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# **RESEARCH ARTICLE**

# Exploration of In-Service Training Needs for Nurses Implementing the Nursing Process at Regional Hospitals of Limpopo Province, South Africa

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#### Abstract:

#### Background:

In-service training of the nursing employees plays an eminent role in developing the empowerment of nurses and the promotion of the overall quality of patient care in hospitals. Nurses with constant attendance of training on the nursing process show improved quality of patient care in most clinical health care settings. Nurses in hospitals in Limpopo province experience challenges regarding in-service training on the nursing process approach during patient care. The current study is imperative to the nursing practice; hence, in-service training remains one of the workplace activities that keep the nurses abreast with the latest development in their profession.

#### **Objectives:**

The purpose of this study is to explore and describe the in-training needs for nurses implementing the nursing process at regional hospitals of Limpopo province, South Africa.

#### Methods:

A qualitative explorative, descriptive, phenomenological and contextual research design was applied in the study. A nonprobability purposive sampling method was utilised to select professional nurses at the regional hospitals. Semi structured in-depth interviews using an interview guide was consumed to collect data from eighteen participants, then the data was analysed by means of phenomenological reduction method where themes and sub-themes were established.

#### Results:

The study discovered that there was no in-service training for professional nurses on the nursing process and there was a lack of management support to nurses implementing the nursing process.

#### Conclusion:

The study recommended the need to develop a training programme to enhance continuous in-service training on the nursing process in hospitals of Limpopo province.

Keywords: Exploration, In-service training, Needs, Implementation, Nursing, Nursing process, Regional hospital.

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# **1. INTRODUCTION**

In-service training is the foremost, vital method used in many areas of employment for the capacity of developing employees to provide quality services in a competent, safe, and efficient manner [1]. "Personnel in-service training, empowerment and development provides an effective assurance for constant growth and success of every institution as the competencies of human resources are enhanced" [2, 3]. Commonly, in-service training is a collection of logical and scientifically scheduled educational activities to advance the employees' performance within an institution, therefore, refining the productivity and quality of services [4, 5]. Inservice training of the nursing staff is significant and an operative approach in advancing the quality of patient care in every hospital service [6].

The prerequisite to training the health workforce on patient care procedures is a crucial component that should include all

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levels of nurses including those in management and other staff members involved in patient care services [7]. "In-service training of nursing personnel plays a prominent role in increasing the empowerment of nurses and promoting the provision of high-quality health care services" [6]. Many studies done on the significance of in-service training internationally indicate that in-service training advances the quality of nursing care rendered to patients in health care institutions. However, there are limited studies piloted in the South African context on in-service training in the nursing process [8].

"Health care institutions are in need funding to support training instigated in various health sectors and this remains a challenge affecting in-service training of nurses and they remain incompetent and failing the health care systems" [7]. Another study [9] "alluded that before holding in-service training courses, there should be an assessment of training needs of staff to have a better proficiency, quality and planning for evaluating educational requirements of nurses also has a significant effect on advancing the results". Furthermore, inservice training on the nursing process approach as a standard in nursing practice is mandatory for preventing irretrievable mistakes during patient care [10]. Therefore, the objective of this study was to explore and describe the in-service training needs for professional nurses during the implementation of the nursing process in regional hospitals of Limpopo province. "The findings of this study are expected to raise awareness to the department of health in Limpopo province on the prominence of continuing in-service training for professional nurses to improve implementation of the nursing process resulting in the provision of quality patient care in healthcare institutions". The study was guided by Edmund Hussel's transcendental phenomenological framework developed in the early 1906s.

# 2. MATERIALS AND METHODS

#### 2.1. Problem Statement

Professional advancement is a key in nursing practice to empower nurses in acquiring knowledge, skills, and professional competence. However, with the current developments in nursing practice, nurses need continuous inservice training sessions to adapt to such changes. Research findings discovered that regional hospitals of Limpopo province lack in-service training programme to ensure continuous in-service training of nurses implementing the nursing process during patient care. Thus, the study pursues to explore in-service training needs amongst nurses implementing nursing process during patient care. Furthermore, a lack of inservice training on the nursing process approach as a standard in nursing practice, deprives patients of quality patient care.

#### 2.2. Objectives of the Study

The objective of the study is to explore and describe the inservice training needs for nurses to implement the nursing process at regional hospitals in Limpopo province, South Africa.

