

Exploring the Experience of Nurses on Nursing Process Implementation in Northwest Ethiopia

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Abstract

Background

The nursing process is a set of actions that help nurses to solve the nursing problems identified for a particular patient. Besides, it is possible to say it is an instrument for nurses in their daily activities, and at the same time, it requires the knowledge, skills, and attitude of its nurses. The study aimed to explore the nursing process implementation among nurses in selected referral hospitals of the Amhara Region. Ida Jean Orlando's Theory of the nursing process guided the study.

Methods

The study employed a descriptive qualitative research design. After obtaining permission from respective referral hospitals and informed written consent from nurses, a semi-structured in-depth interview with sixteen nurses were carried out to gather data. NVivo 10 software was used for analysis and the findings were thematised under different headings.

Results

Three main themes were emerged from the data and stated as care delivery approach, challenges in the nursing process implementation and nurses' preparation during training for implementing the nursing process.

Conclusion

The finding showed different degrees of nursing process implementation with a huge gap in the quality. Inadequate knowledge, attitude towards the nursing process, and skill were considered a major areas of concern. The study recommends the need for coordinated efforts of all stakeholders for improving the implementation of the nursing process, as identified by this study.

Introduction

Satisfactory patient care in any hospital depends primarily on the quality of the nursing activities which is enhanced by the organised nursing process. The nursing process is a set of actions the nurse will implement to solve the nursing problems identified for a particular patient. The nursing process is an instrument for nurses in their day to day activities, and at the same time, it requires the knowledge, skills, and attitude of its implementers (Yildirim & Özkahraman 2011). A situational analysis conducted in Namibia revealed that nurses' belief systems and attitudes about the nursing process caused ineffective implementation. The findings indicated that registered should approach the nursing process differently and that the nursing process was a prerequisite for an effective nursing plan of care (Alfaro-LeFevre 2014; Jooste, Van der Vyfer & Van Dyk 2010).

The nursing process helps the nurse to apply knowledge and skills in an organised and goal-directed manner, it allows the nurse to communicate, document and set standards of care effectively (Afolayan et al. 2013). Nursing today needs that nurses develop their knowledge and critical thinking skills so that they can combine the developments which have occurred in the nursing process with the individuality of their patient's care (Castledine 2011; Chabeli 2007). Besides, the profession nursing considers the nursing process as a technology of care (Amante et al. 2010). Even though the nursing process has become the standard for nursing care delivery globally over the past decades, the perception of the nurses remains that it is considered to be time-consuming to the staff and not practical in most cases. If it is not considered as important and not used, the nurses might continue to practice the standardised nursing activities based on medical approach instead of based on nursing assessment, diagnosis, planning, evaluating, documentation and providing feedback (Alfaro-LeFevre 2014; Jooste, Van der Vyfer & Van Dyk 2010). A study conducted in three selected Nigerian hospitals showed Nurses encountered difficulties in history taking, formulation of the nursing diagnosis, setting objectives, implementing the nursing orders and evaluation of the outcome of the nursing process (Ofi & Sowunmi 2012).

Daily barriers that nurses face such as lack of time, workload and lack of getting prepared for the implementation of the nursing process. In Ethiopia and the rest of the world, the nursing process implementation remains ineffective. A study conducted in Mekelle Hospitals identified poor knowledge, the nurse to patient ratio was identified the main reason for not implementing the nursing process effectively (Hagos et al. 2014). Similarly, a study conducted in Nigeria indicated that even though trained nurses at the hospital had good theoretical knowledge of the nursing process, they did not apply it in the care of their patients. The barriers to the application of the nursing process were ascribed among others as inadequate practical knowledge, inadequate staff, work overload, and management body inability to provide the needed materials (Afolayan et al. 2013). Another study conducted in selected hospitals of Central and Northwest Zones of Tigray region of Ethiopia indicates a low level of the nursing process implementation (35%). According to the finding, factors that could hinder the implementation of the nursing process by nurses were a gap in their knowledge and skills, their educational level, and lack of material supply (Baraki et al. 2017). The finding is almost consistent with other findings reported in Ethiopian studies at different times (Abebe, Abera & Ayana 2014; Hagos et al. 2014). A study conducted at the Debre Markos referral and Finote Selam district hospitals showed that the implementation of the nursing process showed degrees of inconsistencies. The main identified reason for the variation was low knowledge of the nursing process (Abebe, Abera & Ayana 2014). Among the major barriers identified as factors affecting the implementation of the nursing process; difficulty to identify the steps of nursing process (De Moraes Lopes et al. 2010), lack of knowledge (Ofi & Sowunmi 2012), lack of practical training, and lack of knowledge on physical examination (Paganin et al. 2008), workload and unfavourable attitude (Baraki et al. 2017; Foroozan & Tahereh 2011) were factors coinciding with the findings of this study that could affect the nursing process implementation.

