



**ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH MASTER OF HOSPITAL AND HEALTH
CARE ADMINISTRATION**

**IMPROVING THE IMPLEMENTATION OF NURSING CARE PROCESS
IN WACHA PRIMARY HOSPITAL, KAFA ZONE, SNNPR; ETHIOPIA.**

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ABSTRACT

Background: Nursing care Process is a systematic method which utilizes scientific reasoning, problem solving and critical thinking to direct nurses in caring for patients effectively. Despite the important role nursing process plays for the betterment of the health care, its implementation status is far below expected, particularly in developing countries. Similarly, the baseline assessment in this project showed that the implementation of nursing care process in wacha primary hospital was poor. Thus, after the intervention was made the implementation of the nursing care process completeness improved in the hospital.

Objectives: To improve the implementation of nursing care process completeness from 10 % to 65% in medical and surgical wards of wacha primary hospital, by the end of May 2018.

Methodology: A facility based pre- post interventional study was conducted from March 1st to May 30, 2018 in Wacha Primary Hospital, Kafa Zone, South Nation Nationalities People of Republic, Ethiopia. A total of 100 Medical Records were reviewed based on HPMI guideline of Ethiopia (50 at baseline and 50 at the end of the study by simple random sampling method) to compare the nursing care Process implementation status during pre and post-intervention periods. A structured questionnaire was used to collect the data.

Result: The percentage of patient cards with complete nursing care process increased from 5(10%) to 40(80%) after intervention made. Nursing admission assessment from 3(6 %) to 41(82%), Nursing diagnosis from 5(10%) to 41(82%); Nursing care plan from 6(12%) to 40(80%); Nursing implementation from 7(8%) to 40(80%) and Nursing evaluation from 5(10%) to 40(80%), with all changes showing there is an improvement.

Conclusion and Recommendations: Effective implementation of the nursing care process leads to improve quality of care for the patient and stimulates the construction of theoretical and scientific knowledge of nurses on the best clinical practice. Continuous internal supportive supervision of nurses followed by on job training can strengthen the implementation of the nursing care process. Wacha primary hospital senior management team should consider strengthening the internal supportive supervision to improve the nursing process in their health facility.

Key Words: Nursing care process, Completeness, Wacha Primary Hospital

Table of Contents

Contents	Page
Abstract.....	i
List of table.....	iii
List of Figure.....	iv
Abbreviations and Acronyms	v
Acknowledgement	vi
CHAPTER ONE.....	1
1. Background	1
1.1. Organizational description.....	1
1.2. Introduction	2
1.3. Problem of the statement.....	3
1.4. Significance of the study.....	4
CHAPTER TWO.....	5
2. Objective	5
CHAPTER THREE.....	6
3. Root cause analysis.....	6
3.1. Collection of information on the causes of the problem	6
3.2. Final root cause	7
CHAPTER FOUR.....	8
4. Literature review	8
CHAPTER FIVE.....	12
5. Methodology	12
5.1. Project area / setting.....	12
5.2. Study design.....	12
5.3. Project Period.....	12
5.4. Inclusion and Exclusion criteria.....	12
5.5. Sample size and sampling procedure	13
5.6. Measurements	13
5.7. Study variables.....	14
5.8. Operational definitions	14
5.9. Data analysis	15
5.10. Data quality management.....	15
5.11. Ethical consideration.....	15
5.12. Plan for dissemination of results.....	15
CHAPTER SIX.....	16
6. Interventions	16
6.1. Selection of the best interventions	16
6.2. Selecting the best intervention /strategy	17
CHAPTER SEVEN.....	18
7. Implementation of the interventions.....	18
7.1. Training for 15 staff nurses.....	18
7.2. Evaluation of the plan	19
CHAPTER EIGHT.....	20
8. RESULT	20
CHAPTER NINE.....	22
9. Discussion.....	22
CHAPTER TEN.....	24
10. Conclusions and Recomendation	24
10.1. Conclusion	24
10.2. Recommendation	25
References	26
Annexes	28

List of table

Table1. Profile of Wacha Primary Hospital January, 2018. 1

Table.2 Decision Matrix: Qualitative 16

Table.3 Decision Matrix: Quantitative 16

Table4. Pre-post interventional implementation of nursing care process completeness in Wacha Primary Hospital, Kafa, SNNPR, Ethiopia. June 2018..... 20

List of Figure

Figure 1: Fish Bone Diagram (problem: low Implementation rate of nursing care process) 7

Figure 2. Over all nursing care process of patients admitted to inpatient ward in Wacha primary Hospital, SNNPR, Ethiopia..... 21

Figure 3. Nursing care process documentation in the medical record of patients admitted to inpatient ward in Wacha primary Hospital, SNNPR, Ethiopia.....21

ABBREVIATIONS AND ACRONYMS

ADPIE	Assessment, Diagnosis, Planning, Implementation and Evaluation of care
EHSTG	Ethiopia Hospitals Service Transformation Guideline
MR	Medical Record
MRN	Medical Record Number
NGO	Non-Governmental Organizations
SMART	Specific Measurable Achievable Realistic and Time bound
SMT	Senior Management Team
SNNPR	South Nation Nationality People of Republic
NHPMI	National Hospital Performance Monitoring Indicator
PDSA	Plan, Do, Study, Act

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CHAPTER ONE

1. BACKGROUND

1.1. ORGANIZATIONAL DESCRIPTION

Wacha Primary Hospital start's working as clinic level in 1968 E.C, then upgrade to health center in 1995 E.C and now become Hospital in 2007 E.C. It is located in Chena town, Kafa Zone, SNNPR with Catchment area population of 206,956 including the neighboring Woredas.

