ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF SELF-REPORTED PRACTICE OF NURSING DOCUMENTATION AND ASSOCIATED FACTORS AMONG NURSES IN SELECTED PUBLIC HOSPITALS, ADDIS ABABA, ETHIOPIA, 2017

BY: HANNA HAILU (BSC)

A RESEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCE, SCHOOL OF ALLIED HEALTH SCIENCES, DEPARTMENT OF NURSING AND MIDWIFERY FOR PARTIAL FULFILLMENT OF MASTERS OF SCIENCE IN ADULT HEALTH NURSING

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This thesis by Hanna Hailu is accepted in its present form by board of examiners as satisfying thesis requirement for the degree of Master of Science in Adult Health Nursing.

Examiner

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Signature ---------- Date ----------

Advisor

Name---------- Rank----------

Signature---------- Date----------

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Abbreviations and acronyms

AAU: Addis Ababa University

BSC: Bachelor of Science

EHR: Electronic Health Record

FDRE: Federal Democratic Republic of Ethiopia

HMIS: Health Management Information System

IRB: Institutional Review Board

MSC: Master of Science

OPD: Out Patient Department

SPSS: Statistical Package for Social Sciences

TASH: Tikur Anbessa Specialized Hospital

WHO: World Health Organization

COR: Crude Odds Ratio

AOR: Adjusted Odds Ratio

Abstract

Introduction: Nursing documentation is an essential component of nursing practice that has a potential to improve the patient outcome besides developing the nursing profession. However, little has been explored about nursing documentation practice in health care facilities of Addis Ababa, Ethiopia. Therefore; this study was conducted to assess documentation practice among nurses working in selected public hospitals of Addis Ababa, Ethiopia.

Objective: The objective of this study was to assess the self-reported practice of nursing documentation and associated factors among nurses working at Yekatit-12 , Ras Desta Damtew, Zewditu and Black Lion Specialized hospitals which are all located in Addis Ababa, Ethiopia.

Method: A quantitative descriptive cross sectional survey was employed to assess self-reported practice of nursing documentation and associated factors among nurses working in selected public Hospitals. Data was collected using a structured self- administered questionnaire that was developed and pre-tested on 32 (10 %) of sampled nurses working in Minillik II Hospital. The study was conducted from April 3 – 17/2017 and the study participants were selected randomly. SPSS version 22 was used for both data entry and analysis. Descriptive statistics was used to describe the data and binary logistic regression to test statistical association of documentation practice against the knowledge, attitude and organizational factors.

Result: Among all nurses who have participated in the study, good self-reported nursing documentation practice was 47.8 %. Work setting, adequacy of documenting sheets, adequacy of time, availability of motivation from supervisors, lack of skill and familiarity with operational standard of nursing documentation were significantly associated with practice of nursing care documentation [AOR=0.570(95% CI (0.345, 0.940), [AOR=3.610(95% CI (1.516, 8.595), AOR =4.891, 95% CI (2.425, 9.863), AOR =4.081, 95% CI (1.054, 15.806), AOR =0.109, 95% CI (0.013, 0.908) [AOR=1.947(95% CI (1.159, 3.269) respectively.

Conclusion: Nursing documentation practice was poor among nurses under the study. Work setting, adequacy of documenting sheets, adequacy of time, availability of motivation, lack of skill and familiarity with operational standard of nursing documentation were significantly associated with practice of nursing care documentation.

Recommendation: Based on the finding of this study, employing institutions need to create awareness and provide training to enhance knowledge and skill of the nurses regarding documentation. Nursing leaders should motivate the employees to enhance the practice of documentation, avail the necessary documenting materials besides adequate staffing which may be related to time shortage. Researchers also need to carry out large scale studies in order to address the problem.

Key words: Documentation, Self-reported practice, Nurses

1. Introduction

1.1. Background

Nursing documentation is defined as any written or electronically generated information about a client that describes the care or service provided to that client including what occurred and when it occurred (1).It is a vital component of safe, ethical and effective nursing practice whether done manually or electronically (2).

Accurate and complete nursing documentation has been accepted as a very important aspect of professional practice to nurses since the Florence Nightingale era. As written in her book, "Notes on nursing: What it is and what it is not", she stated the necessity of recording patients' progress in words for communication among nurses and the importance of reporting patient related observation accurately(3).Nursing documentation is an important component of nursing practice that occurs within the client health record (4) and is not an optional extra to be fitted in if circumstances allow (5).

Nursing documentation should fulfill the legal requirements since its consequence may end with malpractice suits. The old saying, 'If it wasn't charted, it wasn't done,' still holds today. According to Ethiopian legislation, a written document is the only evidence if a health professional commits homicide due to negligence (6) .

According to a survey done by WHO, it has been shown that poor communication between healthcare professionals is one factor for medical errors (7).There are also evidences indicating that nursing documentation has relationship with patient mortality (8).

Why do nurses need to document their care? The first reason is: It allows nurses and other care providers to communicate about the care provided so as to facilitate continuity of care (5) and to improve their relationship with patients (9). Second, it serves as evidence in legal proceedings through demonstration of the applied nursing knowledge, skills and judgment (1). Documentation also provides valuable data for research in Nursing, which have the potential to improve health outcomes (5). In addition to these, it may form the basis of teaching plans (4). On the other hand, the level of contributions nurses do in the health care system can be witnessed through proper documentation of their roles (10) .

A nursing document, whether written or electronic, should be client focused, consists of relevant information, accurate without missing details, chronologically written, clear and concise, permanent, confidential and timely (11).

In Ethiopia, nursing communication is mostly limited to hand written in most of health settings even though an electronic method called HMIS has been rolled out across different hospitals(12, 13). Based on observation, there are there are limited critical reflections on the nature and outcomes of nursing care for the patients. Even though the quality and effectiveness of nursing practice is mostly demonstrated by documenting the application of the nursing process (14), nurses may record patient visit registry in the outpatient departments. Therefore, the intent of this research is to assess the nurses' documentation practice of patient care and associated factors in the in-patient and out-patient departments of selected public hospitals of Addis Ababa, Ethiopia.

1.2. **Statement of the problem**

Nursing documentation should, but often does not show the rational and critical thinking behind clinical decisions and interventions, while providing written evidence of the progress of the patient. Although keeping a patient record is part of their professional obligation, many studies identified deficiencies in practice of documentation among nurses globally (15, 16) . It has been reported that nursing records are often incomplete (16, 17), lacked accuracy and had poor quality (18, 19).

The challenges for documentation reported so far include shortage of staff (20, 21), inadequate knowledge concerning the importance of documentation (20-23), patient load (20, 22), lack of in-service training (22, 23) and lack of support from nursing leadership (20). Despite the reasons for not documenting completely and accurately, nurses need to realize that rules and regulations by accrediting organizations expect complete and accurate documentation as indicated in their practice standards (1, 4, 14, 24).

Poor documentation in nurses has been shown to have negative impacts on the health care of patients. The impact may lead to harmful consequences like exposing the care provider for medication administration error (25). Quality of patient care can also be impeded by an absence of sufficient documentation of data (26). On the other hand, a good documentation improves credibility of the institution, and makes the nursing profession visible (9). This means that, the situation may lead to the extent that can affect the reputation of the health care facilities because health care facilities are evaluated by the quality of documents they keep in most cases.

As a remedy for these, many researchers recommended to use a multidisciplinary approach like to develop policies and guidelines on nursing care documentation (20, 21, 23) and provide sustained continuing training opportunities for nurses on effectiveness of documentation (9, 15, 20, 21, 27).The nursing leaders are also expected to support, motivate (9, 20) and increase the number of staffs (23) for a better documentation practice.

Some studies from sub Saharan Africa have identified deficiencies in various aspects of nursing documentation. One study from South Africa reported deficiency in attitudes, knowledge and practice behaviors (28) while the Ugandan study reported knowledge and attitude deficiency towards the practice of nursing documentation among nurses (9).

In Ethiopia, inadequacy of data collection with lack of quality was found to be a problem (12). Despite the barely observable deficiencies, studies conducted on this issue of interest are very minimal. Therefore, this research is aimed to assess the practice of patient care documentation and its associated factors among nurses working in public hospitals of Addis Ababa, Ethiopia.

