ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH

IMPROVING THE IMPLEMENTATION STATUS OF NURSING AND MIDWIFERY CARE STANDARD PRACTICE AT MEDICAL, SURGICAL AND GYNECOLOGY WARDS IN DILCHORA HOSPITAL, DIRE DAWA, ETHIOPIA.

BY: MULATU TAKELE

ADVISORS:

ALEMAYEHU DESALEGNE HAILU
DR. ABABAI ZERGAW

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Declaration

I am hereby to declare, that except for references to other people's work which have been duly acknowledged, this capstone project is my own composition and neither in whole nor in part has this capstone project report been presented for the award of a degree or masters in this university or else.

Principal Investigator: ----------

Signature.....… Date…….

Advisor: ----------

Signature.....… Date…….

Co-Advisor: ----------

Signature.....… Date…….

Examiner: ……..

Signature.....… Date…….

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Abbreviations and Acronyms

AAU: Addis Ababa University

ADIE: Assessment, Diagnosis, Plan, Implementation & Evaluation

ALS: Average Length of Stay

BOR: Bed Occupancy Rate

BSC: Bachelor of Science

CEO: Chief Executive Officer

EHSTG: Ethiopian Hospital Service Transformation Guidelines

EOPD: Emergency Out Patient Department

FGD: Focused Group Discussion

FMGT: Financial Management

GOPD: General Out Patient Department

GP: General practitioner

GYN&OBS: Gynecology & Obstetrics

HRM: Human Resource Management

IPD: Inpatient Department

Lab: Laboratory

M & E: Monitoring & Evaluation officer

MR: Medical Record

NANDA: North American Nursing Diagnosis Association

PD: Pediatrics

QIPM: The Ethiopian Quality Improvement and Performance Monitoring

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Abstract

Background: The nursing/midwifery care standard practice is the levels of safe and competent practice but, its implementation status is poor & inconsistent, particularly in developing countries. Similarly, the baseline assessment in this study at Dil chora hospital was poor. Thus, it was critically important to improve the implementation of the Nursing/midwifery care standard practice in Dil chora Hospital.

Objectives: To improve the implementation status of Nursing /midwifery Care Standards from 48.2% to 73% in Medical, surgical & Gynecology wards of Dil chora Hospital, by the end of May 2018.

Method: A facility based pre- post interventional study was conducted from March to May 2018 in Dil chora Hospital, Dire Dawa, Ethiopia. The interventions include training of ward nurses; delegation of internal supportive supervision, strengthening nursing audit committee & facilitate to change the present nursing/midwifery process format with the new one. The same numbers of nurse/midwife participants (50 before & 50 after) and 80 medical cards (40 before & 40 after) were conducted by Simple random sampling method to compare the findings before & after interventions. The data were analyzed by using nursing/midwifery standard checklists.

Result: Among the total 50 the same respondents (50 before & 50 after), mean age was 31.20 years (SD=5.338) and the implementation status of nursing/midwifery care standards was 25 (50.5%) in baseline 38 (76%) after-intervention. This change was statistically significant at (*df* =7, $P < 0.05$). Of the total of 80 medical card review documentation (before 40 & after 40) the implementation status of the standards in nursing/midwifery process & Medication administration record was 19 (47.5%) in baseline, 31 (77.5%) after-intervention.

Conclusion and recommendation: The implementation status of the nursing /midwifery care standard practice is still below the expected criteria and it needs further intervention to increase its utilization. Knowledge, recognition & motivation are possible contributing factors for the improving of nursing/midwifery care standard practice those who are working at medical, surgical, & gynecology wards.

Key words: Nursing care, Nursing care standard, Nursing care standard practice.

Chapter One: Introduction

1.1. Background of the problem

The Nursing/midwifery Care Standard Practice is the levels of safe and competent practice that all nurses/midwives must meet when providing nursing/midwifery services. It is expected to provide the public with competent, safe and ethical nursing/midwifery care for which the nurses/midwives are fully accountable and responsible for their entire practice. Nurses /midwives are professionals who are committed to the development and implementation of nursing/midwifery care of standards through ongoing acquisition, application and evaluation of relevant knowledge, skills, attitudes and judgment(1). The goals of Nursing/midwifery care standard practice in the hospital system are improving the health outcomes of individuals, families and communities. As individuals, members and coordinators of inter-professional teams; nurses/midwives bring people–centered care close to the communities where they are needed most. Thereby contributing greatly in improving the health outcomes of those under their care as well as improving the overall cost effectiveness of health care services (1, 2, and 3).

The application of nursing/midwifery care standard practice is to give a better care with dignity and humanitarian reason, understanding the individual's needs, show compassion and sensitivity, and, provide care in a way that respects all people equally. A supportive and competent nursing workforce is required to ensure the nursing/midwifery care standard practice (1, 4, and 5).

By understanding of its importance in improving the quality of health care, the Ethiopian hospitals service transformation guideline sets the Nursing/midwifery Care Standard Practice as one of the responsibilities of the Nurses/midwives. However, despite the important role of nurses/midwives have for the betterment of the health care, their independent work; the Nursing/midwifery care Practice standards do not get enough emphasis as it is written in many books (4,6,7).

1.2. Statement of the problem

Poor & inconsistent implementation of nursing/midwifery care standard practice occurs commonly in health care facilities in developing countries. The outcomes of such poor implementation have been depicted a bad quality of nursing/midwifery care standard practice, disorganization of the health service, conflicting roles among nurses/midwives, medication error, poor diseases prognosis, dissatisfaction of customers with the care provided, and increased morbidity & mortality rates(8,10,11).

Even though the importance of the Nursing/midwifery care standard practice is very common, in various literatures showed that there exist different challenges in its implementation. The principles of the nursing/midwifery care standards such as the **professional accountability & responsibility**, **client focused provision of service**, **knowledge based practice & ethical practice** 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 (8, 9, 12).

The other challenges to test to implement the nursing/midwifery care standard practice were that the establishment of a validated model of nursing/midwifery records aimed to promote individual care. The results showed limitations of the nursing/midwifery care standard practice conducted according to the nursing/midwifery process formats particularly in the identification of problems presented by the patients and, consequently, diagnosis and the possible intervention procedures (10, 13, and 14).

Similarly, the implementation of Nursing/midwifery Care standard Practice in Dilchora hospital is still below the expected criteria (as indicated in the baseline assessment i.e.48.2%). Incomplete record of nursing/midwifery process components, incomplete medical record & lack of awareness for nursing/midwifery care standards are basic implementation challenges of nursing/midwifery care standards in our hospital. These problems are manageable if a nurse/midwife can properly implement nursing/midwifery care standards by complete medical recording & understanding of the nursing/midwifery care standards. This project aimed to improve the implementation of the Nursing/midwifery care standards in Dil chora Hospital by

addressing those major bottlenecks of the problem. Thus, it is expected that the findings of the project will play its role in improving the overall nursing/midwifery care standards and in decreasing the poor outcomes of the services. Therefore, in this study we are interested to answer the following two important questions: (a) what is the implementation status of nursing/midwifery care standards after intervention; and (b) what are the main factors that hinder the nurses/midwives from implementing the nursing /midwifery care standards?

1.3. Significance of the study

Nursing/midwifery care standard practice is one of the major health care services. It contributes a lot to the patient healing process. Even though there are competent physicians present in a given health institution, it would not be adequate without appropriate nursing/midwifery care standard practice. Nurses/midwives have 24 hour contact with patients as well as being near to them. Thus, as they are the frontline, the patients expect more from them and nurses/midwives should also fulfill patients' needs with competence and a compassionate approach. If the patient is denied appropriate nursing/midwifery care standard practice, the healing process is obviously compromised.

This study will give theoretical as well as practical significance for researchers, policy makers and practitioners in order to use as base line data. The significant of the study in nursing /midwifery care standard practice is to give a better care with dignity and humanitarian reason, understanding the individual's needs, show compassion and sensitivity, and, provide care in a way that respects all people equally.

Chapter Two: Objectives

2.1. General objective

- To improve the implementation status of the nursing/midwifery care standard practice from 48.2% to 73% at medical, surgical & Gynecology wards at Dilchora Hospital, Dire Dawa, in 3 months by the end of May 2018.

2.2. Specific objectives

1. To provide the awareness of the standards for 20 nurse/midwife professionals working at the wards in the hospital in 3 months by the end of May 2018.
2. To develop the ability of 3 nurse/midwife supervisors to mentor the nurse/midwife professionals working at the wards in the hospital, in 3 months by the end of May 2018.
3. To develop the ability of 5 nurse/midwife audit committee to audit the performance rate of standards in the Hospital, in 3 months by the end of May 2018.
4. To identify & solve the 3 major bottle necks of the challenges in implementing of nursing /midwifery care operational standards at the wards in the Hospital, in 3 months by the end of May 2018.

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Chapter Three: Root cause analysis

4.1. Collection of information on the causes of the problem

To identify the possible causes of the nursing/midwifery care standard implementation problem, Focus Group Discussions (FGDs) were held with selected staffs from hospital wards, all ward head Nurses and matrons. Two FGDs were held totaling 18 employees (for pre-intervention). The possible root causes were presented below & verified using Fishbone diagram (Figure 1). To identify the possible causes of the problem, all the participants were asked to list the most important causes of the problem after the discussion.

4.2. Possible root causes of the problem

- ✓ Low awareness about nursing/midwifery care standards
- ✓ Lack of nursing/midwifery supportive supervisors
- ✓ Low commitment of nurse/midwife staffs
- ✓ Incomplete & nursing care form
- ✓ Low experience of nursing/midwifery audit committee
- ✓ Inadequate nursing/midwifery care standard service material supplies
- ✓ Lack of recognition/motivation for model nurses/midwives
- ✓ Shortage of nurse/midwife staffs

Fish-bone analysis

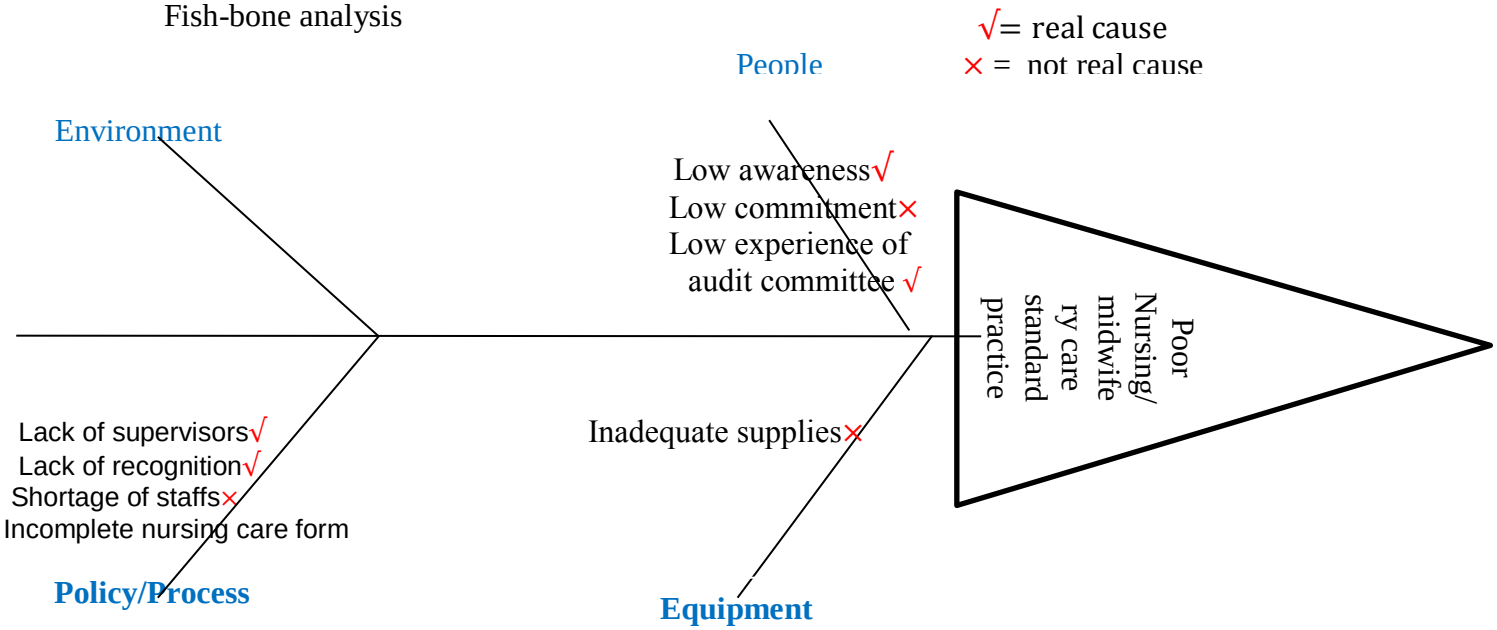


Figure- 1: A fish-bone analysis of r o o t causes of the problem for nursing /midwifery care standard practice in Dilchora Hospital, Dire Dawa, Ethiopia, 2018.