Its mission is to reduce morbidity, mortality and disability, and improve the health status of people through providing and regulating a comprehensive package of promotive, preventive, curative and rehabilitative health service via a decentralized health system. The Hospital is staffed by 7 general practitioner, 5 health officers, 25 nurses, 3 laboratory technicians and technologists, 3 pharmacists, 1 x-ray technicians, 10 midwife and 52 Other none technical staff. It has a minimum 35 bed capacity including maternity beds and currently with 30 functional beds. The average length of stay is 3days.

In 2017 Patients seen in outpatient and inpatient department were 22,800 and 1120 respectively. Service provided in the hospital is Outpatient services, Inpatient service Delivery services, Family planning, ANC & PNC, Emergency service for 24 hours, Comprehensive Laboratory service for 24 hours, X-Ray service, Pharmacy services and Neonatal ICU.

Table1. Profile of Wacha Primary Hospital January, 2018.

S.no.	Description	Quantity
1	Number of nurses(all type)	25
2	Number of paramedics staff(Pharmacy, radiology, laboratory)	10
3	Number of medical doctors	7
4	Emergency surgery	2
5	Number of Health officer	5
6	Number of Midwives	10
7	Number of supportive staff	52
8	Number of outpatient visits per year	22800
9	Number of inpatient services per year	1120
10	Average Length of Stay	3
11	Number of delivery per year	600

1.2.INTRODUCTION

The nursing process is a widely accepted method and has been suggested as a scientific method to guide procedures and qualify nursing care. More recently, the process has been defined as a systematic and dynamic way to deliver nursing care, operating through five interrelated steps: assessment, diagnosis, planning, implementation and evaluation [2, 3]. According to current American and Canadian practice standards, nursing practice demands the efficient use of the nursing process and professional participation in activities that contribute to the permanent development of knowledge about this methodology [2].

There is a demand to establish the nursing care process in practical care in every health institution, within hospitals as well as in the community as a whole. The nursing care process should be established in care practice at all health care institutions, in hospitals as well as in the community as a whole [3].

Despite their knowledge of the nursing care process, certain factors limited the ability of nurses to implement it in their daily practice, including lack of time, high patient volume, and high patient turnover.

Despite these difficulties, the daily application of the nursing care process is characterized by the scientific background of the professionals involved since it requires knowledge and provides individualized human assistance [3].

However, the existence of failures was shown among the nursing diagnoses in the patients' history, as well as the implementation of nursing prescriptions without recording the evaluation of the expected results [4].

Effective implementation of the nursing care process leads to improved quality of care and stimulates the construction of theoretical and scientific knowledge based on the best clinical practice. Aiming at collecting information to improve the nursing care currently provided, a facility based pre and post interventional study was performed to compare the progress of nursing care process completeness, in wacha primary hospital.

1.3. PROBLEM OF THE STATEMENT

Nurses are the largest group of health professionals in every health care institution and quality of nursing care delivered by nurses is closely related to effectiveness of health care systems. Application of nursing process as a scientific framework for delivering quality patient centered care plays a significant role in improving quality of care and stimulates the construction of theoretical and scientific knowledge based on the clinical practice [6].

Nursing process is a step by step series of actions that create something or that lead to a particular result related to health of a patient. It is a matter of fact that nursing process is the center of nursing practice where professional nurses must be expert. This process has its steps that guide nurses in description holistic nursing care to be demonstrated excellently for this is the foundation of quality nursing care to customers [3].

Knowing of its importance in improving the quality of health care, the Ethiopia hospitals service transformation guide line sets the “Nursing/Midwifery care process” is one of the responsibilities of the nurses. However, despite the important role nurses have for the betterment of the health care, the independent work the nursing process do not get enough emphasis as it is written in many books [6].

One of the major challenges in the implementation of the nursing care process in Mekelle hospital is lack of understanding and commitment of nurses for the nursing care process. A significant number of nurses have viewed that nursing process just as a repetition of the Physician Care. This could in fact be a result of the lack of knowledge and understanding to differentiate the nursing process and the Physician [16]. Similarly, the implementation of nursing care process in Wacha primary hospital was less attention given. The baseline assessment in the hospital was shows that only 10% of the patients were received a complete nursing care process.

Poor implementation of the nursing care process can result in poor quality of nursing care, dis-organization of the health service, conflicting roles among nurses, medication error, poor diseases diagnosis, dissatisfaction of customers with the care provided, and increased mortality [16].

The project w a s aims to improve the implementation of nursing care process by giving onsite training, supportive supervisions to improve the overall quality of care and decreasing the poor outcomes of hospital services.

1.4. SIGNIFICANCE OF THE STUDY

The nursing care process is the underlying scheme that provides order and direction to nursing care. It is the core of professional nursing practice. It is the “tool” and methodology of the nursing profession and, as such, helps nurses in arriving at decisions and in predicting and evaluating consequences.

The nursing process was developed as a specific method for applying a scientific approach or a problem solving approach to nursing practice. In nursing, the client/patient may be an individual, family, or community and the nursing care process has been adapted for use with each type of client/patient.

The nursing care process also provides a means for evaluating the quality of nursing care given by nurses and assures their accountability and responsibility to the client/patient. In order to use the nursing care process effectively, nurses need to understand and apply appropriate concept and theories from nursing, from the biological, physical, and behavioral sciences, and from the humanities, in order to provide a rationale for decision making, judgments, interpersonal relationships, and actions. These concepts and theories provide the framework for nursing care.

This project was conducted to assess the current practice of nursing care process in the Wacha primary hospital by assessing the patients’ medical record document. Therefore the result of this study is important to improve the problems related to nursing care process completeness by identifying the root cause of less nursing care process completeness and intervene the possible solutions to wacha primary hospital.

CHAPTER TWO

2. OBJECTIVE

2.1. GENERAL OBJECTIVES

- ❖ To increase the proportion of patients who received a complete nursing care process from 10% to 65% in inpatient wards of wacha primary Hospital, by the end of May 2018.

