

# Study of Nurses' Perceptions and Practices regarding the Nursing Process (NP) in Dakar, Senegal, in 2025

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## Abstract

**Introduction:** The nursing process, also known as the clinical process, is a scientific process. It is a tool that can help nurses organize patient care. **Objective:** To study nurses' perceptions and practices regarding the nursing process in two large hospitals in Dakar. **Materials and Methods:** This is a descriptive cross-sectional study conducted from June 1 to June 30, 2025, among nurses at Dalal Jamm Hospital and Dakar Main Hospital. Data were collected using a questionnaire, extracted in Excel format, and imported into R software for analysis. The arithmetic mean, standard deviation, and frequencies were used for the description. **Results:** The response rate was 74.25% (n = 75). The average age was 32.3 years, the sex ratio favored women, and 56% had a state diploma. Most nurses (86.7%) had received specific training on nursing process (NP). Although 92% of respondents reported being motivated, only 52% regularly apply nursing process and 72% encountered at least some implementation problems. Lack of continuing education (69.3%) and lack of support (53.3%) were identified as significant institutional barriers. **Conclusion:** In the two hospitals studied, nurses express favorable perceptions and strong motivation toward the NP, but its application remains uneven: barely half implement it regularly, and numerous obstacles hinder its systematization.

## Keywords

Perceptions, Practices, Nurses, Nursing Process, Senegal

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## 1. Introduction

The nursing process (NP), also known as the clinical process, is a structured scientific process. It is characterized by an orderly approach to thinking and a logical approach to problem solving that suggests that structure underlies all sciences, and seeks to structure nursing care according to the needs of the patient [1]. Implementing a NP involves undertaking a process of reflection to identify health problems and provide personalized and effective solutions [2]. The NP is a key tool for the professionalization of nursing practices. It promotes professional autonomy, the objectification of practices, and continuity of care [3]. However, its application remains controversial, both in teaching and in clinical practice [4]. These guidelines can sometimes be perceived as restrictive or too cumbersome to implement due to issues related, for example, to organization, available time, or the nature of care [5] [6].

Nursing practice requires constant vigilance, as every action or decision carries a potential risk for the patient. This fact gives the nursing process a preventive and safety role, increasing clinical judgment and guiding the supervision of novice nurses by experienced nurses [7]. Furthermore, the NP appears to be a pillar of quality care, as it ensures traceability, personalization, and continuous evaluation of interventions [8] [9].

Historically, the concept of the clinical approach in nursing emerged in the 1950s, alongside the evolution of nursing education towards academic settings [10]. In Quebec, France, and elsewhere, it has gradually established itself as a problem-solving method, similar to medical approaches, while emphasizing the relational and humanistic dimension of care [11]. In this sense, the NP represents a fundamental methodological framework, guaranteeing personalized and continuous care that is also adapted and promoting the recognition of nursing as a science in its own right.

The objective of this study is to examine nurses' perceptions and practices regarding the nursing process in two (02) major hospitals in Dakar in 2025.

## 2. Methodology

### 2.1. Study Setting

The study was conducted at Dalal Jamm Hospital and Dakar Main Hospital. Dalal Jamm Hospital is located in the commune of Guédiawaye in the northeastern suburbs of Dakar, about 15 kilometers from the city center. Located in a densely populated area, it is one of the country's newest modern level 3 hospitals. It has a capacity of over 300 beds and covers all medical and surgical specialties. Its design and layout meet international standards for safety, hygiene, and quality of care.

The Dakar Main Hospital is located in the heart of the Senegalese capital, in the Plateau district, close to the autonomous port of Dakar and the Presidency of the Republic. It is a level 3 military teaching hospital, built in 1884. It has more than 400 beds and offers highly specialized care.

## 2.2. Type and Period of the Study

This is a descriptive cross-sectional study conducted from June 1 to June 30, 2025, at Dalal Jamm Hospital and Dakar Main Hospital among nurses.