4.3. Verification of possible root causes the problem

It is well documented that fishbone does not tell the real cause of the problem so it needs further analysis in order to know the real cause of the problem. Therefore, through discussion & interview questionnaires with key stakeholders at Dilchora hospital the possible root causes were verified. Possible root causes were selected, verified & prioritized by interview questionnaires and focused group discussion participants by voting in the fish-bone (fig. 1 above) & pare to diagrams (fig. 2 below) respectively.

Low awareness about nursing/midwifery care standards: The nurses & midwives were interviewed with pre-test questionnaires on nursing/midwifery care standards. 20% were with good knowledge, 28% with fair knowledge & 52% were with poor knowledge during pre-intervention time (table 7 on page 30).

Lack of nursing/midwifery supportive supervisors: As Ethiopian Hospital Service Transformation Guidelines (EHSTG); the nursing/midwifery care standards should be implemented by continuous supervision of nursing/midwifery supportive supervisors but the nurses/midwives had confirmed that supportive supervisors were not established 100% in the hospital (table 9 on page 32).

Lack of recognition/motivation for model nurses/midwives: The respondents replied hundred percent that no recognition/motivation for model nurses/midwives after four years (table 9 on page 32).

Low experience of nursing/midwifery audit committee: As Ethiopian Hospital Service Transformation Guidelines (EHSTG); the implementation status of the standards should be audited by the committee every three months. Even though, the committee have been established; they have not been with experience in 74% to carry-out their daily activity(table 8 on page 31) .You can refer the magnitude of other possible root causes at tables 7-9 on pages on 30 to 32.

4.4. Identified real root causes for the problem

1. Lack of experience of audit committee
2. Lack of nursing/midwifery supportive supervisor
3. Lack of recognition & motivation
4. Low awareness about nursing/midwifery care standards

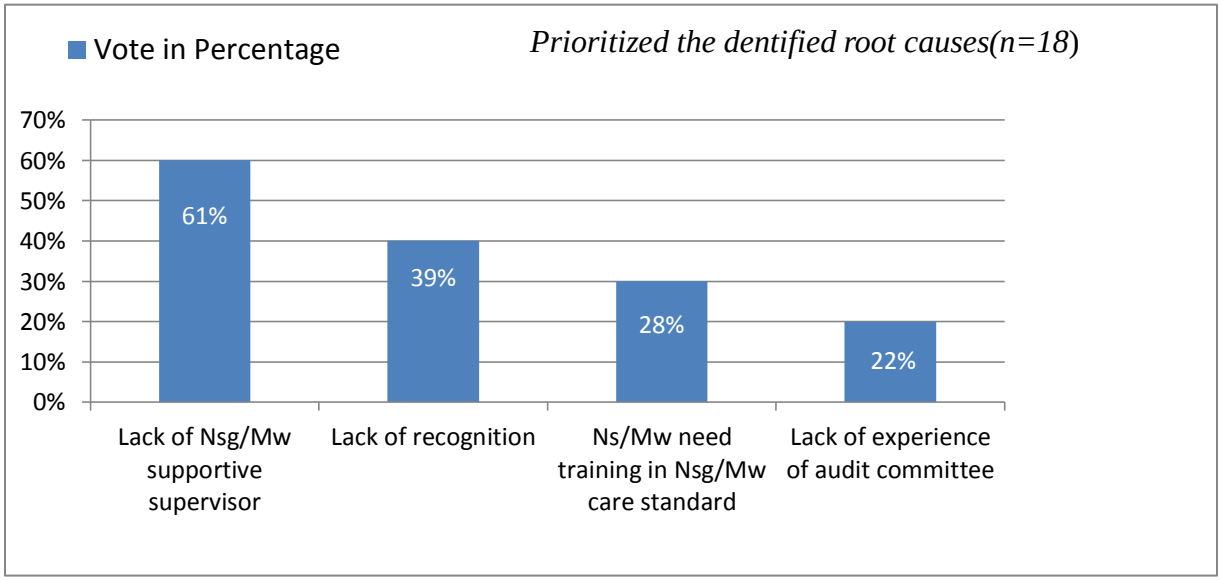


Figure 2: The magnitude of root causes of the problem by pare to diagram.

As we understood from the pare to diagram « Lack of nursing/midwifery supportive supervisor» was the prioritized root cause (main cause) that had been focused during the intervention period.

Chapter Four: Literature review

4.1. Nursing/midwifery care Standard Practice

4.1.1. Nursing/ midwifery care

Nursing/midwifery is a difficult profession to understand and engages many types of users of nursing/midwifery care. Nursing/midwifery care is a step wise process bringing a progress in the patient's health condition and living style over time, giving rise to the need for new data, different diagnoses, and changes in the plan of care. Therefore, evaluation is a continuous process to examine the effect of nursing/midwifery interventions and the treatment regimen on the patient's health condition and expected health outcomes (15, 16).

4.1.2. Standard of Practice

The Nursing/midwifery care standard Practice explains a skillful level of nursing /midwifery care as displayed by the critical thinking procedures called the nursing /midwifery process. The nursing/midwifery process includes the components of assessment, diagnosis, planning, implementation, and evaluation. As stated by the nursing/midwifery process, it encompasses significant actions designed by professional nurses/midwives (4, 17). Nursing /midwifery care Standard Practice is the professional nursing/midwifery activities that should be carried-out by the nurse/midwife using the nursing/midwifery process. The nursing /midwives process is also an organized, systematic and holistic approach to nursing/midwifery by which nursing/midwifery care provision is organized to achieve patient centered care (8, 18).

The Nursing/midwifery Care Standard Practice can be used as a Clinical decision-making process, Communication and history taking, documentation, a nursing/midwifery process by conceptualization of Professional Responsibility and Accountability, Knowledge-Based Practice, Client focused provision of care & Ethical practice by care givers. The nursing/midwifery care standard practice comprises the implementation of the nursing/midwifery process known as: Assessment, Diagnosis, Planning, Implementation and Evaluation of care (ADPIE). This process is effective if it is done together with the collaboration of patient, family and caregiver (19, 20, and 21).

The first Nursing/midwifery process component is assessment, which means the collection,

organization, validation, and documentation of both subjective & objective data. It involves taking vital signs, performing a head to toe assessment, listening to the patient‘s comments and questions about his/her health status, observing his/her reactions and interactions with others and is a systematic guide for data assessment that permits the identification of nursing problem (1, 8, 22-24).

The second Nursing/midwifery process component is Nursing/midwifery Diagnosis. It includes analyzing the data, identifying health problems, health risks, and the strengths the patient has, and formulating the nursing diagnoses. The Nursing/midwifery Diagnosis identifies the needs that require care and determines the degree of dependence on nursing/midwifery care (22-24).

The third Nursing/midwifery process component is the Nursing care Plan, it involves determining the overall nursing/midwifery care that should be established based on the diagnosis. It also includes prioritizing the patient‘s problems and diagnoses, formulating goals and desired outcomes. This will be used to select nursing interventions to enable the patient to meet those goals (22-24).

The fourth Nursing/midwifery process component is Nursing Implementation. It includes the beginning and completion of actions required to achieve results, which involves the implementation and documentation of the interventions performed. It also includes reassessing the client, determining the nurse/midwife‘s need for assistance, implementing the nursing/midwifery orders and documentation of nursing/midwifery actions (22-24).

The fifth Nursing/midwifery process component is Nursing Evaluation. At this stage, it is possible to assess the human response to the nursing care provided (24, 16). Evaluation includes collecting data related to the desired outcomes, comparing the data to see if the patient‘s goals or outcomes desired were met, relating the nursing actions to the goals and outcomes, evaluating the status of the problem, and continuing, modifying or terminating the patient care plan the human response. Thus, it includes not only analyzing the success of the goals and interventions, but also examining the need for adjustments and changes as well (22-25).

The professional nursing/midwifery care standard practice generally comprises four important

basic standardized concepts: **(a) Professional Responsibility and Accountability** which maintains standards of nursing/midwifery practice and professional conduct determined by FMOH. (b) **Knowledge-Based Practice** which consistently applies knowledge, skills and judgment in nursing /midwifery practice. **(c) Client-Focused Provision of Service** which Provides nursing/midwifery services and works with others to provide health care services in the best interest of clients. **(d) Ethical Practice** understands, upholds and promotes the ethical standards of the nursing/midwifery profession in clinical practice, education, administration & researches (9, 23, and 3).

4.2. Implementation Status of Nursing/midwifery Care standards

Even if the nursing/midwifery care standard practice is very important, various literatures showed the different challenges in its implementation. A study conducted in Brazilian private hospital showed that the nursing/midwifery care standard practice was not integrated. There was a lack of coherence in the prescribed actions related to patient health conditions. They additionally stated that a lack of preparedness and a lack of a holistic view that hindered the perception and record of the essential care provided (19, 26).

The Nursing/midwifery care Standards of Professional Implementation describe a competent level of behavior in the professional role, including activities related to ethics, education, evidence-based practice and research, quality of practice, communication, leadership, collaboration, professional practice evaluation, resource utilization, and environmental health. All professional nurses/midwives are expected to engage in professional role activities, including leadership, appropriate to their education and position. Nurses/midwives are accountable for their professional actions to themselves, their healthcare consumers, their peers, and ultimately to society (22, 23).

A study in Manitoba College explained that the College of professional Nurse/midwife has the legislated authority through the professional Nurses/Midwives Act to establish standards of nursing/midwifery care practice in order to protect the public. Standards of nursing/midwifery care practice described that how a professional nurse/midwife is to practice, at a minimum. This minimum is evidenced by their observable behaviors and actions. It is the responsibility of all professional nurses/midwives in Manitoba to understand these standards and be

accountable to apply them to their own nursing/midwifery care standard practice, regardless of roles or practice settings. The policies of employers do not relieve individual professional nurse/midwife of accountability for their own actions or the primary obligation to meet the Standards of Practice for professional Nurses/midwives. An employer's policies should not require a registered nurse/midwife to practice in a manner that violates the Standards of Practice for professional Nurses/midwives. The College provides consultation to assist nurses/midwives with the application of standards for nursing/midwifery practice (23, 27).

