing practice and a systematic process for providing safe, effective, and patient-centered care. The results of this study have shown that implementation of nursing process in the public sector hospitals of South Punjab is considerably hampered by individual and organizational barriers. A significant percentage of the nurses experienced a high level of organizational barriers such as too much work, high number of patients to nurses, lack of adequate documentation resources, lack of administrative recognition, and lack of structured evaluation systems. These systematic challenges affect nurse's ability to apply all phases of the nursing process in a routine clinical practice consistently (Jamal et al., 2023; Mahmoud & Bayoumy, 2014).

At the individual level, barriers such as lack of motivation, lack of knowledge about nursing process steps, lack of confidence and perception of the nursing process as time consuming were common among the participants. Although a number of nurses recognized the theoretical worth and possible value of the nursing process and its benefits, practical limitations in the clinical environment hindered its effective use. Similar findings have been reported in research originating from similar healthcare settings; therefore, it is important to note that lack of training, experience, and the mismatch between theory and practice still affect the implementation of the nursing process (Löfgren et al., 2023; Yilak et al., 2022).

Overall, the study highlights that nursing process implementation barriers are multifactorial and are ingrained in the institutional structures and professional practice environments. Addressing these challenges is essential to the process of strengthening the delivery of nursing care, contributing to nursing professional autonomy, and improving patient outcomes. Without the focused intervention in organizations and in individuals, the full potential of nursing process as the framework for evidence-based nursing practice is unlikely to be achieved in the public-sector healthcare institutions.

### Recommendations

Based on the result of this study several recommendations are suggested in order to strengthen the effective implementation of the nursing process in the public sector hospital. At the organizational level, the administrations of hospitals should place greater emphasis on adequate staffing and workload redistribution to lower excessive patient-to-nurse ratios and administrative burden. Ensuring the availability of standardized documentation tools such as nursing care plan formats, electronic or paper-based resources are essential to facilitate consistent nursing process application (Mahmoud & Bayoumy, 2014).

Regular in-service training programs and continuous professional development initiatives should be implemented that will enhance knowledge, confident, and practical skills of nurses as it pertains to the nursing process. Such training should focus on the use of standardized nursing languages, critical thinking and translation of theory into clinical practice (Ojo & Olaogun, 2023; Yilak et al., 2022). Additionally, the implementation of formal evaluation and feedback mechanisms can help to promote accountability and strengthen adherence to nursing process standards.

At a managerial level, nursing leadership should take an active role in supporting and acknowledging the use of the nursing process as a core framework for the delivery of care. Positive reinforcement, performance appraisal systems and professional recognition may promote motivation in nurses and a sense of ownership in the implementation of the nursing process (Lofgren et al., 2023). Encouragement of team work and shared responsibility amongst nursing staff can also further enhance team work and negate any misconceptions about the nursing process implementation being the sole responsibility of managers.

Finally, future research is recommended to explore interventional strategies to reduce identified barriers such as workload management models, educational interventions and policy reforms. Longitudinal and mixed-methods studies may yield more in-depth information on the effectiveness of such interventions and support the formulation of context-specific strategies for improving nursing practice and patient care outcomes in resource-limited healthcare settings.

#### DATA AVAILABILITY

The data supporting the findings of this study are not publicly available due to restrictions imposed by the institute and the supervising authority. As the corresponding author, I can provide the data upon reasonable requests, subject to approval from the relevant institutional authorities.

#### CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest regarding the publication of this manuscript. There are no financial, personal, or institutional relationships that could influence or be perceived to influence the work reported in this study.