Despite the pressure from the government, prescribing the compulsory application of the nursing process for all patients in hospitals (EMOH 2011), observations and research reports indicate that this is not the case (Abebe, Abera & Ayana 2014; Baraki et al. 2017; Hagos et al. 2014; Shewangizaw & Mersha 2015).

The researcher identified that although the nursing process is prescribed by the Ethiopian government as the method of providing nursing care to its patients, it was not applied in all hospitals. Therefore, this study was intended to explore the experiences of nurses on the implementation of the nursing process among nurses working in the selected referral hospitals of Amhara regional state of Ethiopia.

Methods

Theoretical foundations of the study

The study was based on Ida Jean Orlando's Theory of the nursing process. Orlando, in her Theory of the Nursing Process, describes nursing as a unique and independent profession because it is concerned with an individualised need in an immediate situation. She advocates the nursing action for two different or same patients' problems should be individualised, which implies, the nurse should work to meet the patient's specific need for help. The nurses share their observations with the patients to identify the need for help and the actions needed. A nursing process is a tool that nurses need to use to fulfil their professional functions to their patients. Therefore, the understanding of the nursing process supports nurses to help the patients within their organisational settings effectively. The nursing practice was guided by this theory as it helps nurses to assess, determine a nursing diagnosis for each problem, establish goals and interventions, implement the plans and evaluate the results (Alligood 2014; Alligood & Tomey 2002; George 2011).

Study design and setting

A qualitative design was used to explore the nursing process implementation experiences of nurses in selected referral hospitals in Northwest Ethiopia from January to February 2018. The study was conducted in three referral hospitals which included; Debre Markos referral hospital, Felegie Hiwot referral hospital and Gondar teaching hospital.

Participant recruitment

The study included purposely selected nurses working in the selected referral hospitals. The researcher selected the nurses from wards where nursing process implementation is routine. The recruited nurses are expected to have at least six months of nursing process implementation experience and qualified as first and above degree educational level. The whole process of recruitment was based on a volunteer to participate in the study. A criterion of data saturation was used to determine the sample size. The sample size for qualitative study should be determined based on the information needs (Polit & Beck 2008). Data saturation was achieved after interviewing 16 nurses.

Data collection

A semi-structured interview guide was prepared which contained a list of questions covered with each participant. A semi-structured interview that developed in line with the theory of the dynamic nursing process included an identical set of questions which is presented to every interviewee. Written semi-

structured interview guide containing three parts and a list of 15 topics or broad questions that must be addressed in an interview. The guide enabled the researcher to explore and explain the nursing process implementation experiences of nurses. From each institution nurses were approached, the discussion was carried out on the purpose of the study and arranged for the actual data collection. The researcher approached them and arranged the data collection schedule after discussing it with them. In all three referral hospitals, the interviews were scheduled for the afternoon period since there were nursing rounds in the morning and different times were arranged based on the nurses' free time. Face-to-face in-depth interviews were carried out in a private office in all the selected referral hospitals. An audiotape was used after obtaining consent for its use to capture all information during interviews. The use of an audiotape assisted the researcher to concentrate better on what was said as some information might have been easily missed out. The researcher used probing and repeating of questions to elicit useful information when required.