2.2. SPECIFIC OBJECTIVE

- To explore the current practice of nurses in the nursing care process.
- To investigate the knowledge of nursing care process among nurses.
- To improve the nursing care process documentation of MR

CHAPTER THREE

3. ROOT CAUSE ANALYSIS

3.1. Collection of information on the causes of the problem

A root cause analysis will help to identify the factors that cause the problem and a fishbone diagram helps leaders identify multiple causes of a single problem.

Brainstorming with 10 senior management team members and 12 ward nurses were done about the cause of the problem (less nursing care process completeness) and their opinion recorded in the fishbone chart.

Methods used to identify the root cause include

- Assessments of nursing care process formats used
- Discussion with senior management team
- Discussion with ward nurses and staffs

Problems identified as evidences

- Lack of knowledge and skill
- No responsible person to follow the- nursing process.
- Poor implementation of hospital reform guidelines
- Lack of commitment
- Shortage of nurses
- Stock out of nursing process Forms
- lack of internal supportive supervision
- The department not led by senior professional

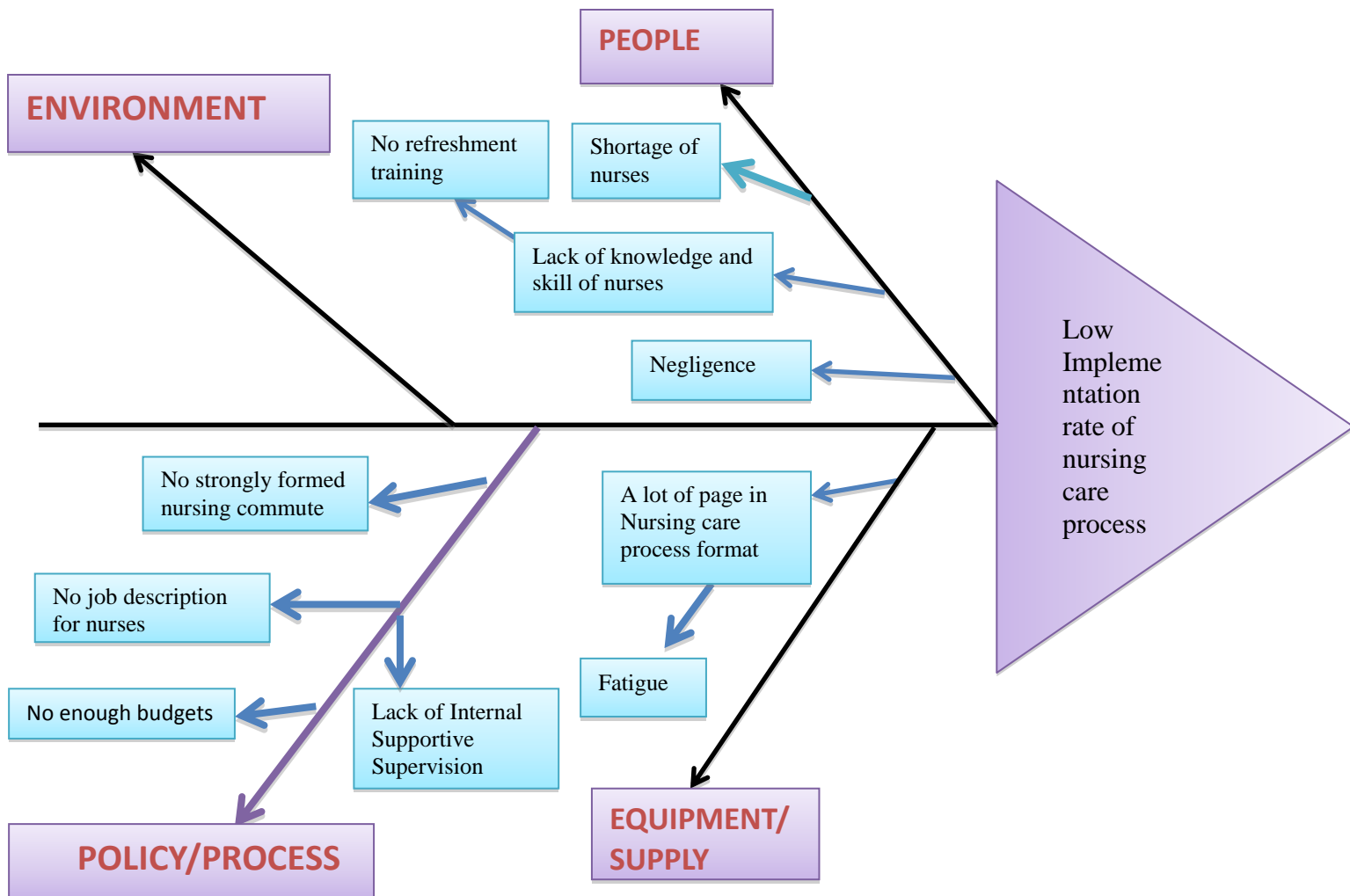


Figure 1: Fish Bone Diagram (problem: low Implementation rate of nursing care process)

3.2. FINAL ROOT CAUSE

By providing training related questioner on nursing care process 20 nurses were interviewed and none of them trained on nursing care process in the hospital during the baseline. The result indicates that training for health workers was mandatory to feel the gap of their knowledge and skill to perform effective nursing care process and patient safety activities. Therefore, “Lack of knowledge and skill of nurses on nursing care process” selected as a main root cause of low nursing care implementation.