4.3. Professional Competence in Nursing/midwifery care Standard Practice

The customers have a right to expect nurses/midwives to display professional competence throughout their executions. The nurse/midwife as a professional is responsible and accountable for improving professional competence. It is the nursing/midwifery profession's duty to shape and guide the nursing/midwifery care standard practice for the care service competence. Regulatory agencies defined minimal standards of competence to protect the customer. The facility is responsible and accountable to offer a practice environment suitable to competent practice. Assure the competency is the shared duty of the professional individual of nurses /midwives, professional institutions, credentialing and certifying entities, regulatory agencies, employers, and other key stakeholders (22, 28, and 29).

4.4. Professional Evaluating Competence of Nursing/midwifery care Standard Practice

Competence in nursing/midwifery practice must be evaluated by the individual nurse/midwife (self-assessment), nurse/midwife **peers**, and nurses/midwives in the roles of supervisor, coach, mentor, or preceptor. In addition, other aspects of nursing/midwifery performance may be evaluated by professional **colleagues** and **patients**. Competence can be evaluated by using tools that capture objective and subjective data about the individual's knowledge base and actual performance and are appropriate for the specific situation and the desired outcome of the competence evaluation. However, no single evaluation tool or method can guarantee competence (15, 30).

4.5. Related Risk factors with implementation of Nursing/midwifery Care standards

Nursing/midwifery care Standard Practice implementation status can be affected by different factors. Some of them are: lack of adequate knowledge and skill of nursing/midwifery care standard practice, lack of skilled supportive supervision, lack of recognition & commitment, lack of nursing/midwifery audit program and lack of adequate supplies for the implementation of standards. The important factor in the implementation of the Nursing/midwifery care standard practice is the knowledge, skill & attitude of the nurses/midwives. The implementation status of a health facility relies on the knowledge, skills, and attitudes of the professionals (8, 22, and 31).

The study in Addis Ababa showed that highly knowledgeable nurse/midwife respondents were 38(25.2%) 10 times more likely to implement nursing/midwifery care standard practice than poor knowledge group nurses/midwife([AOR=9.1 at 95%CI (2.69, 30.9),adjusted for working environment & facility (32). Gaps in this study also showed that in the implementation of nurse/midwife process: nursing diagnosis, objective data collection and measuring evaluation were observable gaps. Among the reasons of this: lack of knowledge; absence of recognition for highly devoted nurses/midwives; their experience with declining value of nursing/midwifery despite their efforts (32). After a theoretical-practical knowledge-based training & practice in the implementation of the nursing/midwifery care standard, nurses/midwifery reported a positive change in their feelings after their initial discomfort and unfavorable perception of the nursing/midwifery diagnosis (33, 22, and 34).

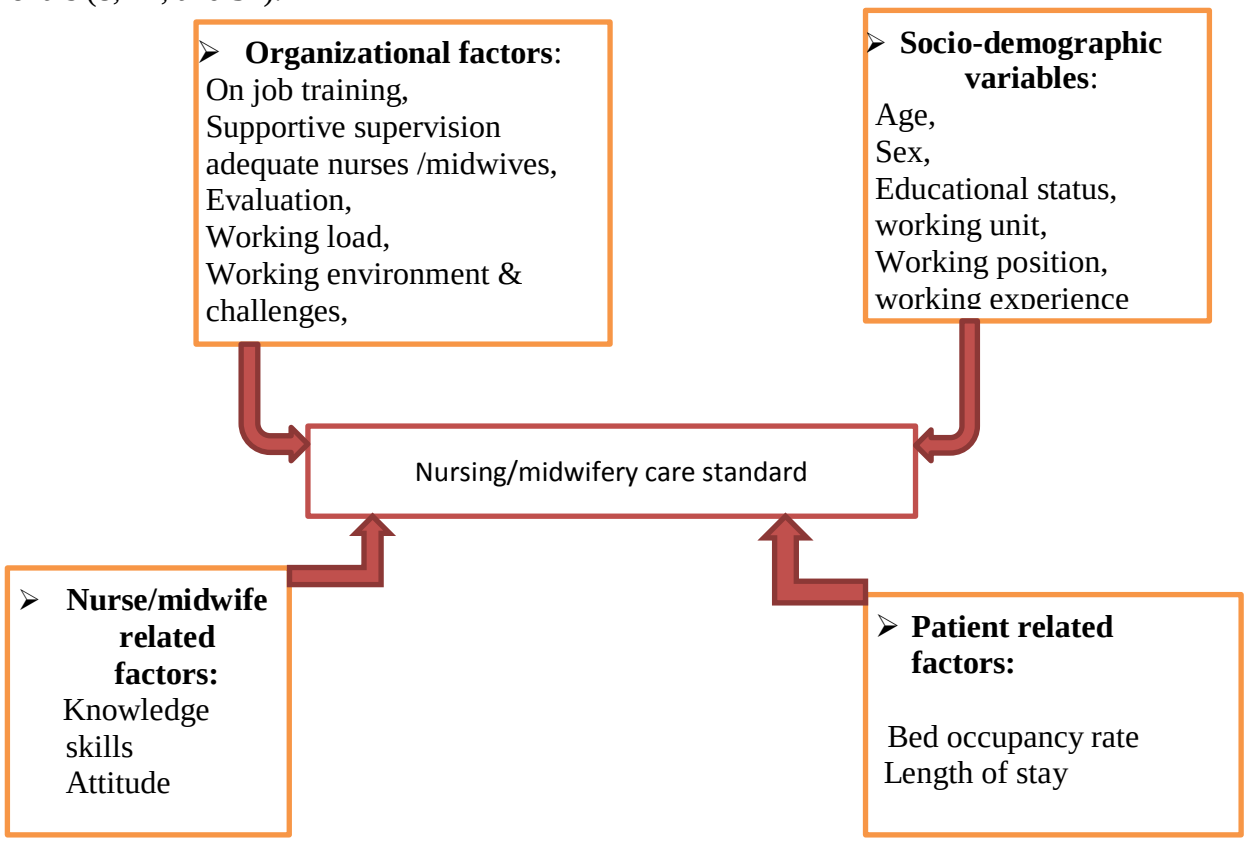
On the other hand, the other performance gaps in the nursing/midwifery care standard practice are poor supervision system. A nursing/midwifery supportive supervision enables individual practitioners to develop knowledge, competence & responsibility for their own practice and enhance consumer protection and safety of care in complicated health facility (4,35). If executed correctly, a supportive supervision could be a system for improving professional development and enhancing worker job satisfaction and motivation. To summarize, a nursing/midwifery supportive supervision is also a vital tool to support quality improvement, risk management, implementing management and building systems of accountability and responsibility (36). As the result, it has been suggested that in all work settings nurses

/midwives should receive adequate support and supervision to ensure that they have the opportunity to enhance the professional knowledge and skills (35, 36).

It is a good judgement to summarize that the nursing/midwifery care standard practice is very essential for the practice of nursing/midwifery care; but, its use is not an easy execution. So, ongoing evaluation is required for how the nursing /midwifery care standard practice is executed within the health facility (8).

4.6. Conceptual frame work

In developing countries nursing/midwifery care Standard Practice implementation status can be affected by different factors. Some of them are: lack of adequate knowledge and skills, lack of skilled supportive supervision, lack of recognition & commitment, lack of nursing/midwifery audit program and lack of adequate supplies for the implementation of standards. Mostly the implementation status of the standard relies on the knowledge, skills, and attitudes of the professionals (8, 22, and 31).



Chapter Five: Methodology

5.1. Study area/Setting

Dire Dawa is the main town of Dire Dawa Administrative Council. It is located in the eastern part of Ethiopia and about 515 kms away from the capital city of Addis Ababa. Dire Dawa Administrative Council has been subdivided into 9 town kebeles and 19 rural kebeles. According to statistics office census result (2009E.C), the total population of the town is estimated to be 466,000, of these 227874 (48.9%) are male and 238126 (51.9%) are females.

The former name of Dilchora hospital was Kedamawi Hailesilassie Hospital &during the Durg regime its name was also Abiyotawi Dilchora hospital

The hospital has 248 functional beds within 7 wards (medical ward 64, surgical ward 40, gyn & Obs ward 53, pediatric ward 29, orthopedic ward 40, NICU 12, S&M ICU 7).Bed occupancy rate(BOR) is one of the important hospital indicator that defines the average percentage of occupied beds during the reporting period. Then, the bed occupancy rate & average length of stay (ALS) in our hospital is 81% & 4.8 respectively, meaning, both are within the normal range of the boundary.

Most of the people living in the town are Orthodox and Muslim faith followers. Besides, the major ethnic groups are Amhara, Oromo, Somalie and Gurage.The town is surrounded by high lands and it has hot temperature. It is bounded by its rural kebels and other regions i.e Somalia regional state from the North and Oromiya regional state from southern west. In Dire Dawa Administrative Council, there are only two public hospitals namely Dil Chora general hospital and Sabiyan primary hospital. There are also other three private hospitals namely Midir Babur, Delt and Bilal hospitals. Dil chora hospital had been put the corner stone and established in Nehase 5, 1952 E.C by Emperor Haile-Selassie.

Dilchora hospital renders a variety of services like Gyn & Obs, psychiatry,orthopedics, pediatric, dental OPD,dermatology OPD &IPD, eye clinic,MCH etc.... It is also utilized as referral hospital by nearby towns and regions, even by neighboring countries like Djibouti and Somalie.It has a central and emergency laboratory, x-ray and pharmacy services. Dil chora hospital is a general hospital with catchment area population of around 1 million & half and it is

one of the most busy and crowded hospital in the region. Dil chora hospital is a home and choice of thousands of HIV patients, because it provides services free of charges.

5.2. Study design

An observational a facility based pre- post interventional study was employed to evaluate the performance of nursing/midwifery care standards. A pre-intervention baseline data was collected in March 2018. Based on the baseline, it was found out that the Ethiopian Hospital Service Transformation Guidelines (EHSTG), nursing/midwifery care standards met were insufficient. Therefore, an intervention was conducted to improve the EHSTG, nursing/midwifery care standards and a follow- up data was collected in May 2018. The same indicators/checklists will be used for the assessment of performance.

5.3. Study population

The study was conducted in three wards of Dil chora hospital, namely, Medical, surgical and Gynecology wards, which hosts around 53% of **the total hospital admissions**. The wards had a total of 119 beds (64 at Medical, 40 at surgical and 15 at gynecology wards). There were a total of 47 clinical nurses (15 at Medical, 8 at surgical & 24 at Gynecology & OBs wards) as the study population working at the end of March 2018. These wards had been selected because of they host majority admission patients from the other wards in the hospital; having similar measurement tools; respondents & avail the majority of the clinical nurses in the hospital. Averagely more than 60 patients have been admitted within 24 hours in the hospital.