#### 2.3. Significance of the Study

The findings are vital to the nursing profession as they may provide the much-needed direction to the provincial department of health to monitor, evaluate and strengthen inservice training programmes on the nursing process in hospitals to develop quality patient care. The researcher is General Nursing Science Lecturer facilitates the nursing process and holds a qualification in health service management interested in the improvement of nursing care through in-service training of staff.

#### 2.4. Research Methods and Design

A qualitative, explorative, descriptive, phenomenological and contextual research design and methodolgy were utilised to explore and describe the in-service training needs for nurses implementing the nursing process at regional hospitals of Limpopo province, South Africa. The professional nurses were allowed to explain and describe extensively their in-service training needs in the nursing process within the context of their work environment. The researcher employed Hurssel's theoretical framework which are retention, bracketing and eidentic phases. The study's phenomenological reduction was achieved through cleaning of raw data and elimination of all overlapping, repetitive and vague expressions for participants.

#### 2.5. Sampling and Sample

"The population included all professional nurses who were implementing the nursing process at general wards of regional hospitals of Limpopo province, South Africa. A nonprobability purposive homogenous sampling technique was applied to obtain 18 professional nurses to participate in the study. A homogenous purposive sampling was utilized because the researcher required to have participants who share the same characteristics that will assist their in-service training needs on implementation of the nursing process during patient care. A sample was not predetermined before the data collection process but, data was collected until saturation was achieved with eighteen participants with no refusal to participate noted.

# 2.6. Setting

The study was conducted at five regional hospitals in Limpopo province, South Africa. The hospitals receive patients who are transferred from district hospitals in the province. The participants were selected from five regional hospitals and these were chosen so that the researcher can explore if the participants hold similar experiences on their need for implementation of the nursing process from different contexts.

#### 2.7. Data Collection

Data were collected in the public hospitals by the researcher, a female lecturer at the University of Limpopo through a semi-structured in-depth face-to-face interview using an interview guide to describe the shared meaning by participants. The interview guide was piloted before it was used for data collection. The researcher is an experienced researcher trained in research methodology, teaching research methodology to undergraduate students and supervising masters' students. A central question was asked to all participants "Could you share with me about the in-service training on the nursing process in your hospital?" The question was followed by probing questions based on the answers of participants and as they appear in the interview guide to obtain in-depth information. "Quality of data was achieved through the use of communication skills, listening skills, reflecting, and summarizing during exploration, and description of their inservice training needs on the nursing process during patient care" [11]. Data was collected using a voice recorder as transcribed verbatim and field notes were written to capture non-verbal cues. The duration of the interviews was between 30 to 45 minutes. Data collection was conducted from the period December 2017 to September 2018 and the eighteen participants were achieved after continuous repeated in-depth interviews where unnecessary information was removed and bracketing or epoche of the researcher's preconceived ideas was done throughout. The raw data collected eliminated the unnecessary features to remain with the possible meaning of the in-service training needs of nurses on implementation of the nursing process.

#### 2.8. Data Analysis

The collected data were analysed through phenomenological reduction steps where the listing of relevant expressions was done along with the reduction of experience, thematic grouping to develop themes and sub-themes, creating individual descriptions and a narrative descriptions of individual descriptions [12]. All similar topics were grouped and arranged as main themes where sub-themes were developed on the training needs of professional nurses implementing the nursing process. Feedback on the findings was not provided by the participants. The independent coder and the researcher were part of the analysis and coding of collected data and an agreement was reached with the researcher on the identified themes and sub-themes as represented in Table **1** below. No software was used for data management.

# Table 1. Themes and sub-themes.

Themes	Sub-themes	
1. Perceived benefits of an in-service training programme on the nursing process	1.1. Empowerment of nurses with knowledge and skills in the nursing process 1.2. Provision of quality patient care	
	<ul><li>1.3. Increasing staff morale and motivation</li><li>1.4. Promote sharing of information amongst nursing staff</li></ul>	
2. Suggestions to improve in-service training on the nursing process	<ul> <li>2.1. Involvement of staff in identifying their own in-service training needs.</li> <li>2.2 Inclusion of all categories of nurses during training.</li> <li>2.3 Management support and involvement in in-service training</li> </ul>	

#### 2.9. Trustworthiness of the Study

Measures to warrant trustworthiness were adhered to throughout the study to ensure the accuracy and truth value of the study [13]. Transferability was safeguarded through the used purposive sampling method to select professional nurses to participate in the study. Dependability was enriched by involving an independent coder as the second author. Confirmability was warranted through taking field notes and the use of a voice recorder during data collection and kept as an audit trail. A proper depiction of the methodology, minimising the researcher's biases through bracketing and prolonged engagement where data was collected for ten months, to enhance the credibility of the study.