CHAPTER FOUR

4. LITERATURE REVIEW

4.1. Definition of basic concepts of nursing care process

Based on Ida Jean Orlando nursing theory, the Nursing Process is an essential part of the nursing care plan. On Orlando's Deliberative nursing process theory, the focus is on the interaction between the nurse and patient, perception validation, and the use of the nursing process to create optimistic outcomes or patient progress. [1, 18]

According to Carlson (2010) nursing process is a systematic problem-solving used to identify, prevent and treat actual or potential health problems and promote wellness. It has five steps; Assessment, Diagnosis, Planning, Implementation and Evaluation (ADPIE). [2, 3, 8]

Assessment is an organized dynamic process including: systematically collecting data, and ordering the collected data and documenting the data in a retrievable way. Subjective and objective data are collected from different sources the nurse emphasizes on eliciting a profile of the patient that supplies a sense of the patient's overall health status, providing a picture of the patient. [3, 7]

Diagnosis means the analysis of collected data to recognize the patient's needs or problems, also called the nursing diagnosis. The purpose of this step is to draw a whole picture regarding the patient's specific needs of concern so which effective care can be planned and given.[3,7]

Planning contains setting priorities, establishing goals, considering proper patient outcomes, and determining exact nursing interventions. These actions are accepted as the plan of care. [3, 7]

Implementation occurs when the plan of care is put into action, and the nurse performs the planned interventions. Individual knowledge and expertise and agency routines allow the flexibility that is necessary to adapt to the changing needs of the patient. [3, 7]

Evaluation is accomplished by determining the patient's progress toward attaining the known outcomes and by monitoring the patient's reaction to efficiency of the preferred nursing interventions for the reason of altering the plan as indicated. [6]

Nursing process is a step by step series of actions that create something or that lead to a particular result related to health of a patient. It is a matter of fact that nursing process is the center of nursing practice where professional nurses must be expert.

This process has its steps that guide nurses in description holistic nursing care to be demonstrated excellently for this is the foundation of quality nursing care to customers. In addition to, interaction is significant in between the patient and the nurse because it is the only way of gaining cooperation in time nursing care is being implemented. On Orlando's Deliberative nursing process theory, the focus is on the interaction between the nurse and patient, perception validation, and the use of the nursing process to create optimistic outcomes or patient progress. [3]

4.2. Theoretical arguments related to Nursing Process Implementation

Despite the importance of the nursing process, various literatures showed that there exist different challenges in its implementation. A study developed in a Brazilian private hospital showed that the phases of the nursing process were not integrated and that there was a lack of coherence in the prescribed actions related to patient health conditions. They additionally asserted that a lack of preparedness and a lack of a holistic view have hindered the perception and record of the essential care provided [10].

A study conducted in Europe to test the establishment of a validated model of nursing records aimed to promote individual care. The results showed limitations of the nursing process conducted according to the model, particularly in the identification of problems presented by the patients and, consequently, diagnosis and the possible intervention procedures [11].

A study conducted in four African countries found that while nurses generally agree on the benefits of the nursing process, it is not commonly used in practice. The constraints identified by the study included, its time consuming nature, failure of nurse leaders to motivate others, shortage of staff and negative attitudes [12, 13]. However, there is still a gap in the implementation of nursing process among nurses working in hospitals. One recent study found that almost all of the nurses in Mekelle hospital reported that they did not use the nursing process during the provision of care to their patients [14]. Similarly a study conducted in Debremarkos and Finote-Selam hospitals in Ethiopia showed that nursing process was implemented by only 37.1% [15].

In a study conducted in selected governmental hospitals of Addis Ababa, Ethiopia, showed that one hundred (52.1%) respondents implemented nursing process while 92(47.9%) did not implemented nursing process.

Seventy nine (41.1%) respondents have had the ability to consider emotional, physical, and personal care, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life; (using nursing skills, intervention/activities to provide optimum care). Eighty one (42.2%) respondents were able to respond to patient needs by planning, delivering and evaluating appropriate and individualized programs of care working in partnership with the patient, their care givers, family and other health workers [16].

A capstone study conducted at Mekelle Hospital shows that the percentage of patient cards with complete nursing care process was 37.5% before intervention, and after intervention reach to 63.3% [16]. Overall, the above literatures show the existence difficulties in the implementing all steps of the nursing process and high lights the need for changes to speed up the work process and optimize the quality of actions in care and education.

Therefore this project was intend to improve the implementation of nursing care process and associated factors among nurses who work in wacha primary hospitals.

4.3. Factors associated with implementation of nursing process

There are different factors which affect the implementation of the nursing process in hospitalized setting. Institutional factors like organizational structure and facilities in both material and human resources are one of categories of factors that affect the implementation of the nursing process. The other category of factors is nursing factors for example knowledge, especially for formulation of nursing diagnosis in developing nursing care plans, skill, experience, interest and beliefs of nurses on the importance of the nursing process. These greatly affect the implementation [17, 18]. Theoretically, if nurses fail to carry out necessary nursing care, then the effectiveness of patient progress may be compromised and can lead to preventable adverse patient events [19, 20]. Although implementation of the nursing process was well investigated throughout much of the developed world, the issue has only rarely been researched in the developing countries including Ethiopia [4].

The other factor that hinders implementation of nursing process is poor supportive supervision. Clinical supervision enables individual practitioners to develop knowledge and competence, assume responsibility for their own practice and enhance consumer protection and safety of care in complex clinical situations [16].

If executed correctly, supervision could be a mechanism for encouraging professional development and improving worker job satisfaction and motivation. Generally, clinical supervision is also important as a tool to support quality improvement, risk management and performance management and building systems of accountability and responsibility (16). Consequently, it has been suggested that in all work settings nurses should receive adequate support and supervision to ensure that they have the opportunity to gain professional knowledge and expand their skills [6].

It is reasonable to conclude that the nursing care process is important for the practice of nursing; however, its use is not an easy task. Therefore, a continuous evaluation of how the nursing care process is executed within the health services is required [16].

