ASSESSMENT OF DOCUMENTATION PRACTICE AND ASSOCIATED FACTORS AMONG NURSES WORKING IN JIMMA UNIVERSITY MEDICAL CENTER, JIMMA TOWN, SOUTH WEST ETHIOPIA

BY: SELAM AYELE (BScN)

A RESEARCH PAPER TO BE SUBMITTED TO JIMMA UNIVERSITY INSTITUTE OF HEALTH, SCHOOL OF NURSING AND MIDWIFERY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS IN ADULT HEALTH NURSING

JUNE, 2018

JIMMA, ETHIOPIA

JIMMA UNIVERSITY

INSTITUTE OF HEALTH

FACULTY OF HEALTH SCIENCE

SCHOOL OF NURSING AND MIDWIFERY

ASSESSMENT OF DOCUMENTATION PRACTICE AND ASSOCIATED FACTORS AMONG NURSES WORKING IN JIMMA UNIVERSITY MEDICAL CENTER, JIMMA TOWN, SOUTH WEST ETHIOPIA

BY: SELAM AYELE (BScN.)

ADVISORS

1. Mr. EBRAHIM YIMAM (MSc)

2. Mr. ADMASU BELAY (MSc)

JUNE, 2018

JIMMA, ETHIOPA

ABSTRACT

Background*: Nursing documentation is an essential component of nursing practice that has a potential to improve patient care outcome. Poor documentation of nursing care activities among nurses has been shown to have negative impacts on the health care quality. However, little has been explored about nursing documentation practice in the study area.*

Objective: *The aim of this study was to assess documentation practice and associated factors among nurses working in Jimma university medical center.*

Method: *Institutional based cross sectional study design was employed. The study was conducted from March l3 to April 6/2018 among 391 nurses. Data was collected using a structured self- administered questionnaire. Simple random sampling was used to select the study participants. Pre-taste was done among 39 (10%) of sampled nurses working in shenen gibe Hospital and Cronbach's alpha was calculated. Nursing care standard checklist was used to review documents from major wards. Data was entered into Epidata version 3.1 and then exported to SPSS version 21for analysis. Descriptive statistics, Binary logistic regression and multivariate logistic regression was used to describe, identify candidate variable for multivariate logistic regression and identify factors associated with documentation practice. P-value of less than0.05 was used to declare statistical significance in multivariate logistic regression.*

Result: *Among the participants good nursing documentation was practiced by 48.6%. Adequacy of documenting formats, motivation from supervisors, in-service training and familiarity with operational standard of nursing documentation were significantly associated with practice of nursing care documentation [AOR=0.357, AOR =4.237, AOR =0.462,AOR=2.165, respectively.*

Conclusion: *Nursing documentation practice was poor among nurses under the study. Adequacy of documenting formats, availability of motivation, familiarity with operational standard of nursing documentation and in-service training were significantly associated with practice of nursing care documentation.*

Recommendation: *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.*

Keywords: *Documentation, Nursing care, nursing record of patient care, documentation practice.*

CONTENTS **PAGES**

List of Figure

List of tables

ACKNOWLEDGEMENT

First and for most, I would like to forward my gratitude to Jimma university for sponsoring me to upgrade my education to masters level in nursing and Jimma University, institute of Health Science, school of Nursing and Midwifery for providing me such an opportunity of studying a Master's program in Adult Health nursing specialty.

My deepest acknowledgement goes to my advisors Mr Ebrahim Yimam and Mr Admasu Belay, for their timely and constructive comments, which have been very helpful in improving and guiding the whole process. I would also like to thank my study participants who were involved in this study and for all data collectors and supervisors without whom accomplishment of this research project would be impossible. Lastly, I like to express my heart-felt thanks to my families for their special support and generally to all students of my batch for their encouraging words throughout the research work.

LIST OF ABBREVIATIONS

JUMC: Jimma University Medical Center

BSC: Bachelor of Science

ANA: American Nurses Association

EHRIG: Ethiopian hospital reform implementation guideline

FDRE: Federal Democratic Republic of Ethiopia

HMIS: Health Management Information System

IRB: Institutional Review Board

MSC: Master of Science

PED: Pediatrics

GYN/ OBS: obstetrics and gynecology

OPD: Out Patient Department

SPSS: Statistical Package for Social Sciences

WHO: World Health Organization

COR: Crude Odds Ratio

AOR: Adjusted Odds Ratio

CHAPTER ONE

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 emergence of nursing as a profession. As written in nurses legal hand book, "Notes on nursing: What it is and what it is not", stated the necessity of recording patients' progress in words for communication among nurses and the importance of reporting patient related observation accurately (2). Nursing documentation is an important component of nursing practice that occurs within the client health record and is not an optional extra to be fitted in if circumstances allow (3).

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 There are also evidences indicating that nursing documentation has relationship with patient mortality(4).

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 (2). Second, it serves as evidence in legal proceedings through demonstration of the applied nursing knowledge, skills and judgment (6).

Documentation also provides valuable data for research in Nursing, which have the potential to improve health outcomes. In addition to these, it may form the basis of teaching plans (7). On the other hand, the level of contributions nurses do in the health care system can be witnessed through proper documentation of their roles (8).

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 (8).

In Ethiopia, nursing communication is mostly limited to hand written in most of health settings even though an electronic method called HMIS (health management information system) has been rolled out across different hospitals (9). 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, nurses may record patient visit registry in the outpatient departments(10).