## 2.3. Inclusion Criteria

All nurses were included in this study who:

- who had been working for at least one year at Dalal Jamm Hospital or the Main Hospital;
- who had been working for at least one year in a hospital in the study area and who agreed to participate in the study.

## 2.4. Exclusion Criteria

- Less than one year of clinical practice experience in a hospital in the study area.
- Being on extended leave or not present at the time of the study;
- Not agreeing to participate in the study

## 2.5. Sampling

This was a comprehensive study. All individuals who met the selection criteria were surveyed by identifying 101 nurses from the human resources rosters via the Head of the department.

## 2.6. Data Collection Procedure

A questionnaire was designed and tested to identify perceptions and practices regarding NP. It consisted of three parts: one on the participant's sociodemographic information, one on perceptions, and the last on practical. This tool was digitized using the *Open Data Kit* and loaded onto the investigators' Android tablets. The investigators were trained on the collection tool and ethical considerations. During collection, the data collected was instantly saved on the ONA online server.

## 2.7. Data Processing

The data were extracted in the form of an Excel file before being imported into R software for statistical analysis. The arithmetic mean, standard deviation, and frequencies were used for the description.

## 2.8. Ethical Considerations

This study was approved by the local authorities of the hospitals concerned, respectively by note no. 00255/MSAS/CHNDJ/DIR/SP and no. 00246/HPD/MC/SF dated March 12, 2025.

Participants were informed of the objectives of this study and informed consent was obtained by signature. The study was anonymous and the information collected was only accessible to members of the research team.

### 3. Results

#### 3.1. Sociodemographic Data

The participation rate was 74.25%; of the 101 nurses working at the study sites, 75 agreed to participate in the study.

The age of participants ranged from 20 to 54 years, with a median age of 31 years. The mean age was 32.3 years  $\pm$  7.8 years. The sex ratio was 1.78 in favor of women.

Those with a state diploma represented 56.0% of participants. In terms of professional seniority, 68% had less than 10 years of experience.

**Table 1** presents all the sociodemographic data for the participants.

**Table 1.** Sociodemographic data (N = 75).

	Absolute frequencies (n)	Absolute frequencies (%)
<b>Gender</b>		
Female	48	64
Male	27	36
<b>Level of education</b>		
State nursing diploma	42	56.0
Bachelor's degree in nursing	31	41.3
DU in PCI	1	1.3
Master's in Nursing	1	1.3
<b>Professional experience</b>		
Less than 5 years	26	34.7
5 - 10 years	25	33.3
11 - 15 years	11	14.7
16 - 20	8	10.7
Over 20	5	6.7
<b>Current service</b>		
Medicine	21	28
General medicine	21	28
Other	21	28
Surgery	5	6.7
Maternity	6	8
Pediatrics	1	1.3

#### 3.2. Nurses' Perceptions of the Care Process

The results in **Table 2** below show that most respondents (86.7%) indicated that they had received specific training on the NP and almost 90% were familiar with its stages. This indicates that theoretical integration is largely possible. In addition,

69.3% said they talked about the NP “very often” and 22.7% said “often,” indicating that there is indeed interest in the tool.

**Table 2.** Nurses’ perceptions of the nursing process (NP) (N = 75).

	Absolute frequencies (n)	Absolute frequencies (%)
<b>Specific training on the NP</b>		
Yes	65	86.7
No	10	13.3
<b>Frequency of discussions about the NP</b>		
Very often	52	69.3
Often	17	22.7
Rarely	6	8
<b>Are you familiar with the stages of the NP?</b>		
Yes	67	89.3
No	8	10.7
<b>How would you rate your level of knowledge about IT?</b>		
Good	29	38.7
Very good	28	37.3
Average	16	21.3
Low	2	2.7
<b>Need for ongoing training on IT systems</b>		
Yes	73	97.3
No	2	2.7
<b>Level of motivation in practicing NP</b>		
Very motivated	41	54.7
Motivated	28	37.3
Not very motivated	6	8
<b>Does IT improve the quality of patient care?</b>		
Yes, very much	70	93.3
Yes, somewhat	4	5.3
No, not really	1	1.4
<b>Level of importance of the IT department</b>		
Very important	73	97.3
Moderately important	2	2.7
<b>Involvement of management in the NP</b>		
Yes	57	76
No	18	24
<b>Existence of oversight in the application of the NP</b>		
Yes	57	76
No	18	24