CHAPTER FIVE

5. METHODOLOGY

5.1. Project area / setting

The study was conducted in Wacha Primary Hospital found in Kafa Zone Chena Woreda. It serves for a catchment area of more than 206,956 populations and it administered by board. The Inpatient department was the major area of the study conducted with average daily admission of one patient.

From Dec 2017 to Feb 2018 50 Patients' card sample size was taken for the baseline data analysis and from March 2018 to May 2018 after post-intervention, the same sample size was taken in the hospital.

The baseline data were collected from March 5 – 11, 2018 among 100 patients, who were admitted at inpatient department of Wacha Primary Hospital from December, 2017 to February, 2018. Post - intervention data collection was held from May 25-30, 2018 and collected by two nurses. Nursing care process completeness was assessed by using pre-prepared standardized checklist.

5.2. Study design

A facility based pre- post interventional study was conducted. The status of the nursing care process implementation was assessed by reviewing patient's medical records (MR) at baseline (pre intervention) and post interventions.

5.3. Project Period

The proposed project was conducted from March 1st to May 30, 2018

5.4. Inclusion and Exclusion criteria

- **Inclusion criteria:** All individual patient folders of inpatient medical records during the study period in the record unit.
- **Exclusion criteria:** Physician Notes, Discharge summary, Medication Administration Record and Order sheet found in patients' folders during the data collection period.

5.5. SAMPLE SIZE AND SAMPLING PROCEDURE

5.5.1. Sample size determination

The sample size of the medical records was taken from the HPMI manual which is 50 cards as minimum or 5% of the discharged patient's medical records to be reviewed based on the protocol to assess the completeness of nursing care process [2]. For the hospitals like Wacha Primary Hospitals with low patient flow minimum standard sample size of 50 samples was used. Based on the protocol we reviewed 50 discharged patients medical record each for pre and post interventional study using standardized prepared check list by using simple random sampling method to assess the completeness of nursing process.

5.5.2. Sampling technique

The MR documentation list of all patients discharged from the inpatient department three month prior to the data collection period was obtained from the hospital admission and discharge summary log-book for the pre-intervention baseline data by simple random sampling technique and similar sampling technique was obtained after post-intervention conducted. The sample sizes were randomly selected in both pre and post interventional periods by simple random sampling technique using lottery method.

5.6. MEASUREMENTS

5.6.1. Data collection procedure

The data source for this project was the patients' nursing care process, documentation of the MR of patients discharged from the hospital wards and nurses working in the selected wards. Data was collected at baseline and at the end of the study (after intervention) to compare the nursing care process implementation status during pre and post-intervention periods.

The data collection method was document review. A patient was classified as received a complete nursing care process if he/she has a documented nursing assessment, nursing diagnosis, nursing care plan, nursing implementation and nursing evaluation. And a patient was classified as not received a complete nursing process if he/she hasn't the above nursing care process steps.

5.6.2. Data Collection Instrument

The data collection instrument format was a structured check lists, adopted from the hospital nursing/midwifery comprehensive client assessment format. It developed in English contain information regarding general patient identification and information based on the nursing care process components, namely, nursing admission assessment, nursing diagnosis, nursing care plan and nursing care implementation and nursing evaluation. The same data collection tools, procedures and people were used in both periods to facilitate comparison and avoid possible biases.

5.6.3. Data Collectors

Two data collectors were selected from the clinical nurses working in emergency departments of wacha hospital to collect data from the medical record data base.

5.6.4. Training of Data Collectors

A two days training was given for the selected data collectors by using different training techniques in order to provide a clear and relevant data about the study. The training includes general overview about nursing care process, appropriate use of data collection instruments and communication approaches.

5.7. STUDY VARIABLES

Dependent variable

- Implementation of Nursing care Process (NP Steps and NP Practice)

Independent variables

- Trainings, Staffing levels, Resources, Supervision, Motivation

5.8. OPERATIONAL DEFINITIONS:-

1. Complete - refers a patient classified as received a complete nursing process if he/she has a documented nursing assessment, nursing diagnosis, nursing care plan, nursing implementation and nursing evaluation.

2. Incomplete - refers the patient classified as not received a complete nursing process if he/she has not a documented nursing assessment, nursing diagnosis, nursing care plan, nursing implementation and nursing evaluation.

5.9. Data analysis

To assess the overall nursing care process implementation status, the proportion of patient cards with complete documentation of the nursing care process forms were calculated for both pre and post-intervention groups. Data was analyzed by Microsoft Office Excel 2010 for windows. Data was summarized by frequency distribution and presented using text, graph and table Excel.

5.10. Data quality management

The data collection team was oriented on the checklist that used for data collection and the way to collect data. The study unit the inpatient department had been assessed for nursing process completeness after the cross check done for the admission of study item against abstract medical register.

5.11. Ethical consideration

The proposal was reviewed and approved by Addis Ababa University, School of Public Health, and Ethical Review Committee. An official letter was obtained from the University to be submitted to Wacha Primary Hospital to obtain the study permit prior to the start of the study. Personal identifiers such as name and address of the patients were not collected to safeguard the confidentiality of the patients.

5.12. Plan for dissemination of results

The results will be present at public defense forum and will be submitted to Addis Ababa University for possible documentation in the libraries. Copies will also be sent to Wacha Primary Hospital management, Zonal Health Desk, Regional Health Bureau, and concerned NGOs involved in improving hospital performance.

CHAPTER SIX

6. INTERVENTIONS

The possible alternative interventions for the main root cause were:-

1. Giving Training to nurses
2. Increase nursing staff
3. Experience sharing
4. Monitoring of health workers

6.1. Selection of the best interventions

Based on the final root cause of the problem, the senior management team was listed the alternative interventions and evaluate each intervention based on evaluative criteria, namely, impact (effectiveness) on the problem, annual cost, time to effect required to implement, and political feasibility.