1.3. **Significance of the study**

Poor nursing documentation practice can be a significant challenge for provision of quality health care. Nurses are expected to keep accurate, timely and complete records regarding patient care not only to assess client progress, but also to protect self because it may be used as evidence in legal proceedings such as lawsuits. Even though the problem is plainly observable particularly in Ethiopia, almost none has been studied to quantify the level through a scientific research. The identification of gaps in nurses' practice of patient care documentation and its associated factors can identify factors related to poor nursing documentation in public hospitals of Addis Ababa so that emphasis may be given towards solving the problem. The finding would also be used as an additional input for further studies since this area needs to be much exploited.

2. Literature review

2.1. Nurses' documentation practice

Even though nursing documentation can be practiced either through a written or electronic method, a study reported that an electronic system has a better health care outcome as compared to the paper based system: Based on this finding, standards for diabetes care was 35.1% higher at EHR sites than at paper-based sites (29).

Various levels of documenting by nurses have been reported globally in various studies. In a study on nursing documentation in long-term care settings of Canada, the maximum proportion of symptoms documented in the nursing notes was found to be 53.5%(30). A multi country cross sectional study in European countries also found adequately documented nursing care to be 28%(31) and Iran 15%(32).A study done in Swiss university hospital revealed that most (53.3%) of documentation error occurs by nurses at ward level in the process of transcription from a prescribing sheet to a patient's medication list and 9.5% during administration documentation in the actual drug dispensation on the medication list by nursing staff (33). A cross sectional study done in Jamaica showed high levels of accurate documentation by nurses at a referral hospital in Western Jamaica and the nurses appeared to be familiar with the required documentation guidelines with policy manuals available on each ward (34). A cross sectional study conducted among nurses in Papuan province of Indonesia also reported a documentation practice level of only 37 % (35).

Several studies from Sub Saharan Africa have reported different levels of nursing care documentation practice. A study conducted in Nigeria showed that good nursing

documentation was practiced by 70% and majority of respondents (96.7%) document anytime a case is rendered, 3.3% document 3-4 times in a shift, 84.8% by sitting at nurses' station and reading what they have written to make corrections respectively and 7.4% check the previous information and formulate theirs (23). Another study in Nigeria also showed that majority (77.2%) of the respondents did not document immediately following a procedure and only document when it is convenient (36).One study from Eastern Ghana described that 46% of the nursing care provided was not recorded (37). According to a study conducted in South Africa, acceptable levels of self-reported record keeping practice behavior were reported by the majority of respondents (68.3%) (28).

In Ethiopia, the Federal Ministry of Health Operational Standard for Nursing Care outlines that every nursing care provided must be clearly and correctly documented (38). Nevertheless, a study conducted in Gondar, North West Ethiopia indicated that slightly more than one-third (37.4%) had good nursing care documentation practice. Good nursing care documentation was practiced by 11–52% of the total nurses in the wards of the hospital while more than half (52.8%) of the pediatric department nurses were observed to have good nursing care documentation practice (22). A study done in Felege Hiwot Referral Hospital also showed that nearly 87% of the medications provided had documentation errors committed by nurses (39).

2.2. Factors influencing nursing documentation

2.2.1. Socio demographic factors influencing nursing documentation

According to a study done in Mosul of Iraq, there were significant statistical differences in nursing documentation with regard to educational level of nurses (27). A study done in Iran showed a strongly positive correlations between ages, gender, ward type or work setting and length of employment and female and younger nurses who had a mean of one to five years of nursing service practiced better nursing document in medical wards than in surgical wards (17).

2.2.2. Knowledge of nurses towards nursing documentation

A quantitative study done in Iraq showed a moderate level of knowledge regarding what must be documented (59%); how to document (38 %); who should document (60%) and when to document (67%) whereas, none of items had got high level of knowledge. Regarding the purposes of documentation, 71% of them said it is helpful for communication and continuity of care; 67% of them said for professional accountability; 50% said for legal interest and 100% of them said it is useful for quality improvement of patient care and for funding (27). According to a study done in Pare Pare, Indonesia, almost all nurses in the hospital had sufficient knowledge about nursing care documentation, in good categories were 97.5%, and only 2.5% in the medium category and no nurses with less knowledge categories (40) while another study in Indonesia showed most nurses (82.7%) had a good knowledge of nursing documentation(35).A study from Iran also reported that , majority of nurses had moderate knowledge (46.5%)(32)

Few studies in sub Saharan Africa reported various levels of nurses' knowledge regarding documentation. A Nigerian study showed that all the respondents (100%) said that documentation is necessary to promote continuity of care; 89.1% of them said it is essential for legal backing; 87.0% of them said it is important in providing quality care; while 84.8% and 65.0% of them suggested that it is used for research and health planning purposes respectively (13). In another study done in Nigeria that assessed nurses' knowledge, 16% of respondents reported no idea of what to document (41). Again, another study conducted in Kaduna state of this country indicated that the major source of information about documentation was school of nursing for majority (77.3%) of them, some (7.6%) obtained their information from tertiary institution, 13.6% from medical personnel and 1.5% from friends (23). In a study done in Uganda, 70.3% of participants scored poor knowledge and none scored 100% (9). A research conducted in South Africa showed adequate knowledge levels of record keeping by the majority of respondents (74.9%).

A study conducted in Ethiopia showed that more than half of the participants (58.3%) had a good knowledge of nursing care documentation and nurses who had a good knowledge of nursing care documentation were 2.16 times more likely to have good nursing care documentation practice as compared to those with poor nursing care documentation knowledge (22).

2.2.3. Attitudes of nurses towards nursing documentation

According to a cross sectional study conducted in Indonesia, only 48.1% of nurses had good attitude (35). A study done in Nigeria showed that all respondents (100%) think it

is important to document nurses' care and 45.8% of the respondents liked documenting because it ensures continuity of care, 21.7% because it serves as a legal backup and 1.5% because it helps to detect problem (23). According to research conducted in South Africa, predominantly positive self-reported attitude was evident towards record keeping (71.7%)(28). On a study conducted in Uganda, 67% of participants had an acceptable attitude towards documentation and respondents strongly agreed that nursing notes were meaningful and necessary for legal protection, as well as a nursing priority and a strong disagreement was found with regard to familiarity with policies on nursing documentation, and an uninterrupted environment for care documentation (9).

According to a study conducted in Gondar (Ethiopia), majority of the respondents (60.7%) had a positive attitude towards nursing care documentation. Compared to nurses who had poor attitude towards nursing care documentation, those who had good attitude were 2.22 times more likely to have good documentation practice (23).

2.2.4. Organizational factors associated with nursing documentation

A cross sectional study done in England showed that lack of time due to work load had an impact in developing or updating nursing care plans by 47% which is one part of nursing documentation(42). According to a study conducted in the Netherlands, knowledge of hospital policy regarding documentation was found to be one of the factors determining the prevalence of nursing diagnosis documentation(43).According to a study done in European hospitals, female nurses and nurses with greater professional experience reported higher levels of nursing documentation(31).

Nurses working in hospitals of England reported that care is often not done because of insufficient time(42)

A research done on nurses in Indonesia showed that nurses who were motivated from the leaders practiced 47.1% of good documentation while those with less motivation performed only 23.4% and those who had good supervision from nurse administrators practiced good documentation by 42.6 % while those with no supervision performed only 14.8 %(35).

A study done in Nigeria showed that lack of time (78.3%), too many workload (58.7%) and few staff (79.1%) have hindering influences on documentation (36). Another studies done in Nigeria showed that the main barriers to nursing care documentation were lack of time for 41.7% of respondents(23);lack of time and knowledge where 77.4% of records from one hospital showed evidence of documentation (44).

.In a research done in Ethiopia, organizational factors that could potentially affect nursing documentation practice were assessed where most of the respondents (61.7%) had received in-service training on nursing care documentation and an appropriate nursing care documentation sheet was available in most of the inpatient wards (84.5%)(22). According to this study conducted in University of Gondar Hospital, nearly 19% and 22% of the nurses working in the hospital reported that shortage of time and patient load were the main reasons for not documenting their care respectively. According to this study, nurses who had taken part in nursing standard documentation in-service training were 2.59 times more likely to have good nursing care documentation practice as compared to those who had not taken part in the training (22).

2.3. Conceptual frame work of the study

Based on a review of the literature (22, 23, 35, 41), a conceptual framework was developed that depicts the relationship among the nurses' practice of documenting their care and mediating factors that affect their practice. According to this diagram, the sociodemographic characteristics, knowledge, attitude and organizational factors influence the documentation practice of nurses directly (Figure1).