## 2.10. Ethical Consideration

Ethical clearance was attained from Turfloop Research and Ethics committee (TREC/264/2017: PG). The researcher acquired permission to conduct the study from the Limpopo provincial department of health as well as from the Chief Executive Officers and nursing management of the regional hospitals and participants themselves. Participants were given all possible information about the study including the reason for conducting the study and gave written informed consent. Participation was voluntary and confidentiality, privacy and anonymity of participants were maintained throughout. The use of audio recordings and taking of field notes during interviews was explained to the participants.

# **3. RESULTS**

#### 3.1. Presentations of Research Findings

Theme and sub-themes of the exploration of in-service training needs on the nursing process in regional hospitals of

Limpopo province is represented in Table 1.

# 3.1.1. Theme 1: Perceived Benefits of an In-service Training Programme on the Nursing Process

"The findings of the study revealed that there are perceived benefits for a continuous in-service training programme for nurses who are implementing the nursing process during patient care. The benefits are aimed at empowering nurses with knowledge and skills in the nursing process, improving the quality of patient care, increasing staff morale, motivation, and promoting of sharing of information amongst nursing staff. Below is a discussion of the sub-themes".

# <u>3.1.1.1. Sub-theme 1.1. Empowerment of Nurses with</u> <u>Knowledge and Skills in the Nursing Process</u>

Professional nurses denoted that they need to be empowered with knowledge and skills when implementing the nursing process during patient care. Nurses articulated that they lack efficient knowledge and skills to successfully implement the nursing process.

Participant 007 "Yes, the nursing diagnosis, it's giving us a headache, people do not have that knowledge and skill to formulate a nursing diagnosis and we need to be empowered through training."

Participant 0011 also added that "I can say 80% of nurses are not sure on how to formulate the nursing diagnosis, training is needed"

Participant 0015 "If we can get more information on

nursing diagnosis formulation, basically people do not understand this formulation of a nursing diagnosis and we need to know that."

# 3.1.1.2. Sub-theme 1.2. Provision of Quality Patient Care

The study revealed that when nurses have challenges with the implementation of the steps of the nursing process, they tend to overlook utilising it leading to the provision of poor patient care.

This was confirmed by participant 003 "Ja, recording is a serious challenge in the wards, people leave gaps in patients' files. Gaps are mostly seen in assessment, nursing diagnosis, and evaluation which shows that we are not giving quality patient care at all"

Another participant 005 "Yes, we are to be in-service on records to record everything but sometimes nurses postpone saying I will record later and this practice leads to poor patient care as there is no continuity of care."

# 3.1.1.3. Sub-theme 1.3. Increasing Staff Morale and Motivation

Professional nurses mentioned that in-service training on the nursing process and having a training programme in place is beneficial as it increases staff morale and motivation.

Participant 001 said, "Yes. to me, I emphasize that if possible training of the nursing process should be done weekly, and this can motivate us more to know and use it during care of patients."

This was verbalized by participant 0014 who also said that These people do not do much to assist us, the audit team is the one that is trying to follow up the nursing process but there is not much progress as I see and this is demotivating us anyhow we are so discouraged."

# 3.1.1.4. Sub-theme 1.4. Promote Sharing and Updating of Information Amongst Nursing Staff

Nurses expressed that during in-service training nurses are provided with an opportunity to share information and skills on the best practices on the implementation of the nursing process to patient care.

This was supported by participant 001 who said "Yes. *I* emphasize that if possible in-training of the nursing process should be done weekly and this can motivate us to know more when we share important information."

Participant 004 alluded that "I don't know how but I think in-service training can improve how we do the nursing process because we will be sharing some new and important information with other nurses." Furthermore, participant 0014 also confirmed that "I think training can help us to share skills on how to formulate the nursing diagnose and how to nurse the patient correctly."

#### 3.1.2. Theme 2: Suggestions to Improve In-service Training on the Nursing Process

Nurses suggested that for in-service training on the nursing process to be effective, there should be an involvement of staff in identifying their training, training to include all categories of nurses, support, and involvement from the management of hospitals.