5.4. Sampling & sample size determination

A total sample size was determined using a sample size calculation formula for comparative interventional study that allows detecting a 25% change in the primary outcome as compare to the possible interventional packages. The parameters used in the sample size calculation will be a 25% change (from p_1 to p_2) in the proportion of nurses/midwives who will meet a complete Nursing/midwifery care standard practice with a confidence level of 95% and study power of 80%. A 10% contingency was considered to account missing information as a result of loss of respondents. Based on the above assumptions a total of 50

nurses/midwives were interviewed by using observational checklist before & after the intervention periods (see annex-V on part-II on page 47) to measure the Nursing/midwifery care Standard practice. It contains 10 nursing/midwifery care standard checklists.

On the other hand 10 medical records had been taken at each ward prior to three months to the data collection to review nursing/midwifery process, medical record completeness & medication administration for performance rate of the nursing/midwifery care standards. A total of 80 medical records were reviewed from the three wards (40 pre intervention & 40 post intervention).The design was used a one-one control and intervention ratio and the sample size is equally divided into both groups. The sample size calculation was shown below.

$$n = \frac{(Z\alpha + Z\beta)^2 * [P_1(1-p_1) + P_2(1-P_2)]}{(P_2-P_1)^2}$$

Where, n = the required sample size

P_1 = the proportion of standard checklists which met a Nursing Care standard practice pre-intervention (before intervention) = 0.48

P_2 = the target value of the proportion of standard checklists which met a Nursing Care standard practice post - intervention (after intervention) = 0.73

P_2-P_1= the magnitude of a change that was a desired to be able to detect = 0.25

1-∝= the level of confidence; (α =0.05, $Z\alpha$ =1.645)

1 - β = the power of the study; (β=0.8; Z_β =0.84)

$$n = \frac{(1.645+0.84)^2 * [0.48(1-0.48) + 0.73(1-0.73)]}{[0.73-0.48]^2} = 44.13 \approx 45$$

10% Contingency=4.5≈5. Then the total Required Sample Size of nurses & midwives =2*(45+5)=100 (50 nurses/midwives Pre-intervention and 50 nurses/midwives Post-intervention)

5.5. Data quality assurance &sampling procedure

Base line data were collected in March, 2018 follows up data in May, 2018, after three months of implementation of nursing/midwifery care standard practice. The data collection could be conducted & measured using: (1) Nursing/midwifery care standard checklists. (2) A semi-structured interview administered questionnaire, with relevant information on socio-demographic characteristics of nurses/midwives & on awareness & challenges of nursing /midwifery care standards practice for nurses/midwives. Questionnaires were also prepared on managerial challenges of nursing/midwifery care standard practice for hospital managers. The ten standard checklists were prepared for nurses /midwives who were working at the medical, surgical, gynecology & orthopedic, wards in March, 2018, 2nd week before intervention and May, 2018, 2nd week after intervention. The same data collection tools, procedures and number of respondents were used in both periods to facilitate comparison and avoid possible biases. Interview was conducted with 50 staff nurses/midwives and also for other 15 hospital managers. A 3 focused group discussions were made with 8 nursing/midwifery audit committee members, 14 midwifery staffs including CEO & matron & 6 other staff nurses. The questionnaires for the data collection were commented by head nurses, matrons, staff nurses, quality officer, as well as interns of medical students. Half day training was also given for the data collectors.

5.6. Inclusion and exclusion criteria

- ✓ Inclusion criteria: - All inpatient ward nurses/midwives
  - Patient cards at medical, surgical & gynecology wards
- ✓ Exclusion criteria: - Nurses/midwives at emergency department & outpatient department.
  - Free service nurses/midwives & absentees during data collection

5.7. Study Variables

- ➢ Dependent variable

- ✓ Nursing/midwifery care standard practice
- ➢ Independent variables
  - **Socio-demographic variables**: Age, sex, educational status, working unit, working position, working experience.
  - **Organizational factors**: on job training, supportive supervision, adequate nurses /midwives, evaluation, working load, working environment & challenges,
  - **Nurse/midwife related factors:** knowledge & Attitude
  - **Patient related factors:** Bed occupancy rate and length of stay

5.8. Operational definition

- **Nursing/midwifery care standard**- It is the professional nursing/midwifery activities that are demonstrated by the nurse/midwife through the nursing/midwifery process.
- **Nursing/midwifery process**- It is an organized, systematic and holistic approach to nursing /midwifery through which nursing/midwifery care standard provision is organized to achieve patient centered care.
- **Challenge**-the situation of being faced with something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability.
- **Nurses'/midwives' Knowledge** - is the ability of nurses/midwives to directly know & perceive, to feel, or to be cognizant of events & more broadly, it is the state of being conscious of nursing/midwifery care standards & classified as:-
  - ✓ ***Good knowledge:*** for nurses/midwives those who answer greater or equal to 75% of the knowledge related questions.
  - ✓ ***Fair knowledge:*** for nurses/midwives those who answer 60 to 74% of the knowledge related questions.
  - ✓ ***Poor knowledge:*** for nurses/midwives those who answer less than 60% of the knowledge related questions.
- **Nurses'/ Midwives' Attitude**-means the nurses/midwives perception towards nursing /midwifery care standards and classified as:
  - ✓ ***Favorable attitude:*** for those who have a mean score of more than or equal to 50% of attitude related questions.

- ✓ ***Unfavorable attitude:*** for those who have mean score of less than 50% of attitude related questions.

- **Complete**- refers A patient is classified as received a complete Nursing Process if he /she has a documented Nursing ADPIE.
- **Incomplete**-refers the patient is classified as not received a complete Nursing Process if the patient has not a documented Nursing ADPIE.
- **Medical Record Completeness**-They are papers that document the nursing/midwifery process & other necessary patient medical records.

5.9. Data analysis procedure

The proportion of nursing /midwifery care standard performance was evaluated by using the ten nursing/midwifery standard checklists with met & unmet columns. The data were calculated for both pre-intervention and post–intervention groups. The medical record document review was evaluated by using each of five components of the nursing/midwifery process & using seven medical record components with complete & incomplete columns. A Pearson's Chi-square test was used to test the difference in the outcome of interest before and after intervention and a P-Value < 0.05 was considered statistically significant by using SPSS soft ware. .

5.10. Ethical consideration

This study was approved by AAU ethical committee & management committee of Dil Chora hospital. Patients & respondents right must be considered

5.11. Plan for dissemination of results

The final study result will be presented at public defense forum and will be submitted to AAU for possible documentation in the libraries. Copies will also be sent to Dilchora hospital, Regional Health Bureau, Federal MOH, and different NGOs involved in improving hospital performance.

Chapter Six: Interventions

6.1. Alternative interventions

After discussion with different nurse/midwife professionals as total of 16 staffs, comparative analysis of alternatives were carried out to select the best interventions for the root cause of the problem.. The followings were comparative analysis of alternatives:

- ✓ Training of nurses/midwives for supportive supervisor
- ✓ Experience sharing with other facilities to assign a supportive supervisor
- ✓ Delegation of supportive supervisors among trained nurses/midwives
- ✓ Recognition and motivation of model nurses /midwives to select supportive supervisor.

Table 1: Alternative interventions at Dilchora Hospital, Dire Dawa, 2018.

Root cause	Interventions
Lack of nursing/ midwifery supportive supervisors	1. Training of nurses/midwives for supportive supervisor 2. Experience sharing to assign a supportive supervisor 3. Delegation of supportive supervisors among trained nurses/midwives 4. Recognition and motivation of model nurses /midwives to select supportive supervisor.

6.2. Selection of the best interventions

Lack of nursing/midwifery supportive supervisor was an identified root cause of the problem for the implementation of nursing/midwifery care standards. The hospital CEO, matrons, quality officer, Monitoring & Evaluation officer, plan officer, the head nurses/midwives, the nursing/midwifery audit committee & staff nurses/midwives with a total of 16 staffs had listed the alternative interventions as indicated below (see table-2 below). The best intervention had been selected based on the following four Evaluative Criteria, namely:

a. impact on the problem,
b. resources (cost),
c. time required to implement, and
d. Political feasibility.

Table 2: Selection of the best intervention at Dil chora Hospital, Dire Dawa, 2018.

5- highest & 1 – least point

Intervantions	**Criteria**				Total Score
	Impact	**Cost**	**Time**	**Feasibility**	
1. Training nurses /midwives	3	3	4	5	15
2. Experience sharing	3	4	4	4	15
3. Delegation of nurses /midwives for supportive supervisors	5	5	5	5	**20**
4. Recognition of model nurses /midwives	5	4	4	5	18

The results showed that, if each evaluative criterion was weighted equally, Delegation of trained nurse/midwife for supportive supervision was the best intervention with a total score of 20, followed by Recognition of model nurses/midwives (with a total score of 18); Training nurses/midwives & Experience sharing (with a total score of 15). However, since the impact of Option 1 and 2 on solving the problem were low compared to Option 3 & 4; because the hospital had a better understanding & financial capacity to solve the problem & the selected Option 3 was as the best alternative intervention for the solution.

Chapter Seven: Implementation of the interventions

7.1. Delegation of nursing/midwifery supportive supervisors

The Delegation of Nurse/midwife Supportive Supervisor to the wards was an interventional strategy for the better implementation status of Nursing/midwifery Care Standards. Three nursing/midwifery supportive supervisors (having a training of trainers/TOT) were assigned to in-patient wards to facilitate the implementation status of the standards. Supportive supervision has played a great role to improve the Nursing/midwifery Care Standard Practice in the wards during the interventional periods. The individuals involved in this package were selected a trained nurses at the wards. The nurse/midwife supportive supervisors have mainly direct, coach, mentor & supervises to the junior nurse/midwife care givers how to assess every health patterns of the patients by using and categorizing of North American Nursing Diagnosis Association (NANDA).

Supervisor Nurses/midwives: are responsible for the overall function of nursing and midwifery activities in the hospital on duty and are accountable to the Nursing/Midwifery Director. A close follow up of the implementation of the Nursing/midwifery care standard practice was also been made by the Ward Head Nurses during the working hours. The Ward Head Nurses has checked the implementation status of the Nursing/midwifery care Standard Practice on a daily bases. In addition, implementation status of the Nursing/midwifery Care Standard Practice has been evaluated every month by nurse audit Committee of the hospital.

7.2. Training of 17 nurses/ midwives

Three days onsite training was given for 17 nurses/midwives from the in-patient wards about Nursing Care Standards, based on the Ethiopian Health Service Transformation Guidelines (EHSTG), Chapter 7. The training focused on the Nursing/midwifery care operational standards, on documentation of Nursing/midwifery process component formats, recording of medication administrations & other necessary format sheets. The main objectives of the training were to: discuss the importance of Nursing/midwifery care standards; describe the five Nursing Process Components; describe the Nursing Process Documentation tool adopted by the hospital; and discuss the challenges that the Nurses/midwives faced during the implementing period. The training was given by BSC Nurses working in the hospital that has better knowledge and training experience on Nursing Care Standards.

7.3. Preparation of New Nursing/midwifery Process Formats based on the wards request

Another interventional package was provision of new Nursing/midwifery Process Documentation Forms. The former format had unclear & incomplete basic elements (components) like evaluation column. In addition to missed valuable points & it was wastage of time to record everything there. But the new format had avoided the above mentioned problems & facilitates the care givers to record, & selects the important interventions with simple alternatives. The orientation had been given for the in-patient staff nurses/midwives for how to record or document about the new nursing/midwifery process formats.