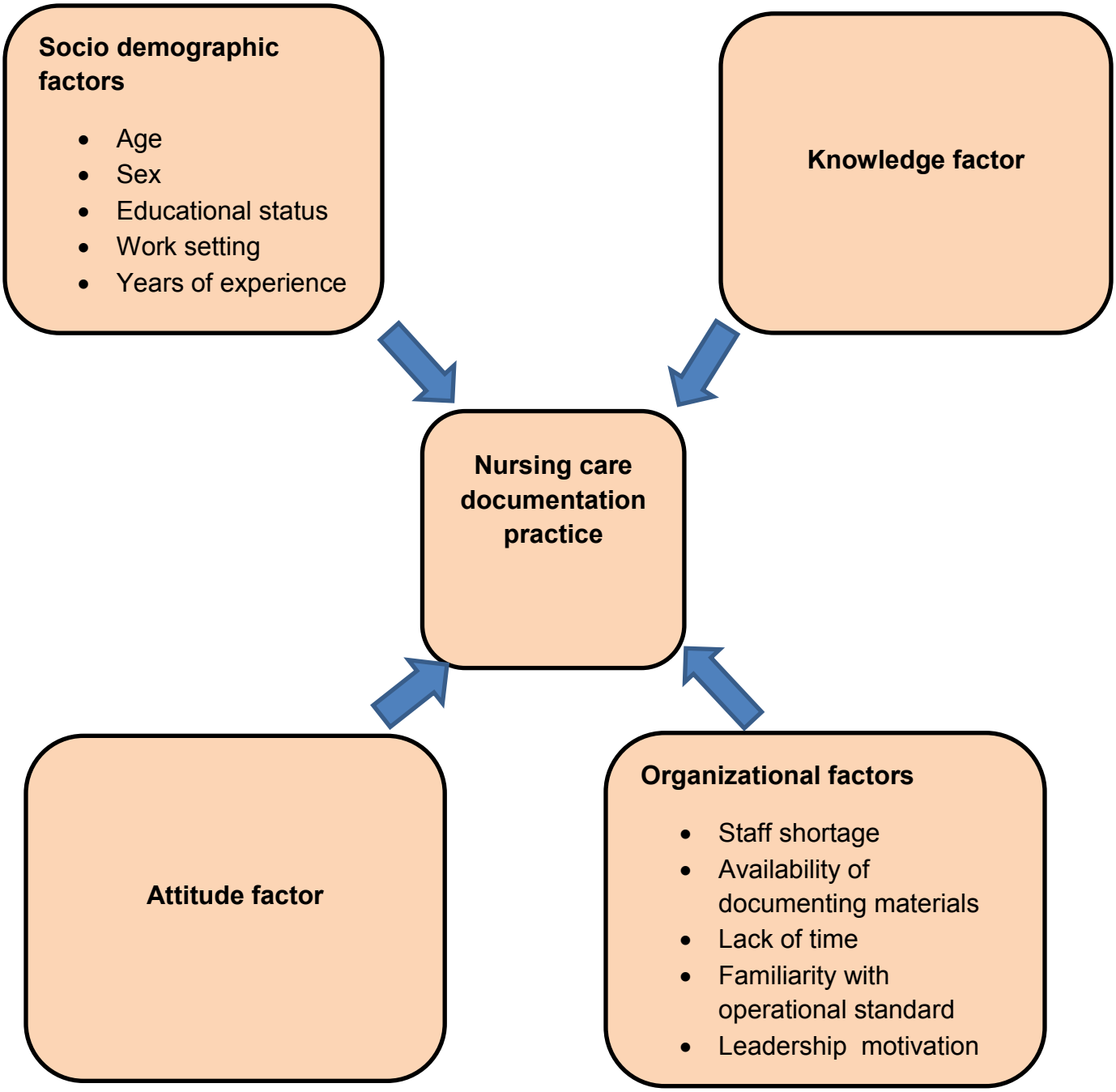

Figure 1: Conceptual frame work of the study based on reviewing related literatures (22, 23, 35, 41).

3. Objectives

3.1. General objective

Assessment of self-reported practice of nursing documentation and associated factors among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017

3.2. Specific objectives

- To assess documentation practice among nurses working in selected public hospitals of Addis Ababa, Ethiopia.
- To identify factors affecting nursing documentation practice

4. Methods

4.1. Study area and setting

The study was conducted in Addis Ababa, the federal capital of Ethiopia and a chartered city having three layers of Government: City Government at the top, 10 Sub city administrations in the middle, and 116 woreda administrations at the bottom. It occupies an estimated area of 526.99 square kilometers. Based on figures from the Central Statistical Agency of Ethiopia (CSA 2007), Addis Ababa has an estimated total population of 3,384,569 and has been projected to be 3,435,000 by 2017(CSA 2013). In Addis Ababa there are about 51 hospitals comprising among which 12 are owned by the government. Among the public hospitals, four hospitals named Ras desta hospital, Yekatit 12 hospital, Zewditu memorial hospital and Tikur Anbessa Specialized Hospital are selected randomly for the study.

4.2. Study design and period

A quantitative descriptive cross sectional study design was used to assess documentation practice of nurses and associated factors. The study has been conducted from April 3-17, 2017.

4.3. Population

4.3.1. Source population

The source populations for this study were all nurses who are working in government owned hospitals in Addis Ababa city.

4.3.2. Study population

This study was confined to nurses working in Ras Desta hospital, Yekatit 12 hospital, Zewditu memorial hospital and Black Lion Specialized Hospital in Addis Ababa, Ethiopia. Nurses working in in-patient wards (medical, surgical and pediatric) as well as those in out-patient departments (Regular, Emergency and pediatric OPD) of these hospitals were included in the study.

4.4. Inclusion and exclusion criteria

4.4.1 Inclusion criteria

Nurses working in the inpatient wards and out-patient departments of the selected hospitals and those who have worked at least for 6 months were included in this study.

4.4.2 Exclusion criteria

Nurses who were not available during the study period were excluded from the study.

4.5. Sample size determination

The study employed a single population proportion sample size determination formula taking the proportion as 37.4% from previous study conducted in Northern Amhara region Public Hospital (22), 95% confidence interval (CI), and 5% margin of error. Thus, the sample size is calculated as follows:

$n_i = (Z\alpha_{/2})^2 \times p\ (q)/d^2$

$n = \frac{(1.96)^2\ X0.374\ (0.626)}{(\ 0.05)^2} = \frac{3.8416X0.234}{0.0025} =$ **360** Where:

n = minimum sample size required for the study

Zα/2 = 1.96(standard normal distribution with confidence interval of 95% and α=0.05)

P = 0.374 (prevalence of nursing documentation practice from previous study,37.4%)

d = 0.05 (a tolerable margin of error); q=0.626(1-p)

Since the study population is less than 10,000, a correction formula was used:

n f= n i /1+ni/N = 360/1+360/1456= **288**

Where n *i* = 360(calculated sample size); n *f* = final sample size; N= 1,456

288+299(non- response rate) =**317**

4.6. Sampling procedure

Selection of hospitals for the study was carried out using simple random sampling after all hospitals in the city were identified. From the 12 governmental hospitals in the city, Ras Desta hospital, Yekatit 12 hospital, Zewditu memorial hospital and Black Lion Specialized hospitals each comprising 208, 344, 252 and 652 nurses respectively. List of all nurses working in the out-patient departments as well as in- patient wards were obtained from the nursing leaders of respective hospitals and the number of samples in each hospital was selected according to proportional allocation formula as follows:

(n f x n) /N = (Sample final *no of nurses in each hospital)/number of total nurses

where N is equal to 1,456.