Regarding their level of knowledge, most respondents rated themselves as “good” (38.7%) or “very good” (37.3%), while 21.3% rated their knowledge as average and 2.7% as poor. This divergence highlights the need for convergence in skills. According to another single-answer question, 97.3% of participants believe that continuing education and training are essential, reinforcing the belief that learning never stops.

Overall, motivation is high, with 92% of professionals who responded to the survey indicating that they are motivated or highly motivated, contrasting with only 8% who are less motivated. 93.3% also believe that NP significantly improve the quality of care, and 97.3% consider them to be very valuable in clinical care.

But at the institutional level, there are constraints: just under 24% of participants say that management is not committed and that the application of NP is not monitored. This may indicate that, from an individual perspective, there may be strong buy-in, but organizational support is still not in place for effective and structured use.

### 3.3. Application of the Nursing Process

The results in **Table 3** below show the application of the nursing care approach (NP) in the departments. More than half of the respondents (52%) apply the NP, while less than half (48%) do not, with a slight imbalance between them in certain practices.

When examining the frequency of application, only 34.7% and 30.7% report applying it “always” and “often,” respectively, compared to 29.3% who apply it “rarely” and 5.3% who “never” apply it. This suggests that the NP, although recognized and considered applicable, is not yet well integrated into daily routines.

Nearly three-quarters of participants reported serious implementation problems (72%).

In fact, these difficulties seem to be closely linked to other aspects of the organization: for example, continuing education is not available to nearly 70% of respondents, and information collection systems are lacking in more than half (53.3%) of these institutions, calling into question the ease with which it would be possible to transition to true NP procedures in such circumstances.

The main obstacles therefore lie in both organizational processes and educational requirements.

On the other hand, there was very strong conceptual identification: 89.3% of respondents consider the integration of NP with technology to be “very useful.” This shows openness and a willingness to change.

**Table 3.** Application of the nursing care approach by nurses (N = 75).

	Absolute frequencies (n)	Absolute frequencies (%)
<b>Do you regularly apply the NP in your department?</b>		
Yes	39	52
No	36	48

**Continued**

<b>How often do you apply the NP?</b>		
Always	26	34.7
Often	23	30.7
Rarely	22	29.3
Never	4	5.3
<b>Difficulties in implementing the NP</b>		
Yes	54	72
No	21	28
<b>Existence of continuing education in IT departments</b>		
No	52	69.3
Yes	23	30.7
<b>Existence of data collection tools within the structure</b>		
No	40	53.3
Yes	35	46.7
<b>Usefulness of integrating technology into the IT department</b>		
Very useful	67	89.3
Moderately useful	7	9.3
Not useful	1	1.3

**4. Discussion****4.1. Nurses' Perceptions of the Nursing Process**

The results of this study indicate that knowledge remains one of the determining factors in the application of the nursing care process. 89.3% of nurses are familiar with the stages of the nursing care process. And among these nurses, 86.7% reported having received specific training on the nursing process during their studies. Contrary to the results of the study conducted by Hagos *et al.*, which measured the level of knowledge of the nursing care process, revealed that 90% of participants had insufficient knowledge of the NP [12]. Similarly, the study conducted in sub-Saharan Africa showed that nurses lack sufficient knowledge to enable them to implement the nursing process [13].