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## REFERENCES

- Ackley, B. J., Ladwig, G. B., Makic, M. B. F., Martinez-Kratz, M. R., & Zanotti, M. (2021). *Nursing diagnosis handbook: An evidence-based guide to planning care* (12th ed.). Elsevier.
- Ajemba, M. N., Eze, P. N., Arene, E. C., Ugo, C. H., & Osuji, R. C. (2023). Implementation of nursing process at Nnamdi Azikiwe Teaching Hospital, Anambra State, Nigeria. *International Journal of Nursing Practice*, 29(3), e13124.
- Areri, H. A., Getie, H., Guta, A., & Simegn, B. (2021). Exploring the experience of nurses on nursing process implementation in Northwest Ethiopia. *Nursing Open*, 8(6), 3024–3032.
- DeLaune, S. C., Ladner, P. K., McTier, L., & Tollefson, J. (2023). *Fundamentals of nursing: Standards and practice* (5th ed.). Cengage Learning.
- Harrington, L. (2015). American Nurses Association releases new scope and standards of nursing informatics practice. *AACN Advanced Critical Care*, 26(2), 93–96.
- Jamal, Z., Shaheen, G., Shaheen, A., Bibi, N., Iqbal, J., & Sultan, A. (2023). Nurses' knowledge regarding nursing process and barriers in its application. *Pakistan Journal of Health Sciences*, 4(7), 52–56.
- Löfgren, U., Wälivaara, B. M., Strömbäck, U., & Lindberg, B. (2023). The nursing process: A supportive model for nursing students' learning during clinical education. *Nurse Education in Practice*, 72, 103747.
- Mahmoud, M. H., & Bayoumy, H. M. (2014). Barriers and facilitators for execution of nursing process from nurses' perspective. *International Journal of Advanced Research*, 2(2), 300–315.
- Makota, E. P., Kyambile, W. P., Seif, V., Mwalukolo, A., & Ulomi, E. (2023). Clinical utilization of nursing process in improving patient outcomes and its associated factors. *Open Journal of Nursing*, 13(8), 537–550.
- Moorhead, S., Swanson, E., Johnson, M., & Maas, M. (2023). *Nursing outcomes classification (NOC): Measurement of health outcomes* (7th ed.). Elsevier.
- Munangatire, T., & Nambuli, S. M. (2022). Nursing students' perceptions and experiences of utilizing the nursing process at a university teaching hospital in Namibia. *International Journal of Africa Nursing Sciences*, 16, 100393.
- Ojo, I. O., & Olaogun, A. A. (2023). Utilisation and challenges of standardised nursing languages in nursing process booklets in selected tertiary health institutions in Nigeria. *International Journal of Africa Nursing Sciences*, 18, 100552.
- Potter, P. A., Perry, A. G., Stockert, P. A., & Hall, A. (2021). *Fundamentals of nursing* (10th ed.). Elsevier.
- Rajabpoor, M., Zarifnejad, G. H., Mohsenizadeh, S. M., Mazloum, S. R., Pourghaznein, T., & Mashmoul, A. (2018). Barriers to the implementation of nursing process from the viewpoints of faculty members, nursing managers, nurses, and nursing students. *Journal of Holistic Nursing and Midwifery*, 28(2), 137–142.

- Rodríguez-Suárez, C. A., Hernández-Padilla, J. M., & Granero-Molina, J. (2023). Effectiveness of a standardized nursing process using NANDA-I, NIC, and NOC: A systematic review. *Journal of Nursing Scholarship*, 55(2), 185–194.
- Shabaan, E. G., Hamed, S. M., Sayed, Z. A., Ragab, O. H. G., & Abdelhafez, K. H. (2021). Adapting NANDA nursing process as an approach of care for COVID-19 isolated patients. *Assiut Scientific Nursing Journal*, 9(24), 12–30.
- Spazapan, M. P., Marques, D., Almeida-Hamasaki, B. P., & Carmona, E. V. (2022). Nursing process in primary care: Nurses' perceptions. *Revista Brasileira de Enfermagem*, 75, e20210589.
- Stannard, D. (2019). A practical definition of evidence-based practice for nursing. *Journal of PeriAnesthesia Nursing*, 34(5), 1080–1084.
- Toney-Butler, T. J., & Thayer, J. M. (2022). *Nursing process*. StatPearls Publishing.
- Yilak, G., Getie, A., Fitwi, A., Wondmieni, A., & Gebremeskel, T. (2022). Implementation of nursing process and its associated factors among nurses in a comprehensive specialized hospital. *Nursing: Research and Reviews*, 12, 111–119.
- Tolera, G. G., Getie, A., Fitwi, A., & Wondmieni, A. (2025). Increasing the rate of nursing process implementation: A quality improvement project. *BMJ Open Quality*, 14(1), e002345.
- Ojo, I. O., Olaogun, A. A., & Adejumo, O. (2023). Standardised nursing language utilisation and clinical documentation outcomes. *Journal of Clinical Nursing*, 32(11–12), 2671–2680.
- Makota, E. P., & Ulomi, E. (2024). Organisational determinants of nursing process utilisation in public hospitals. *International Nursing Review*, 71(1), 89–98.
- Löfgren, U., & Lindberg, B. (2024). Bridging theory–practice gaps in nursing process education. *Journal of Nursing Education*, 63(4), 214–220.