Ras Desta hospital= (317x208)/1456=45

Yekatit 12 hospital= (317x344)/1456=75

Zewditu Memorial hospital= (317x252)/1456=55

BLSH hospital= (317x652)/1456=142

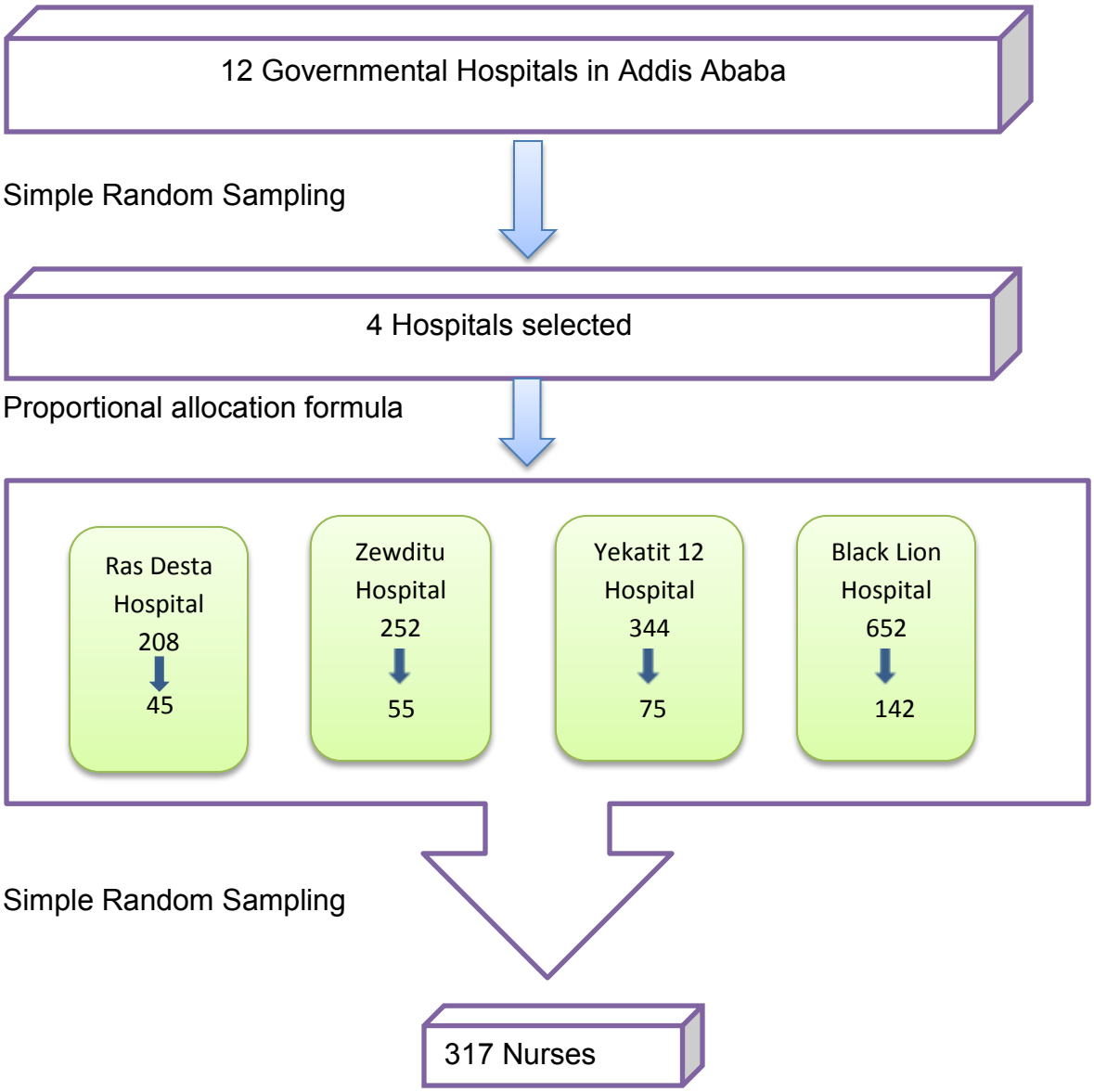

Figure 2: Schematic presentation of sampling procedure.

4.7. Study variables

4.7.1. Dependent variable

- Practice of nursing care documentation

4.7.2. Independent variables

- Sociodemographic characteristics
- Knowledge towards nursing care documentation
- Attitude toward nursing care documentation
- Organizational factors affecting the nursing care documentation (staff shortage, availability of documenting materials, lack of time, lack of skill, familiarity with documentation guideline, availability of obligation from hospital and leadership motivation from supervisors)

4.8. Operational Definitions

Documentation practice: The self-reported practice of study participants was measured by using a structured self -administered questionnaire containing of 10 items with multiple options and multiple choice type questions where the scoring was based on the number of responses. A value of 3, 2, 1 and zero was scored for “always”, “sometimes”, “rarely” and “never” options respectively. In a similar way, a scoring of 0.5, 0.33 ,0.25 and 0.2 was given for answering by half ,one- third, quarter or one- fifth of a given question based on the number of correct options respectively and zero has been scored for incorrect responses and for “I don’t know” answers.

Good practice: Those respondents who scored above or equal to the mean score of practice questions.

Poor practice: Those respondents who scored below the mean score of practice questions.

Good knowledge: Those respondents who scored above or equal to the mean score of knowledge questions.

Poor knowledge: Those respondents who scored below the mean score of the knowledge questions.

Favorable Attitude: Those respondents who scored above or equal to the mean score of attitude questions.

Unfavorable Attitude: Those respondents who scored below the mean score of the attitude questions.

Familiarity with operational standard: Those respondents who knew the availability of operational standard regarding nursing documentation in their hospital.

Unfamiliarity with operational standard: Those respondents who did not know the availability of operational standard regarding nursing documentation in their hospital.

4.9. Data collection instrument

A structured self-administered questionnaire was developed in English language to collect data regarding self-reported documentation practice and associated factors. The questions were developed based on the national guideline prepared by the FMOH (EHRIG)(24), various books written on nursing documentation(4, 11,) and literatures related to the topic (22, 23, 28, 35).The questionnaire comprises four sections: (1) Questions regarding socio demographic background of participants; (2) Questions assessing the practice of nurses on documentation and organizational factors; (3)

Questions concerning knowledge of nurses on documentation and (4) Questions assessing the attitude of respondents towards nursing documentation.

4.10. Data quality assurance

The questions were reviewed by five senior professional nurses for content validity. Based on their comments, some questions were modified and items scored < 80% were discarded. Prior to the actual data collection, the items were pre-tested on 32 (10 % of 317) nurses working in Minilik II Hospital and the result was used to check reliability, consistency and completeness of the questionnaire and some improvements were done on the wordings. Training was given to data collectors and supervisors and the data collection process was supervised on a daily basis to maintain the quality of data.

4.11. Data collection procedure

Six BSC holder nurses (four data collectors and two supervisors) were recruited for the data collection process and training was given for a day on the objective and relevance of the study, the need for keeping confidentiality of information and respect rights of respondents.

The purpose of the study was clearly explained to the participants and their consent was obtained prior to data collection. Data were acquired from nurses working in the in-patient admission wards and out-patient departments of the medical, surgical and pediatric units by using a structured self-administered questionnaire prepared in English language. To minimize the non-response rate, supervision was done regularly.

4.12. Data processing and analysis

The collected data was checked for completion and cleaned manually. Then data entry and analysis was done using SPSS version 22 and descriptive statistics was used to organize and summarize the variables. Then COR and AOR from bivariate and multivariate logistic regression were used to measure the strength of association between dependent and independent variables.

4.13. Ethical consideration

Ethical clearance was obtained from the Institutional Review Board (IRB) of Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery from which an official letter was offered to acquire permission from administrations of the selected hospitals. Approvals were obtained from the participating hospitals and explanation was done to study participants about the aims, objectives, benefits and harms of the study and a written consent was obtained from each respondent. Confidentiality was ensured as well through anonyms of the questionnaire and safe storage of the filled questionnaire.

4.14. Dissemination plan of results

The final report will be presented at Addis Ababa University College of health science, School of Allied Health Sciences, Department of Nursing and Midwifery. A copy of the research report will be disseminated to Addis Ababa Health Bureau, the nursing library through AAU website and each hospital under the study. The findings of the study will be sent for publication on scientific journals so that it will be accessed by various researchers and readers.

5. Result

5.1. Socio-demographic characteristics of respondents

Out of the 317 sampled nurses, all returned the questionnaire and one was discarded due to incomplete information making the response rate 99.7%.From a total of 316 nurses who participated in this study, 207 (65.5%) were females and 109 (34.5%) were males. Of the total respondents, most of them 208 (65.5%) fall within the ranges of 25-34 years age group. The rest 50 (15.5%), 33 (10.4%), 18 (5.7%) and 7 (2.2%) were aged ≤ 24, 35-44, 45-54 and ≥ 55 years old respectively. Most of the respondents were holding bachelor degree 279 (88.3%); MSc and above19 (6%) and a college diploma 18 (5.7%). Almost two third 66.1 % of the study participants worked as a nurse for 5 years or less and 33.9% of them stayed in the profession for more than five years. Almost half 161 (50.9%) of the respondents were working in the in-patient departments and the remaining 155 (49.1%) in out-patient departments of their respective hospitals during the study period (See table 1 below).