In general, the nurses who participated in the study had a good knowledge of the nursing process. Despite this, 97.3% of them expressed a need for continuing education. 69.3% said they had no continuing education. According to current practice standards in the United States and Canada, nursing practice requires the effective use of the nursing process and professional participation in activities that contribute to the ongoing development of knowledge about this methodology [14].

Carrying out a nursing process means doing all the thinking necessary to identify nursing care problems and find personalized and effective solutions to them.

The perception of the nursing process is essential in nursing science, as it provides an understanding of acceptance, resistance, and issues surrounding professional change. In this study, 97.3% of nurses believe that the nursing process is very important. It therefore follows that nurses have a good perception of this process.

#### 4.2. Application of the Nursing Process by Nurses

The nursing process is a widely accepted method and has been proposed as a scientific method for guiding procedures and qualifying nursing care [15]. The results showed that only 52% of nurses apply the nursing process. This shows that the implementation is not fully effective in these facilities. These results are comparable to those found in the study conducted in northern Ethiopia, where the majority of respondents, 150 (75%), stated that the nurse/patient ratio was not optimal for applying the nursing process. Although about 118 (59%) of respondents affirmed that their level of education was adequate to apply the nursing process [12]. These studies strengthen the research conducted in sub-Saharan Africa, which has shown that stressful working environments (high workload, limited nursing care resources, lack of organizational support) hinder the implementation of the nursing process, and that low staffing levels limit its execution [13]. Another study conducted in South Africa also showed that the main barriers to applying the nursing process are the lack of continuing education, insufficient resources, and the absence of a structured program [16].

The majority (76%) of nurses stated that management was involved in supervising the nursing process, which should in fact facilitate its implementation in these structures. This contrasts with the study conducted in Ethiopia, which found that only 47% of respondents stated that hospital administrations supported the application of the nursing process [12].

The study showed that 72% had difficulties implementing the nursing process. These results differ from a study conducted in the central part of Taiwan region, which found that nurses generally followed the nursing process and documentation sequence to establish care plans [17]. These findings also contrast with results from Ethiopia, where a cross-sectional study reported that 73.9% of nurses implemented the nursing process in their daily practice, highlighting a higher adherence compared to our context [18].

The majority (89.3%) of participants find the integration of technological tools in the application of the nursing process very useful. These variations can be explained by differences between study sites, changes in the nursing profession, variations in resources and technologies, government commitment, level of nursing practice, and the lack of clear nursing standards [12].

### 5. Conclusions

Caregivers are well trained, motivated, and convinced of the relevance of NP, but its practical application is hampered by a lack of follow-up and hierarchical support.

Despite recognition of the relevance of nursing process and a willingness to integrate technology, their implementation remains limited due to structural barriers (lack of training, lack of support).

According to the results, NP is perceived as relevant and there is an intention to use the technology, but little use has been made of NP for structural reasons (lack of training, support).