Data analysis

The interview data was imported to the qualitative analysis package QSR Software NVIVO 10. The respondents were coded as N1, 2, 3, through 16 to maintain anonymity. To code, the data, the researcher in consultation with an external auditor followed the following steps when processing the data from the transcriptions of the audiotaped interviews and notes taken during the face-to-face interview. Each interview data were transcribed, analysed and summarised and given to the participant to confirm that the transcription during the data collection time. The analysis of interview data involved a systematic approach for discovering and categorising ideas that were conveyed by the study participants. For this study analysis, the researcher used Marshall and Rossman (1995) and Creswell (2003) proposed steps for qualitative studies. Therefore, the researcher followed the following steps to reduce the large data set to research the common response provided by nurses': (1) Audiotaped interviews were transcribed verbatim,(2) transcribed interviews were then read and re-read by the researcher,(3) themes were identified, (4) redundant information, which the researcher felt, did not have a direct or indirect bearing on questions was eliminated, leaving relevant themes, (5) responses to individual questions were transcribed manually, to allow structuring and organisation of data, (6) themes were classified into major categories and then clustered into subcategories and (7) categories and subcategories from all questions of the interviewers' guide were integrated into a total description of the attributes required. Then the data was then rechecked to ensure consistency between the themes and the categories.

Results

Socio-demographic characteristics

The majority of the participants were male (n=14; 77.8%) and the rest were female (n=4; 22.2%). Half of the participants (n=9; 50.0%) were in the age category of 25- 30 years. This implies the participants were young. Three main themes were emerged from the data and stated as: care delivery approach, challenges

in the nursing process implementation and nurses' preparation during training for implementing the nursing process (Table 1).

Table 1
Themes and categories of the data

THEMES	CATEGORIES
Theme 1: Care delivery approach	1.1 The nursing process implementation 1.2 Nurses role of care versus Philosophy
Theme 2: Challenges in the nursing process implementation	2.1 Competencies of the nursing process 2.2 Views on the nursing process 2.3 Workload
Theme 3: Nurses preparation during training for implementing the nursing process	3.1 Theory and practise integration 3.2 Recommendation of nurse educators 3.3 Staff development plan

Theme 1: Care delivery approach of the hospitals

The role of nurses in hospitals settings is to provide holistic nursing care but in general, we assume the practitioner role which involves nursing process implementation in the framework of nursing care philosophy. Participants agreed on the presence of the nursing process implementation by all nurses, especially for admitted patients. There was a different degree of uniformity and quality in the implementation of the nursing process between the three selected referral hospitals, leading to confusion. This was supported by the data summarised from participants' interviews:

As a nurseresponsible to carry out the nursing process for all admitted patients and our performance was evaluated based on the nursing process framework (N2 & N3).

Overall, the implementation could be considered as good, audited yearly by the external body but the implementation quality was different among individuals because of differences in knowledge, attitude, and skills (N1, N3, N6, N7, N8 & N9).

The nursing philosophy is a guiding principle for nurses to act accordingly for those who need their support. The term holism is popular in nursing science that implies nurses should approach their patients by considering all their concerns and treating them accordingly. These were evident in the following statements made by participants regarding the care delivery approaches:

Performing nursing care based on the framework of the nursing process. Here in this ward patient care is based on the nursing standards; for instance, performing nursing care and documentation (N1, N2, N4, N7, N13, N16).

The major role of the nurse is to follow the patients' progress, and implementation of the holistic care approach for all admitted patients (N6 & N8).

However, a significant number of nurses want to practice in medical philosophy, rather than practising in a nursing philosophy. Some participants were not even clear with what are the expected roles of nurses in their hospitals. Upon probing questions, some of the participants fail to define the nursing philosophy of their hospital and few defended the nurses for performing the nursing process is *"... difficult because it is time-consuming"* (N3) and few of the participants were confusing the nursing care plan within the nursing process. Besides, participants have some reservations about the quality of the nursing process they are implementing and recommending for training needs.

Theme 2: Challenges in the nursing process implementation

Participants in this study different categories of challenges have emerged which consisted of; competencies, view of the nursing process and workload.

Participants expressed agreed concerns on various factors that could affect the implementation of the nursing process. As a professional nurse, I can say, *I am in the difficulty of generating the evidence for the nursing diagnosis.*" (N2, N8, N9, N12, N14, N15). Similarly others added: *...have critical problems of physical assessment skills.*" (N1, N2, N3, N4, N16). It is also noted a significant number of nurses have decision-making skills (N9, N10 & N11).