Table 1:Socio demographic characteristics of nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variable	Frequency (n=316)	Percent (%)
Age group of respondents (in a years)		
≤ 24	50	15.8
25-34	208	65.8
35-44	33	10.4
45-54	18	5.7
≥ 55	7	2.2
Gender of respondents		
Male	109	34.5
Female	207	65.5
Educational level of respondents		
College diploma	18	5.7
Bachelor degree	279	88.3
MSc and above	19	6
Respondents' work experience(in years)		
<2	100	31.6
2-5	109	34.5
>5	107	33.9
Work setting of respondents in their hospitals		
In-patient admission ward	161	50.9
Out-patient department	155	49.1

5.2. Practice of respondents towards nursing documentation

The mean score for practice questions was 7.26 (S.D ± 2.03); the minimum score was 1.25 and the maximum 11. From the 316 respondents who participated in the study, 47.8 % (n = 151) [95% CI of 42.4 % to 53.2%] had good nursing care documentation practice (See figure 3 below).

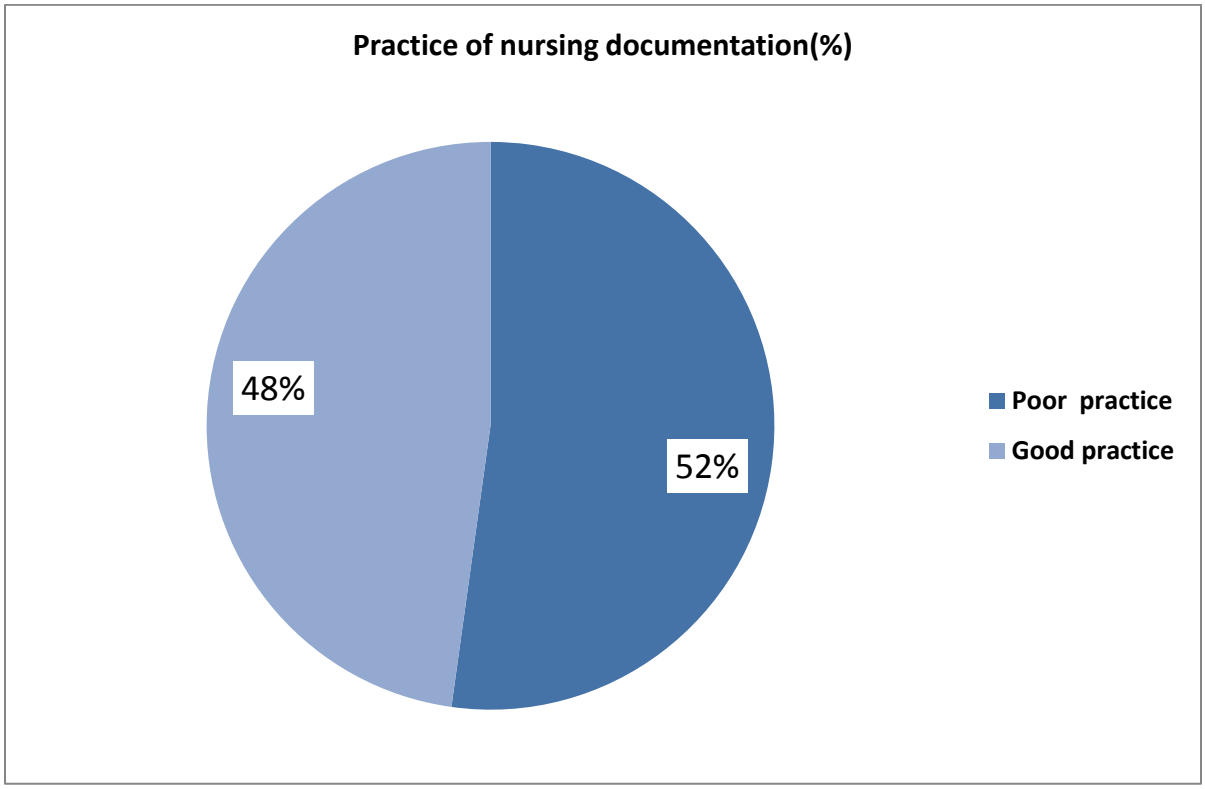

Figure 3: Level of nursing documentation practice among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017(n=316).

Respondents were asked for their time preferences for documenting their care provision and almost half (50.6%) of them document the care immediately or soon after the care provision, 118 (37.3%) any time when convenient and 36 (11.4%) at the end of shift hours. Among all nurses under the study, 230 (72.8%) of them check nursing notes written by their colleagues from which most 130 (56.5%) said the notes are providing adequate information. Concerning the system of documentation, majority 262 (82.2%) of them reported for not applying computerized nursing documentation in their hospital (See table 2 below).

Table 2: Self-reported practice of nursing documentation among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variable	Frequency (n=316)	Percent %
Nursing documentation for every patient (n =316)		
Always	188	59.5
Sometimes	118	37.3
Rarely	8	2.5
Never	2	0.6
Time preference to document a care (n =316)		
Any time when convenient	118	37.3
Immediately or soon after care rendered	160	50.6
At the end of shift hours	36	11.4
I don't know	2	0.6
Ways to keep confidentiality of record(n =316)*		
Access for authorized ones only	214	54
Protect computer pass words	42	10.6
Obtain informed consent	74	18.7
Confidentiality after death	31	7.8
I don't know	35	8.8
Read colleague's notes (n=316)		
Yes	230	72.8
No	86	27.2
Colleague 's notes provide adequate information (n=230)		
Yes	100	43.5
No	130	56.5
Documents education or advice (n=316)		
Always	116	36.7
Sometimes	109	34.5
Rarely	34	10.8
Never	57	18
Uses computerized documentation system(n=316)		
Yes	54	17.1
No	262	82.9
Reports any medical error voluntarily(n=316)		
Yes	225	71.2
No	91	28.8
Way of error recording(n=225)		
No words like" error" or "mistake"	86	32.5
Facts only	132	49.8
I don't know	47	17.7
Documents patient response to care (n=316)		
Yes	187	59.2
No	129	40.8

**n values may not add up to 100% due to multiple options.*

5.3. Factors affecting nursing documentation practice

5.3.1. Knowledge of respondents towards nursing documentation

The score of respondents' knowledge toward nursing documentation practice was added up and dichotomized into two based on the mean knowledge score which was 4.9 (S.D ± 1.9). Based on this cut-off point, 43 % (n = 136) of the study participants had a good knowledge of nursing care documentation.

Out of total respondents who have participated in the study, almost all of them 315 (99.7%) knew that documentation is a professional responsibility for whom previous knowledge from the nursing school was the main source of information for 39.9%, hospital management for 34.1 % and friends from staff for 26%.Regarding the responsibility of documentation, 143(45.3%) of the nurses said the care provider himself should document while 108 (34.2%) said the observant and 54 (17.1) said the assistant is responsible (See table 3 below).