7.4. Strengthening of Nursing/midwifery audit committee

Nursing/midwifery Audit committee was established in our hospital 3 months before this capstone project had been conducted. Even though it had been stablished, the audit committee had not been skilled with practical experience & then, the Nursing/midwifery Audit committee needs to be strengthened & supported by skilled professionals & equipped with necessary materials. A three Focus Group Discussion had been held with the committee to identify gaps, to exchange experiences and to develop Term of Reference (TOR) & evaluating checklists during the intervention period.

Chapter-Eight: Result

8.1. Socio-demographic characteristics of nurses/midwives

A total of hundred nurses/midwives (50 before & 50 after interventions) were interviewed & yielding a response rate of 39 (78%) were females. 48% of the total were found within age categories of 30 to 39 at pre& post-intervention periods respectively. 31.2 of them were the mean age at pre & post intervention periods and standard deviation is 5.338 at pre intervention and at post intervention periods. Socio demographic characteristics of the respondent showed in table 1 below. The majority of respondents 37(74%) were BSC nurse/midwife professionals, the remaining 9(18%) & 4 (8%) were diploma & 2nd degree nurses/midwives respectively.

Most of the respondents 26 (52%) were working at medical, surgical& gynecology wards. The rests 24 (48%) were working at orthopedic, general ICU & ophthalmology wards. Work experience of nurse/midwife varies from one to twenty-six years while the majority lies within the category of 5 to 10 years which were 26(52%).Nurses/midwives whose clinical service was less than and equal to four years were 8 (16%) and the rests 10(20%) & 6(12%) of nurses/midwives had lied within the categories of 10 to 11 & 21 to 30 years respectively.

Table-3: Socio-demographic characteristics of study participants in Dil chora hospital, 2018

Socio-demographic variables		Pre-intervention		Post-intervention		P-value
		Numbers	%	Numbers	%	
Sex	Male	11	22%	11	22%	
	Female	39	78%	39	78%	
Age	20-29	21	42%	21	42%	t = 41.333 df=49 critical value= 0.484 thus significant
	30-39	24	48%	24	48%	
	40-49	5	10%	5	10%	
	≥50	0	0	0	0	
Mean age (SD)		31.2 (5.34)		31.2 (5.34)		
Educational status	Diploma	9	18%	9	18%	
	First degree	37	74%	37	74%	
	Second degree	4	8%	4	8%	
Working unit	Medical ward	15	30%	10	20%	
	Surgical ward	8	16%	8	16%	
	Gynecology	3	6%	3	6%	
	Others	24	48%	29	58%	
Working position	Nurse director	0		0	0	
	Head nurse	3	6%	3	6%	
	Staff nurse	47	94%	47	94%	
Service year	<4	8	16%	8	16%	
	5-10	26	52%	26	52%	
	11-20	10	20%	10	20%	
	21-30	6	12%	6	12%	
	>30	0	0	0	0	
Service year in current position	<1	13	26%	13	26%	
	1-5	35	70%	35	70%	
	6-10	2	4%	2	4%	

8.2. Implementation status of standard checklists (stand.1-3, 5, 6, 8-10)

A total of 10 nursing/midwifery care standard checklists were used in this capstone project both in pre and post-intervention periods to evaluate the implementation status of nursing/midwifery care standards in the Ethiopian Hospital Service Transformation Guidelines (EHSTG), and determine the improvement of the standards. In this section (section 8.2.) only had explained the 8 standards (except standard 4 & 7)were evaluated; because the two standards(4 & 7) orders to review the document for nursing/midwifery process & for medication administration in medical

record completeness(please see table-5 & 6 respectively). During the intervention period; the improvement of the nursing/midwifery care standard practices in 8 standards; some changes were made in March to May & the standards were met and improved in 25.5% ranges as a result of intervention taken in standards (see table-4 below). At the end of the project duration, the improvements had been achieved as a result of the standards performances & the analysis of data from the baseline regarding the number of met standards showed a change from 25(50.5%) to 38(76%) in 8 standards.

Generally, the change in the number of nursing/midwifery care standards in Dil chora general hospital ranged from 50.5% in pre-intervention to 76% in the post intervention.

Table 4: The implementation status of nursing/midwifery care standards from 8 observational standard checklists in Dil chora hospital, in March to May, 2018

Accomplishments	Time accomplished	No of standards met	% of standards met
Pre intervention	February	4.04/8	50.5%
Intervention follow up	March to May	2.04/8	25.5%
Post intervention	June	6.08/8	76%
Difference	At June	2.04/8	25.5%

8.3. Implementation status of nursing /midwifery Process record completeness (Standard 4)

Standard 4 have stated that the review of document record completeness on nursing/midwifery process. A total of 80 Medical Cards of discharged patients were reviewed during the pre and post-intervention periods. Out of the total, 40 cards were reviewed before intervention time as the baseline & 40 Medical cards were reviewed during post intervention period as the final result. Among the collected cards 12.8(32%) of them had a complete Nursing Care Plan Documentation attached & done in their Medical Cards during pre-intervention time. This had been increased to 25.6(64%) during the post intervention period. The proportion of patient who documented Nursing Admission Assessment increased from 16(40%) to 32(80%). Similarly, the proportion of patient who had documented Nursing Diagnosis has been increased from 16(40%)

to 28(70%), Nursing Care Plan from 12(30%) to 28(70%), and Nursing Implementation increased from 12(30%) to 24(60%) pre & post-intervention periods respectively. The Nursing /midwifery Evaluation part in the Nursing/midwifery Process documentation was found to be the component most frequently missed by the nurses/midwives, both in the Pre and Post-intervention periods. Nursing/midwifery evaluation had been documented 8(20%) and 16(40%) of the patients during the Pre and Post-intervention periods, respectively (see table 5 below).

Tab-5: The implementation status of Nursing/midwifery care standards in Nursing/midwifery process complete recording (standard 4) at Medical, surgical & gynecology wards in Dil chora Hospital, Dire Dawa, Ethiopia, 2018.

Nursing/midwifery process components	Pre intervention (n=40 MRs)		Post intervention (n=40 MRs)	
	Complete record N (%)		Complete record N (%)	
Assessment	16	40%	32	80%
Diagnosis	16	40%	28	70%
Nursing Care Plan	12	30%	28	70%
Implement	12	30%	24	60%
Evaluation	8	20%	16	40%
Average result of Nursing /midwifery process	**12.8**	**32%**	**25.6**	**(64%)**

8.4.Implementation status of medication administration in medical record completeness (Standard 7)

Standard 7 have stated that the evaluation of medication administration by overview of medical record document completeness on patient's course of treatment. In medication administration records: Physician Order, transcribing the Order, Administration of Medications, Administration & *Documentation* were revised in the patients'card.The implementation status of medication administration in this capstone project was summarized by medical record completeness & by overview of attachment of necessary patient forms. A total of 80 Medical Cards of discharged patents were reviewed. 40 medical records were review during the pre-intervention period and 40 Medical cards were also reviewed during post-intervention period. Out of the total 40 patient cards were reviewed during the baseline assessment. The medical record completeness was

increased from 55.1% to 92.1% from pre& post-intervention periods. The proportions of patient medical record documentation pre & post-interventions had been displayed in table 6 below.

Table 6: The implementation status of Nursing/midwifery care standards from medication administration records in medical record completeness (standard 7) at Medical, surgical & gynecology wards in Dilchora Hospital, Dire Dawa, Ethiopia, 2018.

Medication administration records in overview of MR completeness	Pre-intervention (n=40 MRs)		Post-intervention(n=40 MRs)	
	Complete	Incomplete	Complete	Incomplete
Presence of patient form & physician signed	32(80%)	8(20%)	40(100%)	0
Physician order sheet note& signed	32(80%)	8(20%)	40(100%)	0
Nursing care plan done & signed	12.8(32%)	27.2(68%)	32(80%)	8(20%)
Record all medication administration & signed	28(70%)	12(30%)	38(95%)	2(5%)
Discharge summary present & signed	28(70%)	12(30%)	39(97.5%)	1(2.5%)
Discharge outcome (death Improve, disappear, self- discharge…)	28(70%)	12(30%)	39(97.5%)	1(2.5%)
Name of nurse & nursing care plan did	12.8(32%)	27.2(68%)	30(75%)	10(25%)
Average %	24.8(62%)	15.2(38%)	36.84(92.1%)	3.16(7.9%)

8.5.The overall implementation status of the Nursing/midwifery care standards

Generally, the overall implementation status of the nursing/midwifery care standards were the summation of the 10 nursing/midwifery care standard checklists that had been displayed in the following graph (fig-3). Therefore, the implementation status of nursing/midwifery care standard practice was increased from 48.2% to 76.4% in pre & post-intervention periods respectively.

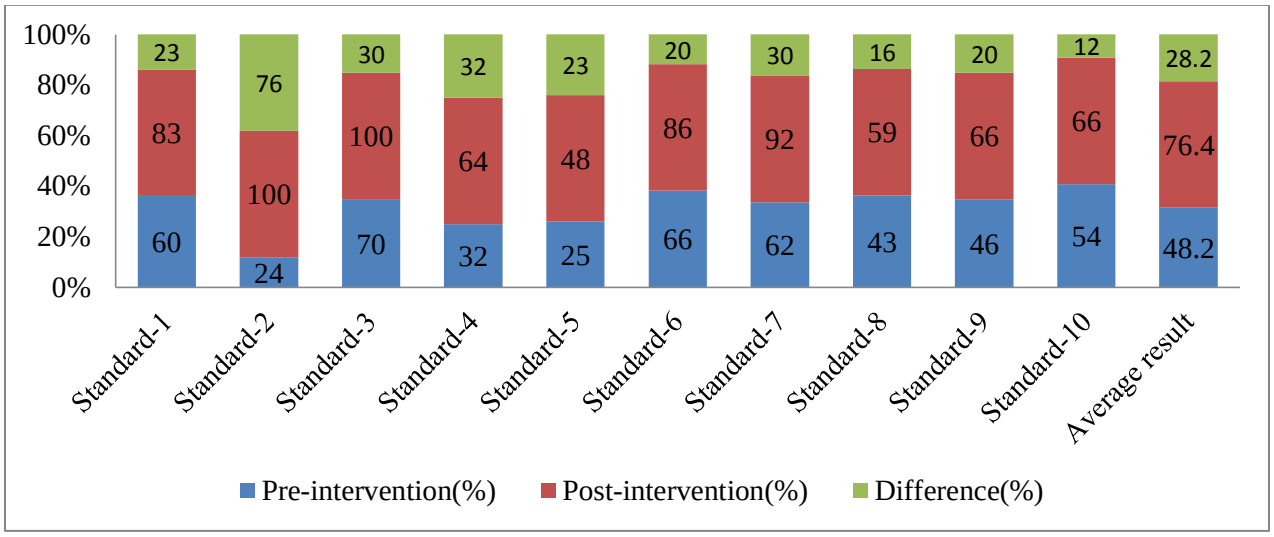


Figure 3: The implementation status of Nursing/midwifery care standards from all (10 standards) nursing/midwifery care standard checklists

As Federal Ministry of Health the expected criteria that every component of standards should be implemented more 80% as a cutoff point with good performance rate. If every standard implements more than 80%, it will lead to the quality of service & patient satisfaction. According to this concept, in this study standard-1-3, 6 & 7 have been implemented more than 80% and standard-4,5 & 8-10 have been implemented less than 80% as described in fig-3 above. The average implementation status of medical, surgical & Gynecology wards were increased from 48.2% to 76.4% from baseline to post-interventions respectively.