Participants in this study seemed to agree that nurses' views that affected the implementation of the nursing process could require view reframing or changes. As a matter of fact, the nursing process is a means for nursing professionals as a scientific process and autonomy as a profession.

Responses from participants prove the fact that payment and the need for recognition to the nursing profession need to be improved, to improve nurses' attitudes towards the profession.

The overall view towards the nursing process implementation is negative which could be related to various factors; lack of updating on the nursing process, difference incompetence in the nursing process, and inadequate payment for nurses." [N1, N3, N 5, N 12, N 14, N15, & N16].

.... negative view about the nursing process is also reflected on student nurses.... did not want to hear about the nursing process...." [N14, N15, N16 & N17]

The interviewed participants seemed to agree on the challenges nurses were facing as a result of the inappropriate nurse to patient ratio in all the selected referral hospitals of the region.

The big challenge here is workload; patient to nurse ratio especially during the night time is high. [N2, N7, N10 & N12].

Besides, high turnover is also found to be a problem. Many nurses want to change their professional line and job title after second-degree qualification.

“... high turnover after master graduation for a better salary. Many of us considering postgraduate qualifications leave hospital work and join teaching institutions for better pay. [N11 & N12].

Theme 3: Nurses’ preparation on the nursing process

Theory and practise integration, the recommendation for nurse educators and the development plan were identified areas of concern to enhance the nursing process implementation. The participants agreed that nurses have an orientation of the nursing process even better in terms of theoretical knowledge but there is a clear gap in practice. From the viewpoint of the participants, the current nursing education curriculum has adequately integrated with the nursing process approach but some of the educators were not sticking to what was expected and nurses were not briefly informed on its importance for the discipline. The agreed statements of the participants are as follows:

Yes, the nursing process is an integral part of the training programme but our implementation is not uniform even among colleagues in the same hospital. [N15 & N16].

We all are good in the theoretical knowledge of the nursing process but there was a gap in its application and even not interested in it [N1-N6, N8, N13 & N14].

The participants were also asked a range of questions on what should be done to strengthen the implementation of the nursing process in general. They seemed to agree on the presence of problems on the current nursing process implementation by both newly qualified and experienced staff.

A nursing process is a tool for nursing staff for their entire professional life and quality of health care. Therefore, during training, there should be a balance between theoretical knowledge and practical skills [N13].

Nursing schools and hospitals should work together on improving attitudes towards the nursing process. There should be a strict follow-up on the implementation of the nursing process. More importantly, nursing schools should consider the nursing process as one major course [N11, N16].

In the profession of nursing, it is a must to be involved in continuing professional development and became competent both in cognitive and psychomotor aspects of the discipline. Here in the study areas, it seems this was felt as non-existent. Nurses working in the study areas were not beneficent of the huge existing sciences and seemed to practise what they taught during their college education in most cases. However, in a few cases, they were planning and implementing monthly seminars and morning sessions per week to learn from each other.

Learning from each other was the main way of personal development here for most of us [N8].

There was no access for self-development opportunities but the nurses were sharing their experience during the morning session, seminar time and nursing rounds [N3, N7, N11].

Besides, only one ward in one hospital has an internet connection and nurses were using the up-to-date database. The following statements are examples of what participants had to say:

No library access, internet access for accessing journals and reading evidence [N4, N7 N8].

We had only a hard copy of the NANDA lists. We do not have hard copy guidelines even for each nurse [N6].

Discussion

The nursing philosophy is a guiding principle for nurses to act accordingly for those who need their support. However, the nurses' experience showed most of the time nurses want to practice in medical philosophy, rather than practising in a nursing philosophy. This implies nurses are leaving their own professional tool, the nursing process approach during their practice rather depends on others philosophy. Therefore, it is true that the nurses could face difficulty to plan and recording the steps of the nursing process (De Moraes Lopes et al. 2010). The reasons for this case might be related to a lack of appropriate nursing knowledge, attitude, and skills to work effectively in an independent way. The other reason could be the critical shortage of nurses in those referral hospitals that make them busy carrying out routine medical orders.