Table 3:Knowledge of documentation among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variables	Frequency	Percent (%)
Documentation is a professional responsibility(n=316)		
Yes	315	99.7
No	1	0.3
Source of information about the responsibility (n=315)*		
Hospital management	130	34.1
Nursing school	152	39.9
Friends	99	26
Principles of documentation(n=316)*		
Free from error	89	16.2
Complete	190	34.5
Easily readable	161	29.2
Chronological	89	16.2
Do not know	22	4
Advantages of documentation(n=316)*		
Improves quality of care	255	35.5
Better communication within staff	176	24.5
For education and research	137	19.1
For legal protection and planning	149	20.8
Do not know	1	0.1
Main nursing activities to be documented(n=316)*		
Assessment data	204	29.6
Progress of patients	188	27.2
Transfer and discharge of patients	113	16.4
Care provided and evaluation of outcomes	182	26.4
Don't know	3	0.4
Consequences of inadequate documentation (n=316)*		
Possible imprisonment	81	17.8
Lack salary increment	54	11.9
Injury or death to the client	100	22
Poor development of a profession	193	42.4
Don’t know	27	5.9

Table 3 continued: Knowledge of documentation among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variables	Frequency	Percent (%)
Effects of using non standard abbreviations(n=316)*		
Leads to error	182	36.5
Wastes time	101	20.2
Causes confusion	196	39.3
Don't know	20	4
Documentation that protects from legal suit(n=316)*		
Record date and time of care	211	34.5
Record performed actions only	121	19.8
Record chronologically	88	14.4
Make corrections clearly	64	10.5
Record frequently	121	19.8
Don't know	7	1.1
Components of medication administration(n=316)*		
Names of medications	206	23.4
Date and time of administrations	231	26.3
Route and dosage of administration	237	27
Name and signature of administrator	201	22.9
Don't know	4	0.5
Who should document a care (n=316)*		
Observant of the care	108	34.2
Assistant of the care	54	17.1
The care provider	143	45.3
Don't know	11	3.5

**n values may not add up to 100% due to multiple options.*

5.3.2. Attitude of nurses towards nursing documentation

Attitudes were assessed via a Likert scale, with scores ranging from strongly agree (5) to strongly disagree (1).The total mean score was 42 (S.D ± 4.9).Among all respondents, most 302 (95.6%) of them agreed that nursing documentation helps for good nurse to patient relationship; 296 (94%) said it helps for patient safety; 293 (93%) said that quality documentation is important. On the other way, 54 (17.1%) respondents did not accept that a written report can replace oral shift report; 39 (12.3%) did not agree patients should know what we are documenting in their chart and 33(10.4%) of them did not agree that nurses have sufficient knowledge of the documentation procedure. In this study, 55.7 % (n = 176) were found to have favorable attitude (See table 4 below).

Table 4: Attitude of nurses towards documentation in selected public hospitals of Addis Ababa, Ethiopia, 2017(n=316).

Variables	**Disagree**		**Neutral**		**Agree**	
	N	%	N	%	N	%
Documentation helps for good nurse to patient relationship	4	1.3	10	3.2	302	95.6
Quality documentation is important	3	0.9	20	6.3	293	93
Documentation helps for patient safety	10	3.2	10	3.2	296	94
Complete and accurate documentation is important	10	3.2	24	7.6	282	89.3
A written report can replace oral report	54	17.1	26	8.2	236	74.7
Documented care is as important as actual care	14	4.4	24	7.6	278	88
Nurses' notes are meaningful and give legal protection	25	7.9	18	5.7	273	86.4
Patients should know what we are documenting in their chart	39	12.3	62	19.6	215	68.1
Nurses have sufficient knowledge of the documentation procedure	33	10.4	33	10.4	250	79.2
Nursing admission assessment should be completed within 1 hour	52	16.5	54	17	210	66.5

5.3.3. Organizational factors affecting nursing documentation practice

Among 128 (40.5%) study respondents who reported not to document always, lack of time was a barrier for most 67 (39.6 %) of them followed by unfamiliarity with operational standard of nursing documentation 37%(n=117), shortage of documenting sheets 24.3% (n=38), inadequate staff 16.6 %(n=28), lack of motivation from supervisors 9.5 %(n=16) lack of skill 6.5%(n=11), and lack of obligation from employing institution 3.6 % (n=6)(See figure 4 below).

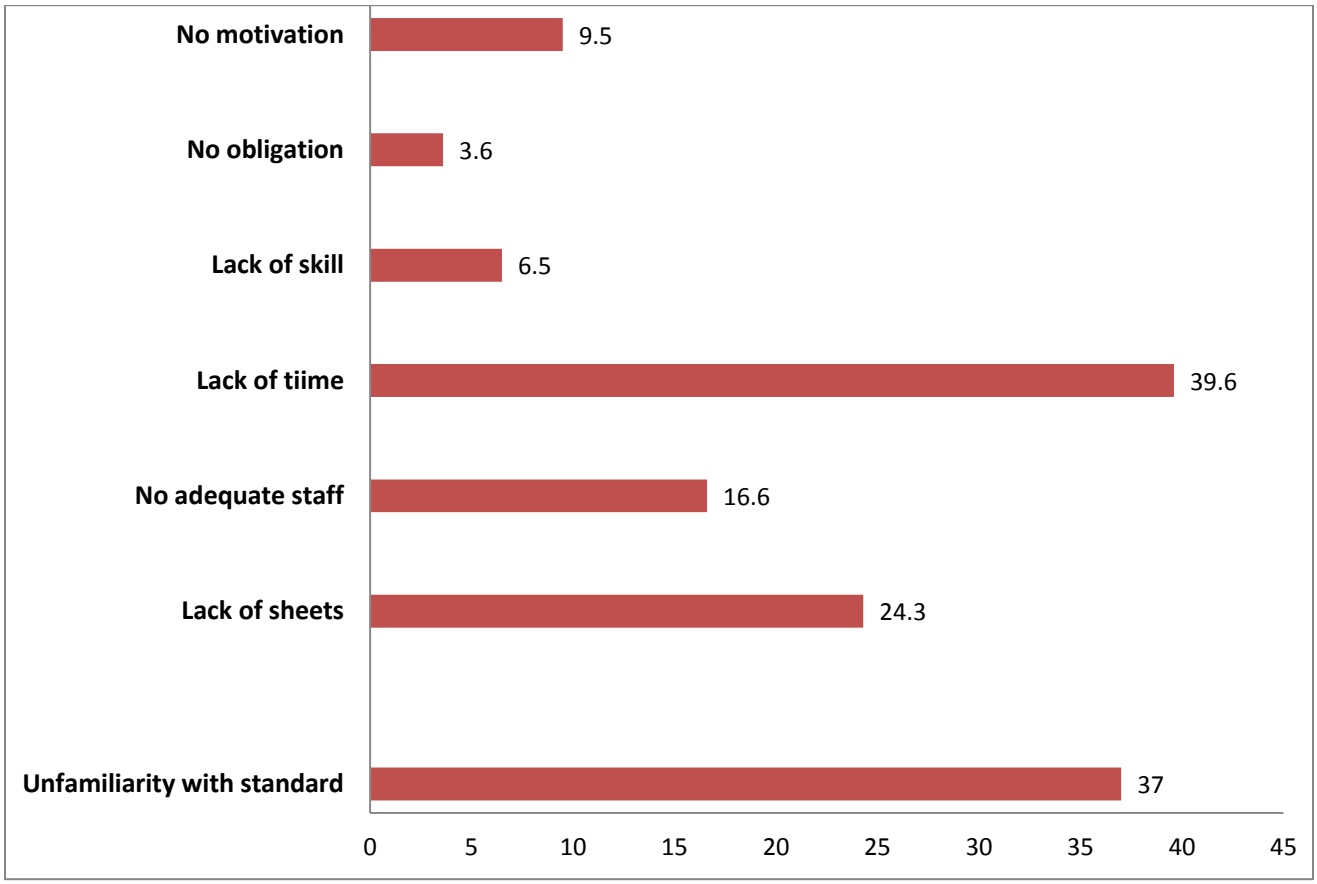

Figure 4:Reasons for poor documentation practice among nurses in selected public hospitals of Addis Ababa, Ethiopia, 2017(n=316).

Among all respondents under the study, 199 (63%) of them knew the availability of guideline for documentation in their hospital while 117 (37%) of them did not know whether it is available or not. Among those who knew availability of the guideline, most 116 (36%) agreed that the assessment, planning, implementation and evaluation of patient care must be documented (See table 6 below).

Table 5: Organizational factors affecting practice of documentation among nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variables	Frequency	Percentage
Reasons for not documenting regularly(n=128)*		
Shortage of documenting sheets	41	24.3
Inadequacy of staff	28	16.6
Lack of time	67	39.6
Did not know how to document	11	6.5
No obligation from employer institution	6	3.5
Lack of motivation from supervisors	16	9.5
Familiar with availability of operational standard regarding documentation(n=316)		
Yes	199	63
No	117	37
Components of operational standard regarding documentation(n=199)*		
Begin with date and time	86	26.7
Assessment, planning, implementation and evaluation	116	36
Appropriate documentation of any care	49	15.2
End with authorized signature	43	13.4
Not sure	28	8.7

*n values may not add up to 100% due to multiple options.