8.6.Knowledge & Attitude of nurses/midwives on nursing/midwifery care standards

There were fourteen questionnaires about knowledge & attitude related concepts about standards. Questionnaires about knowledge were measured as good knowledge, fair knowledge and poor knowledge. Majority of the participants 26(52%) had poor knowledge which had been followed by 24(48%) of fair knowledge & 10(20%) of good knowledge in pre-intervention period. After intervention the majority of the respondents 20(40%) had good knowledge; 15(30%) & 15(30%) had fair knowledge & poor knowledge respectively.

Regarding the overall attitude of nurses/midwives towards nursing/midwifery care standard practice, among seven attitudes related questionnaires, 30(60%) of the respondents had answered the unfavorable attitude related questionnaires and the remaining of the

respondents 20(40%) had favorable attitudes towards the nursing/midwifery care standard practices in the pre intervention periods; whereas, the majority of the participants 26(52%) had favorable attitudes which had been followed by 24(48%) of unfavorable attitudes in post-intervention periods respectively (See table 7 below).

Table 7: The distribution of knowledge and attitude of nurses/midwives towards nursing/midwifery care standard and its implementation level at Dilchora hospital, in Dire dawa, 2018.

Variable		Pre-intervention		Post-intervention		Total respondents
		Number	%	Number	%	
Knowledge	Good	10	20%	20	40%	30
	Fair	14	28%	15	30%	29
	Poor	26	52%	15	30%	41
Attitude	Favorable	20	40%	26	52%	46
	Unfavorable	30	60%	24	48%	54

8.7. Challenges interviewed from hospital managers

An in-depth interview was done with the administrative body of hospital including CEO, CCOs, M/E officer, Quality officer, Nursing/midwifery directors, and nurse heads. A total of 30 respondents were involved in both intervention periods (15 respondents before intervention) and (15 respondents after intervention). Eight of the respondents were females. The mean age of participants were 34 years (SD=6.302). Participants of the interviewee had mean total work experience of 11.87 years (SD=8.157). The respondent's average number of years in their current job position was 2.53 (SD =1.552), ranging from 1 to 6 year.

Of 13(86.7%) of the hospital managers & of 14(93.3%) of them said that there were lack of its own budget allocation about the nursing/midwifery standards implementation in the hospital before intervention & after intervention respectively. Of 13(86.7%) of the managers said that the nurses/midwives were without recognition & motivation both in pre & post-intervention periods. According to the managers 13(86.7%) & 10(66.7%) of the nurses/midwives were unable to train the nursing/midwifery care standards before & after intervention periods respectively. In addition to the above challenges, the managers had mentioned several important challenges that hindered the implementation status of the nursing/midwifery care standards in following table (See table 8 below). The above mentioned challenges were also mentioned & supported by nurse/midwife

respondents in more than 60% before & after intervention periods.

Table 8: The challenges that had been reported by hospital managers on nursing /midwifery care standard practices (Organizational related factors).

S.No	Challenges (n=15)	Pre-intervention		Post-intervention	
		Number	%	Number	%
1	Lack of Knowledge about the standards	13	86.7	10	66.7
2	Inadequate number of professionals	11	73.3	9	60
3	Lack of training regarding the standards	12	80	9	60
4	Lack of recognition and motivation	13	86.7	13	86.7
5	Lack of budget allocation about the standards	13	86.7	14	93.3
6	Nursing /midwifery audit committee didn't support by M&E and quality officers	11	73.3	9	60

8.8.Challenges from nurses/midwives towards implementation of Nursing /Midwifery Care Standards

Almost all of the respondents (before 50 & after 50 nurses/midwives in both periods) mentioned that the major challenge in implementing status of standards in the hospital was lack of recognition & motivation 50(100%) pre & after intervention periods. Most respondents including administrative bodies had believed that the hospital had recognized model staffs four years ago but currently no any recognition & motivating factors. Lack of awareness about the standards in the EHSTG was another challenge in Dilchora hospital. As they stated that only some of higher officials or managers have known about Nursing /Midwifery Care Standards in the EHSTG, but other nurse/midwife staffs had not adequate information about it. Even more than 45(90%) of nurse/midwife professionals had no read or referred the nursing/midwifery care standards in the EHSTG during their intervention time at the ward. On the other hand, the majority of the respondents' stated that there was shortage of nursing/midwifery supplies 32(64%) & 30(60%) pre & post-intervention periods respectively. Please see additional challenges in the following tables (table-9).

Table 9: The challenges that had been reported by nurses/midwives on nursing /midwifery care standards.

S.N	Challenges	Pre-intervention		Post-intervention	
		Number	%	Number	%
1	Shortage of nurses/midwives	30	60	26	52
2	Nurses/midwives need training about nursing/midwifery care standards	23	46	17	34
3	Lack of awareness about nursing /midwifery care standard	26	52	20	40
4	Shortage of supplies for nursing /midwifery care standard practice	32	64	30	60
5	Lack of awareness to record correctly the nursing/midwifery forms	25	50	24	48
6	Lack of recognition & motivation	50	100	50	100

8.9. Evaluation

The overall results: The evaluation needs to answer the questions« Had the intervention changed the determinants? Or met the goals? By how much? Why? & Why not? The implementation status of nursing/midwifery care standards was increased from 48.2% to 76.4%, in pre & Post-intervention periods respectively. In this interventional period an increment was made by 28.2% from baseline data (see table 10 below).And the performance rate was met to the desired objective due to some basic implementation of the interventions like; Delegation of nursing care supportive supervisors; training of the nurses & midwives about the standards; preparation of the new nursing/midwifery forms & strengthening of audit committee.

Table-10: A final performance rate of nursing/midwifery care standard practice

Objective	Indicators	Pre intervention	Post intervention	Frequency
To maximize the implementation status of the nursing/midwifery care standard from 48.2% to 73%	Delegation of trained nursing/midwifery supportive supervisors	No	Yes	Quarterly
	Performance rate of Nursing/Midwifery care standard practice	48.4%	76.4%	Half yearly

Chapter Nine: Discussion

The aim of this capstone project was to improve the implementation status of nursing /midwifery care standards among nurses/midwives working in Dilchora Hospital, Dire Dawa, Ethiopia 2018.

9.1. Nursing/midwifery care standard implementation status

The implementation status of nursing/midwifery care standard practice in this capstone project was increased from 25(48.2%) to 38(76.4%) before & after interventions from the baseline respectively. This study was advanced in its implementation of baseline(pre-intervention) with the study conducted in Asella Referral Teaching Hospital (37) & in some selected hospitals of Central and Northwest zones of Tigray region which was 57(14.7%)(38) & 70(35%) respectively. In contrast, it is low by its baseline when it compares with Tikur Anbessa hospital(32) which was 86(57.6%) but it exceeded by this study in 38(76.4%) after intervention. This difference might be due to: the study area, sample size, size of the facility, study time & measurement criteria to say nursing/midwifery care standard is implemented. On the other hand, this study is lower than with a study conducted in Asella Referral Teaching Hospital with its interventional difference which was 46.8% & from this study which was 28.2% after interventions. This might be in addition to the above mentioned reasons: low organizing & administration, low commitment of some nursing/midwifery staff members. Poor participation of Senior Management Team members except hospital CEO. Furthermore; this study is very low when it has been compared with the study conducted in Sweden that was 137 (98%) (39), this might be due to study area, measurement criteria & developmental status of the country.

In medical record documentation review; the total 80 cards were seen in pre-intervention (40 cards before) & post-intervention (40 cards after).The complete documentation was averagely increased from 12.8(32%) to 27.2(64%) from pre-post interventions respectively. This means, those cards which were documented all steps of nursing process in completed way in pre- to post-intervention periods respectively with the range of 32%. It is lower when it compared to the study conducted in Mekelle hospital, which was completely recorded from 36(75.0%) to 47 (95.9%) (8) cards were performed all steps of nursing process in completed way before & after intervention periods respectively with the range of 20.9%.The documentation the study from

Mekelle hospital is higher than this study both in pre & post-interventions; but this study is higher than the study from Mekelle hospital it-self by its interventional difference (20.9%) from this study (32%).This difference might be due to: low availability of the charts, un-interest of in documenting, lack of supportive supervisors, sample size of the cards, lack of awareness and commitment. On the other hand; it is very low when it compares to the study conducted in Brazil, which was documented 100% (26). This variation might be due to: study area, study time, lack of commitment, lack of recognition, shortage of staffs, lack knowledge & attitude about standards as well as the economic developmental status of the country, were the main constraints of this study.

9.2. Knowledge & Attitude about nursing/midwifery care standards

The findings from this study had been increased from 10(20%) to 20(40%) with good knowledge of respondents before & after intervention respectively. It was also increased from 14(28%) to 15(30%) of respondents with fair knowledge; & decreased from 26(52%) to 15(30%) with poor knowledge respectively. In this study nurses/midwives who had good, fair & poor knowledgeable were lower with the study conducted in Tikur Anbessa hospital (32) which was 38(25.2%); 50(33.1%) & 63(41.7%) by its baseline respectively. The difference might be the sample size, lack of commitment & recognition. On the other hand, the favorable & unfavorable attitudes of the respondents was consistent by its baseline 20(40%) to 26(52%) & 30(60%) to 24(48%) respectively with the study conducted in Tikur Anbessa hospitals which was 64(42.4%) & 87(57.6%).

As many studies revealed that knowledge is mandatory to implement the nursing/midwifery care standard practice, for example a study in Egypt at Benha University (40) stated that lack of sufficient knowledge about the nursing/midwifery care standard practice become a main barrier for the nurses/midwives' compliance to its task in healthcare facility. If it is performed with the absence of knowledge, it is simply done as the completion of an institutional task, without the collective awareness of how important this standard is for the nurses/midwives' development as health professionals with social responsibilities.

9.3. Organizational factors for the implementation of nursing/midwifery care standard practices

The nurse/midwife per patient ratio during the intervention period in the medical, surgical, gynecology & obstetrics units were 1:5, 1:5 & 1:3 respectively. The average nurse per patient ration in these three wards at this project time was 1:4. As stated in different literatures for example Pamela Tevington (41,42) had stated that nurse/midwife per patient ratio in the year 2011 was 1:4 for cold or ambulatory cases, 1:2 for post-anesthesia cases & 1;1 for under anesthesia cases. Therefore, during this study, the nurse/midwife per patient ratios in Dilchora hospital was working as above standards during day time especially before noon. But this working condition (1:4 ratios) was not consistent during the study time throughout 24 hours, meaning the nurse/midwife per patient ratios became below the standard in the afternoon & during night time. This might affect the implementation status of the nursing/midwifery care standards. Therefore, there was no a consistency to continue the nursing/midwifery care standard practice throughout 24 hours in the same fashion. In this case, «shortage of professionals» was a challenge for a continuous execution of nursing/midwifery care standards in Dilchora hospital.

9.4. Correlation between age, sex & service years

Results of this study displayed that neither age nor sex was related to any of the perceived challenges for execution of nursing/midwifery care standard practice. On the other hand, highly significant correlations showed among all the perceived service years at the (P= 0.01 level), the years in service had a significant relation to use books as reference source and having enough time for performing the nursing/midwifery care standard practices. The studies conducted by Fadia (43) and Aseratie (45) had stated that there is a significant correlation between demographic characteristics and knowledge factor that could determine the provision of the nursing/midwifery care standard practice.