Recommendations could be made to hospital administrators, including the implementation of structured mentoring programs and the development of standardized digital documentation tools to promote the application of the nursing process.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] Lara Monod, T.B. (2013) The Nursing Approach at the Haute Ecole de Santé (Geneva): Factors Facilitating Learning. Haute école de santé Genève.
- [2] Hoggui, M. (2015) The Impact of the Nursing Approach on the Quality of Care. [https://paramedz.com/infirmier-memoire/memoire-infirmiers-limpact-de-la-demarche-infirmier-sur-la-qualite-de-soins/?utm\\_source=chatgpt.com#google\\_vignette](https://paramedz.com/infirmier-memoire/memoire-infirmiers-limpact-de-la-demarche-infirmier-sur-la-qualite-de-soins/?utm_source=chatgpt.com#google_vignette)
- [3] Munyaneza, A. (2004) Evaluation of Nursing Care for Hospitalized Patients during Night Duty: Case of Ruhengeri Hospital, March 2004. Kigali Health Institute. [https://www.memoireonline.com/04/08/1007/m\\_evaluation-infirmiere-patients-hospitalises-garde-de-nuit-ruhengeri0.html](https://www.memoireonline.com/04/08/1007/m_evaluation-infirmiere-patients-hospitalises-garde-de-nuit-ruhengeri0.html)
- [4] CIUSSS de la Capitale-Nationale (2024) Nursing Clinical Approach: Explanatory Document. <https://www.ciusss-capitalemationale.gouv.qc.ca/sites/d8/files/docs/ProfSante/Infirmier/Document-explicatif-Demarche-clinique-soins-infirmiers.pdf>
- [5] Ead, H. (2019) Application of the Nursing Process in a Complex Healthcare Setting. <https://community.cna-aiic.ca/dev-cn-french/blogs/ic-contenu/2019/09/16/application-de-la-demarche-de-soins-dans-un-servic>
- [6] Jonathan (2021) Entraide Esi Ide. <https://entraide-esi-ide.com/la-demarche-de-soins-2/>
- [7] Therrien, D. and Dumas, L. (2001) Critical Thinking and the Nursing Care Process during Clinical Placements. 1-11.
- [8] ANAES (2003) Patient Records: Regulations and Recommendations.
- [9] Chergui, A. and Rizoug, T. (2015) Impact of Nursing Records on Organization. [https://paramedz.com/infirmier-memoire/memoire-infirmier-limpact-de-dossier-de-soins-infirmier-sur-lorganisation-des-soins/?utm\\_source=chatgpt.com](https://paramedz.com/infirmier-memoire/memoire-infirmier-limpact-de-dossier-de-soins-infirmier-sur-lorganisation-des-soins/?utm_source=chatgpt.com)
- [10] Hivon-Lizé, T. (1993) Teaching the Clinical Approach: Perceptions of Nursing Teachers at Cégep de l'Abitibi-Témiscamingue.
- [11] Krol, P. and Lavoie, M. (2015) A Dialectic on Watson's Theory of Caring.
- [12] Hagos, F., Alemseged, F., Balcha, F., Berhe, S. and Aregay, A. (2014) Application of Nursing Process and Its Affecting Factors among Nurses Working in Mekelle Zone Hospitals, Northern Ethiopia. *Nursing Research and Practice*, **2014**, Article ID:

675212. <https://doi.org/10.1155/2014/675212>
- [13] Tadzong-Awasum, G. and Dufashwenayesu, A. (2021) Implementation of the Nursing Process in Sub-Saharan Africa: An Integrative Review of Literature. *International Journal of Africa Nursing Sciences*, **14**, Article 100283. <https://doi.org/10.1016/j.ijans.2021.100283>
- [14] Pokorski, S., Moraes, M.A., Chiarelli, R., Costanzi, A.P. and Rabelo, E.R. (2009) Nursing Process: From Literature to Practice. What Are We Actually Doing? *Revista Latino-Americana de Enfermagem*, **17**, 302-307. <https://doi.org/10.1590/s0104-11692009000300004>
- [15] Lauri, S. (1982) Development of the Nursing Process through Action Research. *Journal of Advanced Nursing*, **7**, 301-307. <https://doi.org/10.1111/j.1365-2648.1982.tb00245.x>
- [16] Takalani, E. and Tebogo, M. (2020) Nurses' Practices During Implementation of the Nursing Process at a Selected Public Hospital of Limpopo Province, South Africa: A Qualitative Pilot Study Analysis. *The Open Public Health Journal*, **13**, 309-315.
- [17] Lee, T. (2005) Nursing Diagnoses: Factors Affecting Their Use in Charting Standardized Care Plans. *Journal of Clinical Nursing*, **14**, 640-647. <https://doi.org/10.1111/j.1365-2702.2004.00909.x>
- [18] Adraro, Z. and Mengistu, D. (2020) Implementation and Factors Affecting the Nursing Process among Nurses Working in Selected Government Hospitals in Southwest Ethiopia. *BMC Nursing*, **19**, Article Number 105. <https://doi.org/10.1186/s12912-020-00498-8>