Table.2 Decision Matrix: Qualitative

S.no.	Alternative Interventions	Impact on Problem	Cost	Time	Political Feasibility
1	Giving Training to nurses	Very Good	Low	1 wk.	Very high
2	Increase nursing staff	Good	High	1yr	Low
3	Experience sharing	Good	Low	1mo.	High
4	Monitoring of health workers	Good	Low	2wk.	High

Table.3 Decision Matrix: Quantitative

S.no.	Alternative Interventions	Impact on Problem	Cost	Time	Political Feasibility	Total
1	Giving Training to nurses	4	4	3	5	16
2	Increase nursing staff	3	2	3	4	12
3	Experience sharing	4	4	2	3	13
4	Performing supportive supervision	4	4	4	3	15

6.2. Selecting the best intervention /strategy

Based on the decision matrix evaluative criterion impact on problem, cost, time and political feasibility training of staff about nursing care process is the best option with a total score of 16, followed by performing supportive supervision with a total score of 15.

CHAPTER SEVEN

7. IMPLEMENTATION OF THE INTERVENTIONS

Based on the selected interventions the implementation activities was performed accordance to the economic feasibility.

7.1. Training for 15 staff nurses

Three days onsite training was given in the hospital for randomly selected 15 nurses from all Wards, based on the EHSTG and Nursing Care Practice Standards Manual. The training focused on the nursing/midwifery process components, namely: nursing admission assessment, nursing diagnosis/problem identification, nursing care plan, implementation of nursing care plan and evaluation of the nursing care plan. The main objective of the training was to: discuss the importance of nursing care process; describe the five nursing process components; describe the nursing process documentation tool adopted by the hospital; and discuss the challenges nurses face in implementing nursing process. The training was given by BSc nurse working in the Bonga general hospital that has better knowledge and training experience on nursing care standards.

The outcome of the training was assessed by quality team members every two weeks, mainly based on a review of a randomly selected patient's medical records from the wards to confirm that each contains nursing care process documentation. After the assessment performed, the team discusses on the key findings, the major challenges and areas for improvement in the implementation of the nursing care process.

A close follow up of the implementation of the nursing care process was also been made by the ward nurses during the working hours. The ward nurses checked the completion of the nursing Process documentation form on a daily bases. In addition, the progress of implementation of the nursing care process has been reviewed every month by the SMT and quality unites.

7.2. Evaluation of the plan

7.2.1. Process indicator

- number of nurses trained on nursing process
- number of supportive supervision done

7.2.2. Outcome indicator

- Sixty five percent (65 %) improvement of nursing care process implementation

CHAPTER EIGHT

8. RESULT

A total of 50 medical record cards of discharged patients were reviewed during the pre-intervention (baseline). Of the total 50 reviewed during the baseline, 5 (10%) of them had nursing care plan documentation attached in their medical record cards. This has increased to 44(88%) during the post intervention period. The proportion of patient who documented nursing admission assessment increased from 3(6 %) to 41(82%). Similarly, the proportion of patient who had documented nursing diagnosis, nursing care plan, and nursing implementation increased from 5 (10%), 6 (12%) and 7 (14%) to 41 (82%), 40(80%) and 40(80%), respectively. The nursing evaluation increased from 5 (10%) and 40 (80%) and over all nursing care process also increases from 5(10%) and 40 (80%) during the pre and post-intervention periods.

Table4. Pre-post interventional implementation of nursing care process completeness in Wacha Primary Hospital, Kafa, SNNPR, Ethiopia. June 2018.

S.N.	Nursing Process Components		Pre-Intervention (N=50)	Post-Intervention (N=50)
1	Is Nursing Care Process	Yes	5(10%)	44(88%)
	Documentation in the MR?	No	45(90%)	6(12%)
2	Nursing Admission Assessment	Complete	3(6%)	41(82%)
		Incomplete	47(94%)	9(18%)
3	Nursing Diagnosis	Complete	5(10%)	41(82%)
		Incomplete	45(90%)	9(18%)
4	Nursing Care Plan	Complete	6(12%)	40(80%)
		Incomplete	44(88%)	10(20%)
5	Nursing Implementation	Complete	7(14%)	40(80%)
		Incomplete	43(86%)	10(20%)
6	Nursing Evaluation	Complete	5(10%)	40(80%)
		Incomplete	45(90%)	10(28%)
7	Overall Nursing Process	Complete	5(10%)	40(80%)
		Incomplete	45(90%)	10(20%)