Florence and Adenike (44) also summarized that the correlation of all the predictor variables such as knowledge factor, institutional factor and attitude factor have positive values with criterion variable (the use of nursing/midwifery care standard), knowledge factor has the highest indicative value in the future for the provision of nursing/midwifery care standard practice. This means that the more nurses/midwives are knowledgeable, the more the provision of nursing/midwifery care standard practice. In this study, nurses/midwives viewed having theoretical-practical training highly correlated to perceived knowledge and experience which in

turn highly related to perception of having enough time for nursing/midwifery care standard performance, and viewing nursing/midwifery care standard practice as the quickest and most objective phase of the nursing/midwifery care standard professionals.

Even though, there are difficulties and challenges, the findings of this study support that a well-planned and organized nursing/midwifery care system can improve the implementation status of nursing/midwifery care standards. However, the findings of the study should be interpreted in light of its limitations. First, the same observation methods were used in the pre and post-intervention periods with the potential bias and may affect the conclusions. Second, the study was conducted in a single hospital and results may differ in other settings.

Chapter Ten: Conclusion and Recommendation

10.1. Conclusion

This study indicated that the status of nursing/midwifery care standard utilization among nurse /midwife was increased from 25(48.2%) to 38(76.4%) before & after interventions respectively; however according to the medical record review, among cards a complete documented; the nursing/midwifery process format complete recording was only increased from 16(32%) to 32(64%) of them includes all the steps of nursing process in a completed way before & after intervention respectively.

In this study, important factors were associated with the utilization of nursing/midwifery care standard practice like: level of knowledge about nursing/midwifery care standards, recognition or motivation, commitment, recording, nursing/ midwifery process components, supportive supervision & auditing the standard of care, were significant on the implementation of nursing/midwifery care standard practice.

Other factors such as, nurse/midwife to patient ratio (in all three shifts/AM, PM & Night), inadequate resource, unable to allocate budget for the standards, nurses/midwives poor attitude towards the nursing/midwifery care standards, poor implementing practice in nursing /midwifery process at gynecology ward, and poor recording practice of nursing/midwifery evaluation were some factors that hinder the implementation of nursing/midwifery care standard practice. The above mentioned problems are easily manageable if nurses/midwives are supported with nursing/midwifery supervisors, continuous recognition & auditing the services regularly.

10.2. Recommendation

Nursing/midwifery care standard implementation is very essential to maintain nursing /midwifery as a profession. The following measures should be taken to minimize some factors affecting the implementation status of nursing/midwifery care standard practice. For the better implementation of the standards, the principal investigator would like to give the following recommendations for:

Nurse/midwife Scholars and hospital senior management team members

- ✓ For nurse researchers it is better to focus to the challenges of the contemporary nursing /midwifery in Ethiopia in comparison to the status of the international nursing/midwifery.
- ✓ Produce a standardized Ethiopian nursing/midwifery care practice with ethical code of conduct if there is any performance of actions performed below the expected criteria or qualification.
- ✓ Budget should be allocated for nursing/midwifery care standards in cash on yearly basis.
- ✓ Recognition/motivation of model nurses/midwives should put an impact on implementation of nursing/midwifery care standard practices.
- ✓ Provide opportunities like on job training for new staffs or periodical training to update the knowledge of nursing/midwifery care standard practice.
- ✓ Provide some important charts, guidelines, text books to the wards this helps the nurses to initiate reading mood to update their knowledge.
- ✓ The hospital should provide the appropriate supplies for nursing/midwifery care standard practices.

Monitoring/Evaluation & Quality control staffs

- ✓ During monitoring and evaluation of nursing/midwifery care standard practice, it is better to check in the standard way by following updated scientific approach, this helps the nurses /midwives to work accordingly which means with the highest quality of performance. This contributes for development of the nursing profession and introduction of evidence based practice through the staffs.
- ✓ The nursing/midwifery supportive supervisors & audit committee should be supported by Monitoring/Evaluation & Quality control staffs periodically.
- ✓ A more standard tool to assess the Nursing Process should be developed by together with M&E officer, quality officer & audit committee for easily measured by audit committee.

For staff nurses/midwifes

- ✓ Conducting a peer review in some time intervals should narrow the nursing /midwifery care standard gaps.

- ✓ Every nurses/midwives should record & signed on each nursing/midwifery process format
- ✓ The nurses/midwives should not be only relied on training but reading & referring the nursing /midwives care standard manual every time in your working life.
- ✓ Participating actively in nursing/midwifery care standard practice both in good knowledge & skills is one of the main signs to develop the nursing/midwifery professions.
- ✓ The nurse/midwife staffs should be cognizant at all times in Professional Responsibility and Accountability, Knowledge-Based Practice, Client-Focused Provision of Service & Ethical Practice; these are the main indicators for nursing/midwifery care standard practices.
- ✓ Currently you have to focus on standards having a lower performance rate from the expected criteria like standard-4, 5, & 8-10.

10.3. Strength and limitation of the study

- ❖ Strength of the Study
  - This study used medical card review which is not included in many studies. This helps to compare the reliability of the nurses/midwives' responses to the result of the card review towards the implementation of nursing/midwife care standard.
  - Data collectors are recruited from nurse/midwife head staffs of the hospital this decrease biases.
- ❖ Limitation of the study
  - The study design was cross sectional which is used to investigate findings on a single point of time. So that the factors affecting the implementation of nursing /midwifery care standards out of the study period & it was impossible to measure the indicators (bed sore, attrition rate …) because of its measuring period.
  - Study questionnaire was prone to social desirability bias; because of every one do not want to expose once inability or unwanted attitude.
  - There was a mismatched result between the documented medical records and questionnaire as an evidence for this bias.

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Annexes:

Annex-I: A Total number of employees in Dil chora Hospital, Dire Dawa , Ethiopia. Jan. 2018.

Hospital staffs		No.	Hospital staffs	No.
Number of beds		267	optometrist	1
Physician	GP	37	Anesthetists	5
	Specialists	14	Environmental health	2
	Total	51	Number of supportive staffs	156
Nurses	BSC nurse	97	Lab. technology & technician	19
	Clinical nurse	48	Radiology technologist & radiographer	6
	Total	145	Number of outpatient visits per year	144968
Midwives	BSC	12	Number of inpatient services per year	12260
	Diploma	12	Average Length of Stay (4-5 days standard)	4.8 days
	Total	24	Pharmacist & druggist	22
Grand totals	Nurses & midwives	169		
Number of paramedics staffs		1	Number of delivery per year	3881
Biomedical		1	Total staffs in Dilchora hospital	433

Annex-II: Organizational hierarchy of Dil chora Hospital

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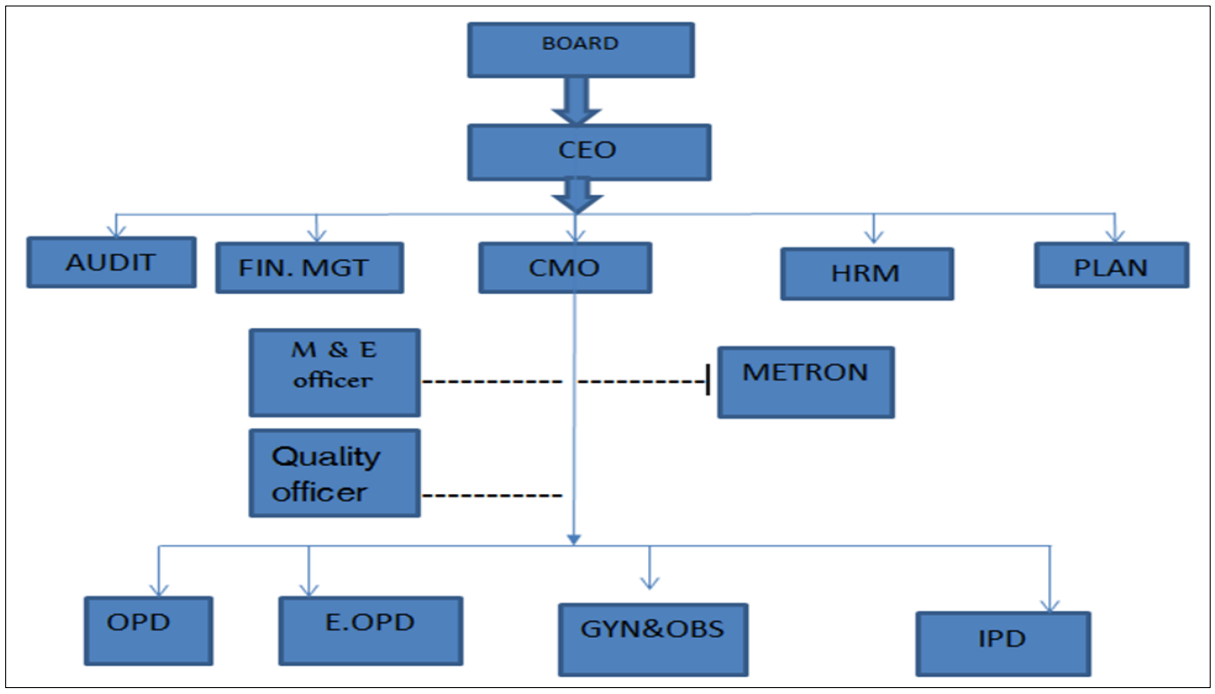

Annex III: Participant Information Sheet

My name is ---------- Currently I am a graduate student at Addis Ababa University, College of Health Sciences, School of Public Health, Department of Health Care and Hospital Administration. And now I am conducting a capstone project to assess nursing/midwifery care standard implementation status.

Title of the project: Improving the implementation status of nursing/midwifery care standard practice in Dil chora Hospital of Dire Dawa, Ethiopia, 2018.

Objective: To maximize the implementation status of the nursing/midwifery care standard practice in Dil chora Hospital of Dire Dawa, Ethiopia, 2018.

Participants: randomly selected nurses/midwives designed title-related questionnaires for them working on Dil chora Hospital who meets the eligibility criteria.

Potential Risks: There is no foreseen risk by being in this project.

Benefits: No financial benefits are related with this project. But by participating in this project, you will give an input for the implementation of nursing/midwifery care standards.

I would like to ask you few questions. Your honest response to the questions can make the study to achieve its **objective**. All the information that you give will be kept confidential and private. Only the principal investigator and interviewer will have access to the information.

You are kindly requested to respond voluntarily. You can also choose not to participate in this study totally or if you become uncomfortable during the study, you will be allowed to leave the study at any time.

If you have any question, you can contact me at any time by using the following addresses;
Name: - Mulatu Takele
Mobile:-0915738938/0904518937 and
Email:-mulatutakele3574@gmail.com/mulatutakele@yahoo.com

Annex IV: Informed Consent

I am here with declare that:

The objectives of this project are explained to me and are clear.

The contents of the consent are verified to me to participate in the study.

I understand that participation in this study is completely voluntary and that I may withdraw at any time without supplying reasons. I agree to participate in this study to be interviewed, provided my privacy is guaranteed. When signing this consent form to participate in the study, I Promise to answer honestly to all reasonable questions and not provide any false information or in any other way purposely mislead the researcher.