# 3.1.2.1. Sub-theme 2.1. Involvement of Staff Regarding the Assessment of their own In-service Training Needs.

The study detected that nurses are ought to participate in pinpointing their training needs, based on the challenges they experience when implementing the nursing process during patient care. Nurses have to identify their training gaps in the implementation of the nursing process so that they can be trained accordingly.

Participant 0012 indicated that "Like in in-service training for the nursing process we must first identify where we are having challenges so that we are then trained on that."

Another participant 009 supported saying "You can have a training, yes, but nurses must have a say on what they need and the problems they have first so that they enjoy attending the inservice training."

# 3.1.2.2. Sub-theme 2.2. Inclusion of all Categories of Nurses During Training

Nurses indicated that in-service training on the nursing process should include all categories of nurses as nurses work as a team in the provision of quality patient care.

Participant 007 explained that "All categories of nurses must be trained and understand this whole thing because in the nursing process we work as a team including junior categories as we are short-staffed."

Another participant 0011confirmed that "This shows that all nurses must be included if in-service training is planned like students, enrolled nurses and auxiliary nurses not only professional nurses. If we are all trained with the junior levels, then we will understand what to do when a patient is in the ward."

# 3.1.2.3. Sub-theme 2.3 Management Support and Involvement in In-service Training

Nurses highlighted that there should be management follow-up, support, and support of nurses who are implementing the nursing process during patient care.

Participant 009 indicated that "If the management does not communicate with us on the nursing process and how to do this thing properly it frustrates us."

Participant 0017 mentioned that "There is nothing said to us in meetings where to get assistance about nursing process. Nobody, I mean even managers do not volunteer to talk with us about the nursing process, so we are not clear about this thing."

#### 4. DISCUSSION

The study found that there are perceived benefits of an inservice training programme on the nursing process which includes the empowerment of nurses with knowledge and skills, provision of quality patient care, increasing staff morale and motivation and promotion of sharing of information amongst nursing staff. Similar findings were illustrated in a study [14], which revealed that "a lack of both theoretical, practical knowledge and skills of the nursing process act as an obstacle to its implementation". Ineffective implementation of the nursing process is related to nurses' lack of knowledge and skills, non-attendance of in-service training and lack of monitoring [15 - 17]. Furthermore, a study [18] "postulates that a lack of appropriate knowledge and skill among nurses is also a contributing factor that hinders the accurate implementation of the nursing process. Another study alluded that in-service training of nursing employees plays a major role in increasing the empowerment of nurses and the advancement of the quality of care in health services" [6]

The findings of the study are consistent with that of a study that specified that hospitals ought to increase the knowledge of nurses in the nursing process through the provision of educating and training to develop the quality of patient care [19]. Similarly, another study concluded that for nurses to render quality patient care, hospital management should engage in the supervision, giving out information and evaluation of the nursing process implementation inpatient care [20]. Additionally, "nurses with excellent knowledge of the nursing process were 2.90 times more likely to put into practice the nursing process much better compared to those with poor nursing process knowledge" [21]. In-service education and training of nurses are efficient and vital in improving the quality of patient care in hospitals. Nurses who go through inservice training are more likely to give quality nursing care documentation practice as compared to those who were not trained [22]. In a study [5], the majority of nurses agreed that in-service training is necessary and important in improving patient care quality.

"Irrespective of the gains, most nurses are not fully committed to implementing the nursing process in practice, which results in poor patient care and outcome [23]. The study further recommends that nurses should focus on developing their knowledge and skills to advance their approach to patients systematically to provide standardised quality nursing care [23]. In-service training of personnel is effective for the constant development of organizations as it boosts the competencies of human resources [24]. The outcomes of studies conducted in Iran and Sweden also support that inservice training of staff <u>increases</u> motivation and teamwork that will ultimately lead to improving the nursing care recording practice" [25].

Encouraging nurses on the value of in-service education and sharing of information through performance assessments, participation in educational programs, and reflection on the results is crucial to advance the quality of patient care in health [24]. Thus, it assists in updating occupational knowledge and professional skills and endorse active participation that grows the best practices [26]. Nevertheless, the need to update the knowledge and practice of nurses through ongoing in-service training educational programs to enhance quality care [27]. The study findings also revealed that nurses suggested that for effective in-service training on the nursing process, there should be an involvement of staff in assessment of their training needs, training to include all categories of nurses together with support, and involvement from the management of hospitals. According to a study [9], "prior in-service training is planned, assessments should be done and there should be a plan to evaluate the educational needs of nurses to achieve good training outcomes". Furthermore, education and training have to be practice-based and self-directed and adhere to adult learning principles where learners identify their learning needs, formulate learning goals, choose strategies, and evaluate outcomes [9]. Determination of training needs from nurses themselves is an imperative requirement to gather the required data needed in planning forthcoming in-service training activities [10].