5.4. Bivariate and multi variate logistic regression model

For analysis of the data, bivariate and multi variate logistic regression were done by using binary logistic regression. Crude and Adjusted odds ratio with 95% confidence interval was calculated to determine the strength of association and statistical significance between documentation practice and each independent variable.

According to bivariate analysis, work setting [(P= 0.024) COR=0.598, 95% CI (0.383,0.934)]; availability of motivation from supervisors[(P=0.019) COR=4.574,95%CI (1.288,16.245)]; lack of documentation skill [(P=0.031) COR=0.103,95% CI(0.013,0.817)]; adequacy of sheets [(P=0.001) COR=3.972, 95%CI (1.759,8.970)]; adequacy of time [(P=0.000) COR=5.481 95%CI (2.793,10.757)], and familiarity with operational standard of nursing documentation [(P=0.000) COR=2.575 (1.600,4.143)] were significantly associated with practice of nursing documentation.

Based on findings from the multi variate binary logistic regression, nurses working in the OPD and lacked skill for documentation were 43% and 89% less to document their care than those working in the in-patient department and had adequate skill respectively [AOR=0.570(95% CI (0.345, 0.940)],[AOR =0.109, 95% CI (0.013, 0.908)]. On the other hand, those respondents who are familiar with operational standard of nursing documentation and have been motivated from their supervisors were almost two and four times more likely to practice good documentation than unfamiliar and non-motivated ones respectively [AOR=1.947(95% CI: (1.159,3.269)],[AOR =4.081, 95% CI (1.054, 15.806)]. Similarly, respondents who had adequate time and adequate documenting sheets were 4.9 and 3.6 times more likely to perform good documentation

than those with lack of time and lack of sheets [AOR =4.891, 95% CI (2.425,9.863), AOR = 3.610, 95% CI (1.516,8.595)] respectively. (See table 6 below).

Table 6: Bivariate and multi variate logistic regression model between nursing documentation practice and socio demographic factors in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variables	**Practice level (%)**				**Bivariate logistic regression**		**Multi variate logistic regression**	
	Poor		**Good**		**COR(95%CI)**	**P-value**	**AOR(95%CI)**	**P-value**
	N	**%**	**N**	**%**				
Age of respondents								
< 35	132	51.2	126	48.8	1	0.430		
≥ 35	33	56.9	25	43.1	0.794(0.447,1.409)			
Sex								
Male	58	53.2	51	46.8	0.941(0.591,1.497)	0.797		
Female	107	51.7	100	48.3	1			
Level of education								
≤ BSc	153	51.5	144	48.5	1	0.328		
≥ MSc	12	63.2	7	36.8	0.620(0.237,1.618)			
Work setting								
Out-patient	91	58.7	64	41.3	0.598(0.383,0.934)*	0.024	0.570(0.345,0.940)*	0.028
In-patient	74	46	87	54	1		1	
Work experience								
≤ 5	55	51.4	52	48.6	0.952(0.597,1.517)	0.836		
> 5	110	52.6	99	47.4	1			

Table 6 continued: Bivariate and multi variate logistic regression model between nursing documentation practice and knowledge, attitude and organizational factors in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Variables	Practice level (%)				Bivariate logistic regression		Multi variate logistic regression	
	Poor		Good		COR(95%CI)	P-value	AOR(95%CI)	P-value
	N	%	N	%				
Knowledge								
Poor	96	53.3	84	46.7	1			
Good	69	50.7	67	49.3	1.110(0.711,1.733)	0.647		
Attitude								
Unfavorable	76	54.3	64	45.7	0.861(0.552,1.344)	0.511		
Favorable	89	50.6	87	49.4	1			
Lack of sheets								
No	30	78.9	8	21.1	3.972(1.759,8.970)**	0.001	3.610(1.516,8.595)**	0.004
Yes	135	48.6	143	51.4	1		1	
Inadequate Staff								
No	18	64.3	10	35.7	1.727(0.771,3.869)	0.185		
Yes	147	51	141	49	1			
Time shortage								
No	53	81.5	12	18.5	5.481(2.793,10.757)***	0.000	4.891(2.425,9.863)***	0.000
Yes	112	44.6	139	55.4	1		1	
Lack of skill								
No	155	50.8	150	49.2	1		1	
Yes	10	90.9	1	9.1	0.103(0.013,0.817)*	0.031	0.109(0.013,0.908)*	0.040
Lack of motivation								
No	14	82.4	3	17.6	4.574(1.288,16.245)*	0.019	4.081(1.054,15.806)*	0.042
Yes	151	50.5	148	49.5	1		1	
Familiarity with standard								
Non familiar	87	43.7	25	49	1		1	
Familiar	26	51	14	21.2	2.575(1.600,4.143)***	0.000	1.947(1.159,3.269)*	0.012

****P-value <0.001* ***P-value<0.01* **P-value <0.05*

6. Discussion

Poor documentation in nurses has been shown to have negative impacts on the health care of patients, the health care providers and on the profession in general. Various studies have shown that documentation problem is still a critical issue in both developed and under developed countries, especially in Sub-Saharan Africa including Ethiopia.

The result of this study showed that good nursing care documentation was practiced by 47.8 % of nurses, [95% CI of 42.4 % to 53.2%].This finding is almost similar to a study done in England 47% (42),Canada 53.5%(30) and Ghana 54.6%(37). On the other hand, it is higher than a finding from European Hospitals which was 28%(42) and Iran 15%(32).This discrepancy might be due to difference in sample size(larger samples in the study of European Hospitals). A recent study conducted in the University of Gondar hospital also identified documentation practice of 37.4%(22) and in Indonesia 37 %(35). This might be related to the study design used(22) and difference in attitude level of the participants which is a known factor to affect documentation practice. In contrast with this, satisfactory level of effective documentation was reported to be practiced in Jamaica 98%(34),couple of studies from Nigeria 70%(23)and 77.4%(44) and in different hospitals of Cape town 68.3% (28).These discrepancies might be related to familiarity of the nurses with the required documentation guidelines available on each ward (34) and adequate knowledge level of study participants regarding documentation as indicated in those studies.

Despite their non-significant association, this study found 43% of knowledge level among participants which is in line with Iran(46.5%)(32).But this finding contradicts with the finding from University of Gondar Hospital which was 58.3% (22),South Africa

74.9%(28),Iraq 59%(27) and Indonesia 82.7% (35).These inconsistencies might be related to differences in educational background of the study participants and accessibility of in-service training by their employing institution(22).

Concerning the attitude of participants, this study found 55.7 % of good attitude level which is comparable to the study conducted in Gondar University hospital (60.7%) (22) and Uganda, 67%(9). As reported by participants of this study, 88% of them agreed that documented care is as important as actual care and 86.4% said nurses' notes give legal protection. Similarly, a study from Nigeria showed that all respondents think it is important to document nurses' care and 21.7% said it serves as a legal backup(23).Based on cross tabulation result of this study, respondents who had good knowledge practiced good documentation by 49.3% while those with poor knowledge practiced 46.7%.Similarly,those who were having favorable attitude had good practice of 49.4% than unfavorable ones(45.7%).

This study also identified that lack of time was the factor to have hindering influence against nursing documentation. This is similar to a study conducted in Nigeria(44) and England(42) where care is often not done because of insufficient time. Respondents who reported to have lack of time in this study were 41.9 % which is similar with a study conducted in Nigeria 41.7% (23) and in England 47% (42).On the other hand, 19% of participants in the study of Gondar reported lack of time as a reason for inadequate documentation. This variability might be related to difference in the number of population visiting the study areas. In this study, respondents who had adequate time were five times more likely to perform good documentation when compared to those who had lack of time. This study also identified that familiarity with operational standard

for nursing documentation is one of the factors affecting nursing documentation which is comparable with a finding in Netherlands where knowledge of hospital policy regarding documentation was found to be one of the factors determining the prevalence of nursing diagnosis documentation(43).In this study, nurses who are motivated with their supervisors were four times more likely to perform good documentation which is similar with the study in Indonesia(35).

As indicated in this study, 50.6% of respondents document the care soon after provision, 37.3% any time when convenient and 11.4% at the end of shift hours and 72.8% of them read their colleague's notes before formulating own. Whereas, a finding from Nigeria reported that 96.7% of study participants document anytime a case is rendered and 7.4% of them check the previous information before formulating theirs (23).Another study from Nigeria reported that 77.2% of the respondents did not document immediately following a procedure (36).