Respondent's signature_____

If no, skip to the next participant

Date of interview: _____ Time started: _____ Time finished: _____

Interviewer Name_____Signature_____Date_____

Supervisor's name _____ signature _____ Date.

Thank you

Annex V: Questionnaires

Instruction–one: put a «circle» for your answer among a given choices on the ‹‹response›› side.

Part-I: Socio-demographic characteristics for nurses/midwives				
No	Questionnaires	Response	Remark	skip
101	What is your sex?	1. male 2. female		
102	What is your age in year?			
103	What is your educational status?	1. Diploma 2. Degree(BSc) 3. Master of science(MSc)		
104	What is your working unit?	1. Medical ward A 2. Medical ward B 3. Surgical ward 4. Gynecology ward 5. others		
105	What is your working position?	1. nurses director 2. case-team coordinator 3. staff nurses		
106	What is your working service in year?	----------		
107	What is your working service in current position?	----------months, or ----------year/s		

Part-II: Observational standard checklists from nursing/midwifery care standards

Instruction-two: please put «√» on either‹‹ met or unmet› ›side of the space provided

No	Standard	Method of Evaluation	Met	Un-met	Rem-arks	skip
201	The hospital has established nursing/midwifery service management	1.1. Check for nursing representation in the SMT;				
		1.2. Does a system exist to supervise nursing activities?				

	structures and job descriptions that detail the roles and responsibilities of each nursing and midwifery professional, including reporting relationships.	1.3. Has the hospital established management structures that detail the roles and responsibilities of nursing/midwifery professionals, including reporting and communication relationships?				
		1.4. Does the hospital have a nursing/midwifery workforce plan that addresses nurse/midwifery staffing requirements according to the standard set for hospitals?				
		1.5. Do the hospitals provide written policies describing the responsibilities of nurses/midwives on prevention, promotion, rehabilitative and curative care as well as nursing and midwifery care process?				
		1.6. Is there a prepared budget and operational yearly plan regarding nursing and midwifery practice and has it been submitted to the SMT?				
202	The hospital has a nursing and midwifery workforce plan that addresses nurse /midwife staffing requirements and sets minimum nurse /midwife to patient ratios in each service area.	2.1. Obtain copy of nursing staffing plan and confirm this establishes nurse to patient ratios for each service area (e.g. inpatient wards, ER, surgical suite, labour and delivery). Confirm the plan identifies mechanisms to reassign nursing staff or call in extra staff to ensure that minimum nurse to patient ratios are maintained at all times				
203	The hospital has written policies describing the responsibilities of nurses and midwives for the nursing/midwifery process including the admission assessment, planning, implementation and evaluation of nursing /midwifery care.	3.1. Identify written policies that describe the nursing process.				
		3.2. Verify that the following are addressed: 3.2.1. Nursing admission assessment				
		3.2.2. Nursing care planning, implementation and evaluation				
204	All admitted and emergency patients/clients have a nursing/midwifery care plan that describes	4.1. Select a random sample of 10 inpatient records from different wards. Confirm that each contains a nursing care plan.				√

	holistic nursing/midwifery interventions to address their needs. The plan is regularly reviewed and updated as required.					
205	All hospital nurses/ midwives comply with the professional code of conduct and ethics which governs their professional practice.	5.1. Does the hospital provide a written professional code of conduct and ethics to all nurses and midwives?				
		5.2. Does the hospital provide complete uniforms for nurses/midwives and do nurses/midwives comply with the institutions dress code and all nurses are wearing the specific uniform? 5.3. Are nurses /midwives in complete uniform at all times?				
		5.4. Does the hospital have a system to report illegal, incompetent or impaired practice?				
206	The hospital has established guidelines for verbal and written communication about patient/client care that involves nurses/midwives and their patients/clients, families, other case team professionals of the disciples, including verbal orders and timely documentation of accomplished activities.	6.1. Does the hospital provide written guidelines regarding verbal and written communication and documentation?				
		6.2. Do nurses and midwives attend nursing rounds on a regular basis?				
		6.3. Do nurses and midwives provide safe, effective, efficient, and patient-centered care to patient/clients?				
		6.4. Do nurses/midwives engage in self-evaluation on a regular basis?				
		6.5. Do nurses and midwives seek constructive feedback regarding their own practice?				
		6.6. Does the hospital have a systematic peer review? regularly, supervise, mentor and coach the senior nurse to support the junior nurses?				
		6.7. Do the nurses/midwives have perform one hour rounds?				
207	The hospital has standardized procedures for the safe and proper administration of	7.1. Identify written procedures for process of medication of administration.				
		7.2. Verify that procedure addresses safety, proper administration, and administration authority.				

	medications by nurses or designated clinical staff.	7.3. Review 10 Medication Administration Records from different wards and confirm that each is completed correctly with the signature of the transcriber and of the individual who administered each medicine dose.				√
208	The hospital has established nursing/midwifery care practice audit program, including the documentation of completed audits and resulting practice improvements.	8.1. Does the Hospital have a Nursing/midwifery Audit Committee?				
		8.2. Does the Nursing/midwifery Audit Committee meet regularly and conduct a nursing/midwifery service audit?				
		8.3. Do Nurses/midwives collect data to monitor the quality of nursing/midwifery practice?				
		8.4. Do Nurses/midwives participate in critical review and/or evaluation of policies, procedures, and guidelines to improve the quality of healthcare?				
		8.5. Do Nurses/midwives collaborate with the inter-professional team to implement quality improvement plans and interventions?				
		8.6. Do Nurses/midwives analyze trends in healthcare quality data?				
		8.7. Do Nurses/midwives incorporate evidence based best practices to improve health outcomes? • Look for a nursing/midwifery audit report • Look for action plans that address gaps identified by audits • Observe implementation of the action plans				
209	The hospital implements regular nursing/midwifery eight hours' shift, hourly rounds, and central medication cabinet or room.	9.1. Is the hospital implementing 8 hours shift of nurses/midwifes?				
		9.2. Do the nursing/ midwife staffs conduct hourly patient rounds?				
		9.3. Does the hospital implements central medication management system to ensure medications are not placed at patient side?				
210	The hospital has a centralized nursing/ midwifery station set-up in each ward with adequate space,	10.1. Does each unit have the necessary equipment and supplies to accomplish nursing and midwifery care practice?				
		10.2. Does the unit have equipment for specific minor procedures?				

	equipment and consumables.	10.3. Does the nurse/midwife assess equipment necessary to accomplish the nursing and midwifery practice related to safety, effectiveness and availability?				

Part-III: Questionnaires on the knowledge & attitude of nurse/midwife professionals about standards & related services

Instruction-four: please put «√» on either‹‹ Yes or No› ›side of the space provided.

SN	A. Knowledge based Questionnaires	Yes	No	Remarks
301	Have you heard about nursing/midwifery care standards in the EHSTG?			
302	Have you read/referred the nursing/midwifery care standard in the 7th chapter at EHSTG?			
303	Have you ever been trained about the nursing/midwifery care standard and got important points for your profession?			
304	Is there any difference between the nursing/midwifery process & nursing/midwifery care standard?			
305	Is nursing/midwifery care standard practice more general than nursing/midwifery care process?			
306	Does each nurse/midwife have an operational plan on yearly, quarterly, monthly, weakly & daily basis of nursing/midwifery care standards?			

307	Is the plan based on nursing/midwifery care standards, easy to implement?			
	B. Attitude based Questionnaires			
308	Application of nursing/midwifery care standard is very important for patient care			
309	Nursing/Midwifery care standard can improve patient outcome if implemented			
310	Nursing/Midwifery care standard practice can increase patient satisfaction.			
311	Nursing/Midwifery care standard is not applicable in practice.			
312	Nursing/Midwifery care standard practice is only Record Keeping.			
313	Nursing/Midwifery care standard practice is a burden & a waste of time to nursing staffs.			
314	Nursing/Midwifery care standard practice should be only done by Bsc and above Nurses/Midwives.			

Part-IV: Observational questionnaires on challenges for nurses/midwives about implementation of nursing/midwifery care standards.

Instruction-five: please put «√» on either‹‹ Yes or No› ›side of the space provided.

S.N	Questionnaires	Yes	No	Remarks
401	Is there any shortage of staffs at your ward?			
402	Is there any shortage of nursing/midwifery process<< formats>>?			
403	Are there any untrained professionals about nursing/midwifery care standard?			
404	Is there any hand washing facility in each ward?			
405	Is there any lack of awareness about nursing/midwifery care standard practice among nursing/midwifery professionals?			
406	Is there any shortage of supplies for nursing/midwifery care standard practice?			

407	Can audit committee identify gaps during its reporting period?			
408	Can supportive supervisors supervise, mentor or coach the junior professionals at any time?			
409	Is there any miss-understanding to record or to document correctly the ‹‹NANDA›› format?			
410	Does the nursing/midwifery audit committee have clear and achievable operational plan?			
411	Is there any patient discharged without taken a care of nursing/midwifery process?			
412	Is there any lack of devotion about the implementation of nursing /midwifery care standard from the concerned bodies (CEO, CCO & matron others)?			

Part-V: Interview questionnaires for hospital managers about the implementation of standards (CEO,CCO, Matrons, HRM,M/E, quality officer, head nurses...)

Instruction-six: please put «√» on either‹‹ Yes or No› ›side of the space provided.

S.N	Questionnaires	Yes	No	Remark
501	Does the hospital have enough amounts of nurses/midwives?			
502	Did all nurses/midwives train about nursing/midwifery process?			
503	Did all nurses/midwives train about nursing/midwifery care standards?			
504	Is there any time interval to measure the implementation status of the nursing/midwifery care standards?			
505	Are there any motivating mechanisms to recognize model nurses/ midwives about a good performance of nursing/midwifery process?			
506	Does the SMT allocate a budget for nursing/midwifery care standard			

	practice on yearly bases in cash?			
507	Does the hospital have any measuring mechanisms to know a lack of Knowledge & capacity about the nursing/midwifery care standards?			
508	Have the nursing/midwifery audit committee being supported by M&E & quality officer?			

Part-VI: Review of nursing/midwifery process format record completeness in the implementation status, of nursing/midwifery process

Instruction-five: please put «√» on either‹‹ complete or incomplete› ›side of the space provided.

	Nursing process component	Pre intervention(n=40 MRs)		Post intervention(n=40 MRs)	
		Complete	incomplete	Complete	incomplete
601	Assessment				
602	Diagnosis				
603	Nursing Care Plan				
604	Implement				
605	Evaluation				
	Overall Nursing process				

Part-VII: Overview of medical record completeness about the attached & complete documentation of necessary formats.

Instruction-five: please put «√» on either‹‹ complete or incomplete› ›side of the space provided.

S.No	MR completeness	Pre-intervention (n=40 MRs)		post-intervention(n=40 MRs)	
		complete	incomplete	complete	incomplete
701	Presence of patient form & physician signed				
702	Physician order sheet Note & signed				
703	Nursing care plan done & signed				
704	Record all medication: a. ordered and administered to a patient b. at bed-side clip board during the patient's stay & MR c. Name of drug,route,dosage, time,frequency & signed by transcriber administration & signed d. medication is administered & signed by the nurse				
705	Discharge summary present & signed				
706	Discharge outcome (death Improve, disappear, self-discharge…)				
707	Name of nurse & nursing care plan did				