The initiatives to the learning need to be the responsibility of learners themselves can be effective and lifelong learning can be achieved in cases where the need for such learning is self-. "The following were recommendations for the improvement of in-service training, which includes the involvement of staff members regarding the needs for inservice training. Assessment of the learning needs should be conducted, including the circulation of a list to all nurses to identify the learning needs" [28]. Another aspect to be contemplated is that nurses who are qualified before the nursing process were integrated into the nursing curriculum be targeted in training in clinical areas compared to those recently qualified with the moderate implementation of the nursing process. Furthermore, "the study recommends interventions targeting older nurses and increased training coverage amongst all practicing nurses of all cadres to improve implementation" [29]. The findings of a training necessity assessment study also identify that most nurses indicated the need for in-service training after graduation to bridge the gap in knowledge and skills [30]. Additionally, findings of a study piloted in Turkey discovered that nurses perceived that one of the professional flaws or weakness in nursing that warrants in-service training is having a lack of adequate practical information after graduation [31].

The studies piloted on the in-service education of nursing staff show the lack of follow-up evaluation by management and thus provide little proof of their effectiveness [24]. A recent perceptive of in-service training concentrated on developing the capabilities of health and social care professionals. Further revealed a lack of oversight and evaluation of the effects of training by management. The study also recommends that partnership and clear reporting prevent duplication in training [32]. "The health institutions management thus should consider special attention to the working environment, on-site training, and knowledge of the nurses to develop the care they give to patients" [23]. When the staff is embraced with the support, supervision, and responsibility of management, the staff performs productively and efficiently [24]. Work-related motivation of nurses should be enriched, especially, by the management in the hospital setting for the best implementation of the nursing process. Therefore, the hospital management should be open-minded about the value added to the nursing process in terms of patients' outcomes [33].

### CONCLUSION

The improvement in patient care, empowering of staff, sharing of information, and increasing of staff morale was described as the perceived benefits of an in-service training programme in nursing practice. The participation of nurses in identifying their learning needs, the inclusion of all other nursing categories, and involvement and support by nursing management were viewed as suggestions that can effectively improve the in-service training on the implementation of the nursing process in public hospitals. The study findings recommend a training programme for professional nurses on the nursing process to improve its implementation aimed at delivering quality patient care. Furthermore, the study recommends the participation of nurses in the planning of inservice training programmes so that they can identify their learning gaps.

# SUMMARY AND IMPLICATION TO PRACTICE

The study has revealed the needs and benefits for inservice training for nurses implementing the nursing process during patient care. These findings send an important message to hospital managers and policymakers to approve continuous in-service training specifically on the implementation of the nursing process to improve nursing care during practice.

# LIMITATIONS OF THE STUDY

The study findings are limited to the regional hospitals of Limpopo province where the study was conducted and may not be generalised to other regional hospitals in other provinces and elsewhere.

# **AUTHORS' CONTRIBUTION**

Takalani E Mutshatshi, a Ph.D. student and lecturer at the university of Limpopo interviewed participants during data collection and conceptualized the research idea and initial drafting of the manuscript, Tebogo M Mothiba supervised the Doctor of Philosophy in Nursing and reviewed the manuscript. N.R.M co-supervised the study and reviewed the manuscript and all authors approved the manuscript to be published in the journal.

# ETHICAL STATEMENT

The study includes human subjects and ethical clearance for approval of the study was obtained from the Turfloop Research Ethics Committee (TREC/264/2017: PG). Permission to collect data was obtained from the Limpopo provincial department of health, district managers, Chief executive officers and nursing managers of hospitals.

# CONSENT FOR PUBLICATION

Consent was obtained from professional nurses of regional hospitals.

# AVAILABILITY OF DATA AND MATERIALS

The data that support the findings of this study are available from the corresponding author [T.E.M], upon request.

# FUNDING

None.

#### **CONFLICT OF INTEREST**

The author declares that there is no conflict of interest, financial or otherwise

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