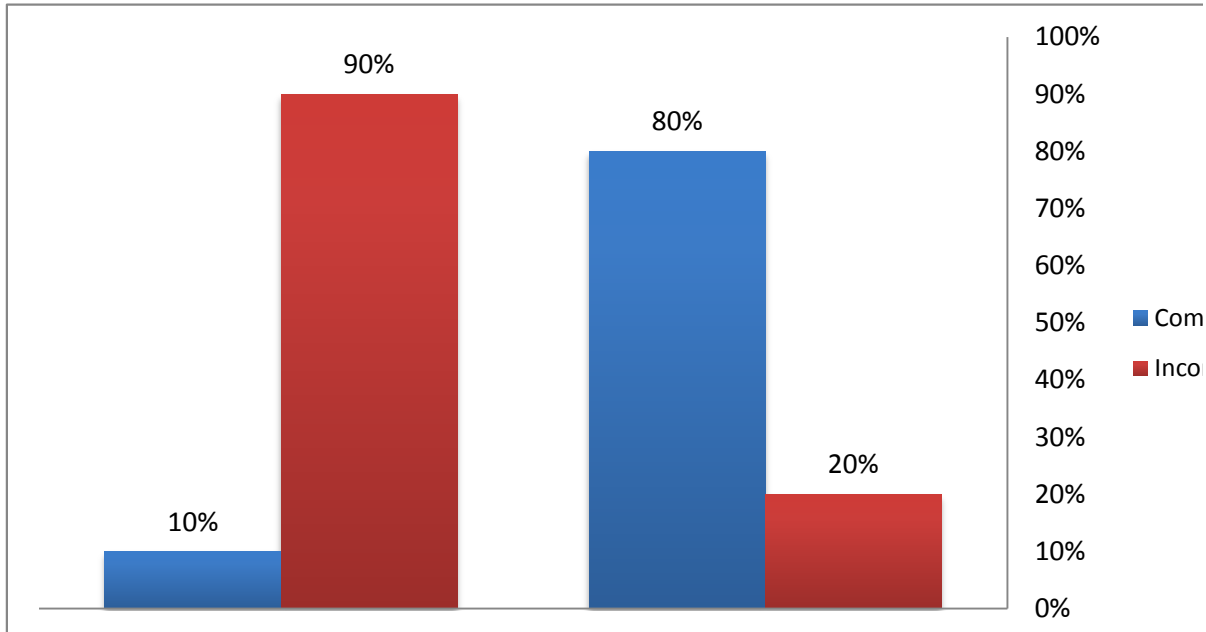


Figure 2. Over all nursing care process of patients admitted to inpatient ward in Wacha primary Hospital, SNNPR, Ethiopia.

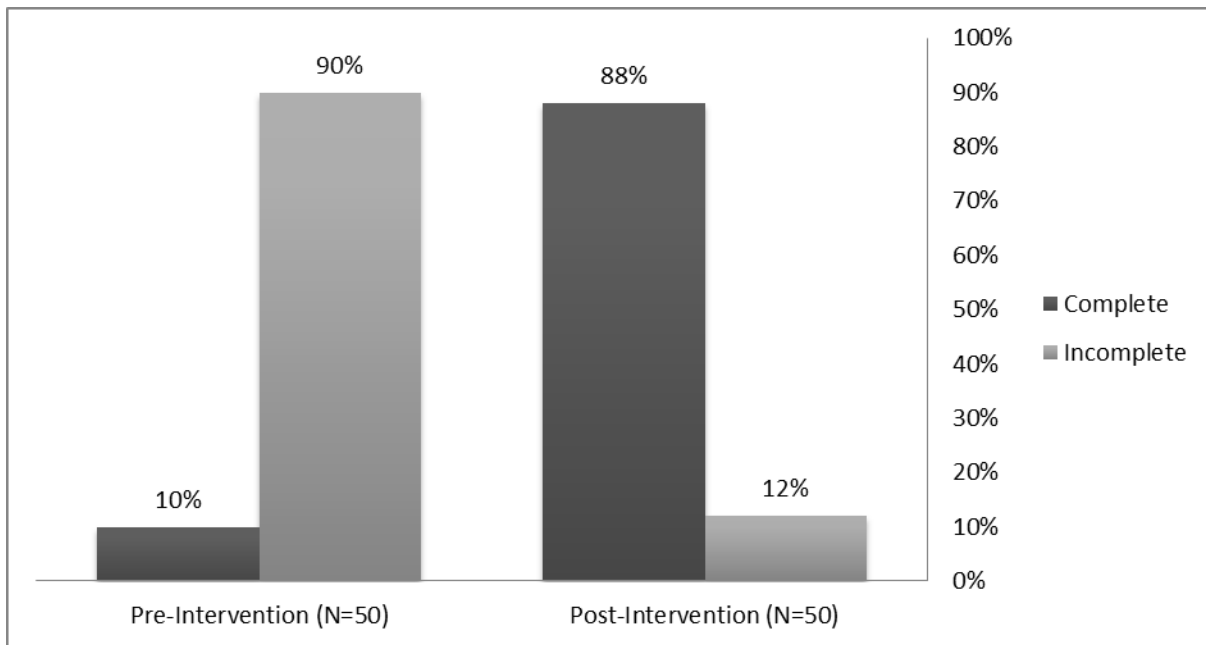


Figure 3. Nursing care process documentation in the medical record of patients admitted to inpatient ward in Wacha primary Hospital, SNNPR, Ethiopia.

CHAPTER NINE

9. DISCUSSION

This project was tried to improve the implementation of nursing care process by providing training and supportive supervision based assessment on Ethiopia Hospitals Service Transformation Guideline (EHSTG) and Hospital Performance Monitoring and Improvement Manual (HPMI). A systematic approach (PDSA-Cycle) was used to achieve the project objectives.

The overall implementation of the nursing care process at pre-intervention 5(10 %) was less than compared to the study reported from Mekelle Hospital (37 %).The reason behind this result was the Ethiopian Hospital Service Transformation Guideline (HSTG) implementation was not strong. After three month intervention was made the nursing care process completeness significantly improved to 40(80%) this was more than the study done in Mekelle Hospital, was 63% [16]. A study done on the “assessment of the nursing process implementation and associated factors among nurses in Debremarkos and Finote-Selam hospitals, Amhara region in, 2014 nursing care process implementation was 37.1% [15]. This is also far to the level of nursing care process implementation of this capstone project.

In a study conducted in selected governmental hospitals of Addis Ababa, Ethiopia, showed that one hundred (52.1%) respondents implemented nursing process while 92(47.9%) did not implemented nursing process [16].

On average, 88% of patients had documented nursing admission assessment, nursing diagnosis, nursing care plan, nursing implementation, and nursing evaluation showing an average increase by 78% from the base line. This implies that implementation of nursing process can be improved with some interventions delivered in a systematic way. However, a few proportions of patient cards still did not have documentation like nursing care implementation, nursing care plan and nursing evaluation, which is one of the important components of the nursing process. A discussion with the ward nurses, senior management team showed that they have difficulties in documenting the nursing care process.