7. Strength and limitation of the study

7.1. Strength

Coverage of larger study population (compared to the study conducted in Gondar University Hospital); so it may be possible to generalize the finding to the source population.

7.2. Limitation

No adequate literatures were found on similar topic especially in Ethiopian context making it difficult for comparison.

8. Conclusion and recommendations

8.1. Conclusion

Nursing documentation practice was poor among nurses under the study. Work setting, adequacy of documenting sheets, adequacy of time, availability of motivation, lack of documenting skill and familiarity with operational standard of nursing documentation were significantly associated with practice of nursing care documentation

8.2. Recommendations

It has been accepted that nursing documentation is a very important aspect of professional practice to nurses. Based on the finding of this study, the following recommendations are forwarded for:

1. Policy makers to give greater emphasis towards the importance of nursing documentation and work towards solving the problem.
2. Health institutions to provide sustained continuing training opportunities for nurses to create awareness, familiarize them with the guideline regarding documentation, enhance their knowledge and develop their documenting skill.
3. Nursing leaders (matrons /nursing directors) should support and motivate the employees and avail the necessary documenting materials besides adequate staffing which may be related to time shortage.
4. Researchers to carry out large scale studies in order to address the problem in wider context. Researchers also need to carry out large scale studies in order to address the problem.

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Appendices

Appendix 1: Information sheet

Good morning/good afternoon! My name is _____. I am here today to collect data for a study to be conducted by Hanna Hailu from Addis Ababa University, Department of Nursing and Midwifery, post graduate program. The objective of this study is to assess the practice of nursing documentation and associated factors among nurses in public Hospitals of Addis Ababa. You are asked to take part in this study and to respond genuinely and your cooperation is greatly helpful. Your participation is voluntary and your name will not be written in this form and will never be used in connection with any information you tell us. There is no risk in participating in this research project and there may not be direct benefit to you but your participation may have direct or indirect contribution to the patient, the nurses and the profession as a whole.

If you have questions regarding this study or would like to be informed of the results after its completion, please feel free to contact the principal investigator by using the following address.

Cell phone: +251 912042236

Email: hannahailu15@gmail.com

Appendix 2: Consent form

In signing this document, I am giving my consent to participate in the study entitled "Assessment of patient care documentation practice and associated factors among nurses in selected public hospitals in Addis Ababa". I have been informed that the purpose of this study is to assess documentation practice and associated factors among nurses. I have understood that participation in this study is entirely voluntarily and my participation or refusal to answer the questions will have no effect on me. I have been told that my answers to the questions or reports of this study will never identify me in any way. I understood that Hanna Hailu is the contact person if I have questions about the study or about my rights as a study participant. I also know that the address of the principal investigator is: Hanna Hailu, Mobile number- +251 912042236,e-mail-hannahailu15@gmail.com.

I here approve my consent to take part in the study with my signature.

Signature _____

Date _____

Appendix 3: Questionnaire

Section I: Socio demographic characteristics of the nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017.

S. No	Question	Response	Remark
1.	Your age(in years)	----------	
2.	Sex	1. Male 2. Female	
3.	What is the highest level of education you have attained?	1. College diploma 2. Bachelor degree 3. MSc and above	
4.	Where is your working setting in the hospital?	1. Medical ward 2. Surgical ward 3. Pediatric ward 4. Regular OPD 5. Emergency OPD 6. Pediatric OPD	
5.	Years of experience (in years)	----------	

Section II- Practice of documentation among nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Instruction-Please read the following questions carefully and **encircle** on the correct answer option. Please note that **more than one answer is possible** (for questions 202,204,206 & 212).

Question	**Responses**	**Remark**
1. Do you document the care you have done for every patient?	1.Always 2.Sometimes 3.Rarely 4.Never	If "Always" to Q 201, please skip to 203.
2. If not "Always" to Q 201, what were your reasons?	1. I could not find adequate documenting sheets 2. No adequate staff 3. Lack of time 4. I didn't know how to document 5.No obligation from the hospital 6. No motivation from supervisors 7. If others, please specify----------	
3. Does your hospital have operational standard for nursing documentation?	1.Yes 2. No	If "No" to 203,please skip to 205
4. If "Yes" to 203, which of these elements concerning documentation are included in the standard?	1. Begin with date and time 2. The assessment, planning, implementation and evaluation of the patient care must be documented 3. Ensure that any aspect of care delegated has been documented appropriately 4. End with authorized signature	
5. Which time do you prefer to document a care provided to the patient?	1.Any time when convenient 2. Immediately or soon after care rendered 3. At the end of shift hours	

6. How do you keep confidentiality of patient's record?	1. Maintaining patient charts to be accessed by authorized person only 2. Keep pass words of computers safe (if electronic) 3. Obtain informed consent from the client to use or disclose information to others 4. The duty of confidentiality continue after death of an individual 5. I do not know	
7. Do you read your colleagues' notes?	1.Yes 2. No	If "No" to Q 207, please skip to 209.
8. If "yes" to Q 207, does your colleague's recording provide you adequate information?	1.Yes 2. No	
9. Do you document education or advice you have provided to a patient?	1.Always 2.Sometimes 3.Rarely 4.Never	
10. Do you use computerized nursing care documentation system currently in your hospital?	1.Yes 2. No	
11. Do you voluntarily report any medical error that occurs while providing patient care?	1.Yes 2.No	
12. If "Yes" to question 211, how do you record?	1.Do not use words like" error" or "mistake" in the patient's chart 2. Record facts only 3. I don't know	
13. Do you document your patient's response to the care	1.Yes 2. No	

you have provided?		

Section III- Knowledge of nursing documentation among nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017

Instruction-Please read the following questions carefully and **encircle** on the correct answer option as honest as possible. Please note that **more than one answer is possible** except for questions 301 and 310.

Questions	**Responses**	**Remark**
1. Documentation of patients care is part of professional responsibilities	1.Yes 2. No	If "No" to 301,please skip to 303
2. If "Yes" to 301,who is your major source of information?	1. Hospital management 2. Nursing school 3. Friends from staff 5. Others----------	
3. What are some of the principles needed to be followed while documenting?	1. Error free 2. Complete 3. Easily readable 4. Chronological 5.I don't know	
4. What are the advantages of patient care documentation?	1. To improve quality of care 2. For better communication with health care staff 3. For education and research 4. For legal protection and health planning 5.I don't know	
5. What are the main nursing activities you are expected to document?	1. Assessment data 2. Progress of patients 3. Transfer and discharge of patients 4. Care provided and evaluation of outcomes	
6. What are the potential consequences of inadequate documentation?	1. Possible imprisonment 2. Loss of salary increment 3. Severe injury or death of a client 4. Poor development of nursing profession	

7. What are the effects of using non standard abbreviations when documenting patient care?	1. Leads to errors 2. Wastes time 3. Causes confusion 4. I don't know	
8. Which of the following actions of documentation do you think protects you from legal suit?	1. Documenting the date and time of care 2. Recording only what you saw or did 3. Recording in a chronological order 4. Putting single line and make correction clearly 5. Recording frequently 7. I don't know	
9. What are the components of documenting medication administration?	1. Names of medications 2. Date and time of medications administered 3. Routes and dosage of medications administered 4. Nurses name and signature 5. I don't know	
10. Who should document a care provided to a patient?	1. An individual who has observed the care 2. A colleague who has assisted the care 3. The same individual who provided the care 4. I don't know	

Section IV- Attitude of nurses working in selected public hospitals of Addis Ababa, Ethiopia, 2017.

Instruction- Please read the following statements carefully and put a **check mark** on the option that best agrees with your opinion. Tick **"Neutral"** if you don't want to agree nor disagree with the opinion.

Statement	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
1. Nursing documentation helps to create good nurse to patient relationships					
2.Quality documentation of nursing care can add value to my hospital					
3. Proper documentation has a positive impact on patient safety					
4. Although challenges are known to exist, I am expected to do complete and accurate documentation					
5. A well-written report can replace oral shift report					
6. Documented care is just as important as the actual care					
7. Nursing notes are meaningful and gives me legal protection					
8. Patients should know what we are documenting in their chart					
9. Nurses have sufficient knowledge of the documentation procedure					
10.Nursing admission assessment should be completed within 1 hour					