According to the Ethiopian Ministry of Health (EMOH 2011), the nursing process implementation is a means of assuring accountability and responsibility to patients. Currently, most hospitals in Ethiopia have policies for enforcing the implementation of the full version of the nursing process for all patients admitted to hospitals on the day of admission. However, the finding of this study revealed inadequate reinforcing mechanisms were reported among some of the participants. The main reason for inadequate reinforcement could be related to the shortage of nurses. The number of nurse to patient ratio is low, it could be difficult to cover all the required needs of their patients, which might not be their fault and then, the leaders face difficulty enforcing them. However, this finding is a call to establish strong communication among policymakers, hospital managers and supervisory teams for improving the quality of the nursing process implementation. There should be nursing rounds once per week and a nursing audit committee to enforce and support the nurses in implementing the nursing process. This could be an opportunity for nurses to learn from each other during the rounds and discussions.

The findings summarised from discussion with participants indicated inadequate understanding, gaps in skills, and negative views about the nursing process were found major concerning in line with the findings in the literature that could affect the implementation of the nursing process (Afolayan et al. 2013; Hagos et al. 2014).

Nurses working in the study areas lack the required competence level of the nursing process as a result they were facing difficulty in decision-making. Each step of the nursing process requires a critical thinking skill component which is crucial during data collection, interpretation of the collected data, formulating a diagnosis, prioritising, identifying appropriate nursing actions for the implementation and evaluation (Afolayan et al. 2013). The nursing process must guide nurses' thinking daily and it should be the foundation for clinical reasoning during nursing practice and promote a competent level of care (Alfaro-LeFevre 2014). A nursing process is a problem-solving approach that all nurses working in a hospital setting should apply. However, the findings of this study indicate nurses' lack the assessment and diagnosis skills which might make them ineffective in the implementation of the nursing process.

Consistent with a study conducted in Namibia (Jooste, Van der Vyfer & Van Dyk 2010), the participants of this study comprehend nurses have attitude problems towards the implementation of the nursing process. The participants seem to have a lot to do in this regard since the nursing process implementation was just for the sake of coverage but nurses are accountable and responsible for the service quality they provide to their patients. Nurses' attitudes should be reframed and nurses should adapt to the nursing process as it is a prerequisite for effective nursing care delivery. It is a fact that the nursing process provides a framework by which nurses use their knowledge, practical skills, attitudes and values for providing humanistic care (Chabeli 2007; Foroozan & Tahereh 2011).

Incongruent with literature (Afolayan et al. 2013; De Moraes Lopes et al. 2010; Hagos et al. 2014; Ofi & Sowunmi 2012) and a shortage of staff, inadequate organisational support, workload, lack of time and extensive writing were some identified barriers for documenting what has been carried out by nurses. If the nurse-patient ratio is high, it means nurses do have not adequate time to perform the steps of the nursing process.

Conclusion

The finding showed different degrees of nursing process implementation with a huge gap in the quality as a result of inadequate knowledge, attitude, and skill among nurses. The view towards the nursing process, competencies, workload, and inadequate payment were considered a major area of concern. Different enhancing mechanisms should be in place for motivating and enabling nurses for better nursing process implementation. Ways in which improving the nursing process implementation could be linked to the improvements in the first place the views of nurses regarding the importance of the nursing process for the nursing profession. Then, the hospitals and concerned stakeholders should work on improving the competency of nurses, especially on the nursing assessment. The leaders should also work on maintaining nurse to patient ratio that allows the nurses to have adequate time to use the nursing process for patient care. It is very important to have in mind the effectiveness of any hospital depends on the effectiveness of the nurses working there, therefore, it is crucial to have a policy for recognition and motivation of the nurses in place.

Declarations

Ethics approval and consent to participate

To confirm the Declaration of Helsinki (1964) and Population Screening Act, ethical approval for the study was obtained from Amhara Regional Health Bureau Research Office. Permission was obtained from the hospital management. Participation is determined by the person without any external influence to participate or not. Written consent was obtained from the individual participant. The participant of this study has the right to withdraw anytime from the research project without any negative consequences. Information is collected in private rooms and kept private all the time.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

Fundings

No funding obtained for this study

Authors' contributions

HAA designed the study, collected data, analysed and interpreted data, and wrote and revised the manuscript. AG, BS and HG designed the study, interpreted the data, and critically revised the manuscript. All authors read and approved the final version of the paper.

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