A continues self-assessment and training should be done/given by quality improvement team of the wacha hospital for the nurses so as they will be able to provide complete and continues nursing process.

One of the major challenges in the implementation of the nursing process observed during the pre - intervention was lack of understanding and commitment of nurses for the nursing care process.

This could in fact be a result of the lack of knowledge and understanding to differentiate the nursing care process. To overcome this challenge, a quarterly checklist based assessment on hospital reform was introduced in the wacha primary hospital. This has helped to some extent the nurses to develop better understanding and performance, but it appeared that a continuous implementation of this process is mandatory to bring about significant and sustainable changes. Another major challenge in the implementation of the nursing care process observed during the follow up period was lack of accountability of the nurses for implementing the nursing process.

The responsibilities for providing the nursing care process for all admitted patients were shared among all nurses working in the wards. To overcome these challenge, each beds was assigned to each nurse working in the wards, so as they should be responsible for providing the nursing process for each patients admitted to that bed.

Most of the hospitals in Ethiopia are operating in a similar environment; the interventions could be replicable in other similar hospitals. However, a throughout investigation of the root causes for the poor implementation of the nursing process are considered necessary to pick the appropriate interventions. Poor handover of patients are another challenge to the completeness of nursing care process. However, through discussions of the issue with the senior management team patient hand over seen seriously and managerial decision has given [16].

The assessments based on the documentation of the nursing care process will tend to underestimate the existing nursing care process in the wards, which is the case in most developing countries. On the other hand, if nurses tend to fill the nursing care Process forms just for the sake of avoiding their accountability, the assessments based on the documentation of the nursing process might tend to overestimate the existing nursing care process.

CHAPTER TEN

10. CONCLUSIONS AND RECOMANDETION

10.1. CONCLUSION:-

Around hundred patients' medical record were reviewed in both pre and post interventions to assess the completeness of nursing care process, implementation rate of nursing care process was the problem in wacha primary hospital.

However, the implementation rate of the nursing care process improved from ten percent to eighty percent due to the intervention made in the hospital. This indicates that implementation of nursing care process can be improved with some interventions delivered using PDSA Cycle in a systematic way.

Patients who are admitting in the wards started gating a complete nursing care service after intervention. Individual patient nursing care documentation, completeness level with overall improved. To sustain the nursing care service refreshment training for newly employed nurses started and weekly performance base self-evaluation in the wards strengthened.

Therefore, it can be concluded that the elements of the interventions successfully increased the knowledge of nurses to improve the nursing care process completeness and patients also gating a nursing care in wacha primary hospital. And also, it can be concluded that staffs were positive relationship between an intervention elements to improve patient care in the hospital.

10.2. RECOMMENDATION

From the above conclusions to give a sustainable care for patients Health workers, Hospital, Woreda health office, Zonal health Departments should work to increase the nursing care process. However, the following recommendations are forwarded:

- Continuous supportive supervision of nurses should be strengthen
- A systematic approach (Such as PDSA Cycle) should be continued
- Weekly activity based evaluation should be strengthen
- Nurse accountability to implement the nursing process should be developed
- Patient hand-over should be strengthen

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Annexes

Annex 1 Nursing Care Process Data Extraction tool

Nursing Care Process Data Extraction Form			
Participant ID No:			
Full Name:			
MRN:			
Ward:			
Name of Data Collector:			
Date Admitted:			
Date Discharged:			
SN	Nursing Care Process assessment Format	YES	NO
PART ONE: Complete Nursing Admission			
1.1	Is Patient's Nursing Care Plan Documentation attached in the MR		
PART TWO: Complete NURSING Assessment			
2.1	Health perception and Management pattern		
2.2	Nutrition and Metabolism Pattern		
2.3	Elimination pattern		
2.4	Activity and exercise pattern		
2.5	Rest and sleep pattern		
2.6	Sexuality and reproductive pattern		
2.7	Cognitive and perceptual		
2.8	Self-perception and self-concept pattern		
2.9	Coping and stress tolerance pattern		
2.10	Role and relationship		
2.11	Value and belief		
2.12	summary of subjective and objective data		
PART TRHEE: Complete NURSING Diagnosis			
3.1	Problem No.		
3.2	Nursing problem (Nursing Diagnosis)		
3.3	Date& Time Identified		
3.6	Signature and Designation		
3.5	Date Resolved and Time		

PART FOURE: Complete NURSING plan			
4.1	Date& Time Identified		
4.2	Problem No.		
4.3	Nursing outcome/Goal/		
4.5	Intervention/Action		
4.6	Signature		
PART FIVE: nursing implementation and Evaluation			
5.1	Date& Time Identified		
5.2	Problem No		
5.3	Implementation/Intervention/Action		
5.4	Signature and Designation		
5.5	Patient Progress note / Evaluation		
5.6	Review Date and Time		

Annex 2: Root cause verification Checklist

S. no	Question	Choices	No.
	Training related information on NP		
1	Have you ever participated in any training?	Yes	15
		No	5
2	Have you ever participated in any training program about nursing care process?	Yes	0
		No	20
3	Have you participated in any training program about NP in the last one year?	Yes	0
		No	20

Declaration

1. This project is my original work, and all those sources of material are used for the project has been duly acknowledged.

Student's Name **Ermias Million**

Signature-----

Place Addis Ababa University

Date of submission June, 2018

2. This project has been submitted for examination under my approval as a university advisor.

Advisor's Name;

Anagaw Derse (PHD)

Gashaye Asrat (MPH)

Signature -----

Signature -----

Place Addis Ababa University

Date of submission June, 2018

3. This project has been evaluated under my approval as a university examiner

Examiner's Name

1. Name-----

Signature -----

2. Name-----

Signature -----

3. Name-----

Signature -----

Place Addis Ababa University

Date of submission June, 2018