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. It has been reported that nursing records are often incomplete, lacked accuracy and had poor quality(5),(11).

One of the main problems facing in nursing is lack of standardization of the documents and forms nurses are required to use. It is not unusual for differently designed forms that have similar functions to exist even within the same facility. Lack of uniformity creates confusion and increases chance of documentation error(2),(12).

The challenges for documentation reported so far include shortage of staff, inadequate knowledge concerning the importance of documentation, patient load, lack of in-service training and lack of support from nursing leadership(13),(14). 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(15).

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. Quality of patient care can also be hindered by an absence of sufficient documentation of data (16). On the other hand, a good documentation improves credibility of the institution, and makes the nursing profession visible. This means that, the situation may lead to the extent that can affect the status of the health care facilities because health care facilities are evaluated by the quality of documents they keep in most cases(17),(18).

Good nursing documentation clearly and concisely communicates the observations, actions and outcomes of care, in a timely and accurate manner. However nurses constantly struggle to document in a way that is timely, accurate and legally practical. Poor nursing documentation can place patients, staff and organizations at considerable risk of physical and legal harm(19).

In sub Saharan Africa identified deficiencies in various aspects of nursing documentation, Specially South Africa and Uganda reported a problem in attitudes, knowledge and practice

towards the practice of nursing documentation among nurses (20). Proper documentation allows real representation of what is happening on the ground (16).

The global trend of missed, inappropriate or incomplete documentation of nursing care is alarming and as with most developing countries such as Ethiopia, struggling with inadequate nursing staff and yet burdened with an increasing workload, the tendency for documentation errors cannot be ignored(21).

It is unfortunate that nursing documentation continues to draw criticism from professionals, community and regulatory organization because of incomplete, substandard charting practice Nurses action are typically described as compassionate, committed and caring yet these attribute are often difficult to recognize in the nursing documentation. Most of nurses‟ actions are either not documented or not properly documented and thus crates a great problem when it comes to evaluation of client(22).

In Ethiopia, inadequacy of data collection with lack of quality was found to be a problem (21).

Jimma university medical center (JUMC) uses paper-based documentation, with the scientific nursing process as the documentation guiding framework. However, audits of patient records for quality assurance purposes and morbidity and mortality reviews revealed poor documentation of nursing assessments and other pertinent patient care information.

Despite the barely observable deficiencies, studies conducted on this issue of interest are very minimal. Therefore, this study is aimed to assess the practice of patient care documentation and its associated factors among nurses working in Jimma university medical center south west Ethiopia.

CHAPTER TWO

Literature Review

Since the emergence of nursing as a profession, nurses have viewed documentation of patient care as an integral part of nursing practice. As action-oriented professionals, nurses often experience conflict between time spent caring for patients and time needed to accurately record what care was provided. When time is limited and many tasks need to be done, nursing care may seem to take priority. However, documentation is one of the most critical skills nurses perform. Although one may approach documentation as a job/task, one's entire nursing career could depend on the accuracy and completeness of one's charting(14),(16).

Various authorities have stressed the importance of keeping records of nursing practice. In 1948, Brown, E. in her report make more to the importance of provision of quality nursing care services and this marked the beginning of the need to give proof of nursing practice by documenting and record keeping. Effective documentation is systematic, timely, accurate, well written account of nursing care provided to individual patients(23),(24).

Nurses' documentation practice

A study conducted in Jamaica showed high levels (98%) of good documentation by nurses at a referral hospital in Jamaica.(25). A study conducted among nurses in Papuan area of Indonesia also reported a documentation practice level of only 37 % (26). 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 (27).

In Ethiopia, the Federal Ministry of Health Operational Standard for Nursing Care outlines that every nursing care provided must be clearly and correctly documented. Nevertheless, a study conducted in Gondar, North West Ethiopia indicated that slightly more than one-third (37.4%) had good nursing care documentation practice(28).

Good nursing care documentation was practiced by 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. A study conducted in Felege Hiwot Referral Hospital

also showed that nearly 87% of the medications provided had documentation errors committed by nurses(29).

In the last few years, some significant trends in documenting patient care have become reality. These trends include changes in traditional care planning and effort to meet the need for increased documentation and improved communication while making charting less time consuming(30).

Factors associated with 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 (31). A study done in Iran showed a strongly positive correlation 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 (32).

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 (31).

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 (26)while another study in Indonesia showed most nurses (82.7%) had a good knowledge of nursing documentation(26).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 (33). In another study done in Ghana that assessed nurses' knowledge, 16% of respondents reported no idea of what to document (22).

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 (21).

In a study done in Uganda, 70.3% of participants scored poor knowledge and none scored 100% (34). 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(28).

Attitudes of nurses towards nursing documentation

According to a study conducted in Indonesia, only 48.1% of nurses had good attitude (26). 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 (27).

According to research conducted in South Africa, predominantly positive self-reported attitude was evident towards record keeping (71.7%)(33). 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 (34).

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 (28).

Organizational factors associated with nursing documentation

A study conducted in Thailand 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(14). 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 (35).According to a study done in European hospitals, female nurses and nurses with greater professional experience reported higher levels of nursing documentation (35). Nurses working in hospitals of England reported that care is often not done because of insufficient time(13)

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 %(26).

In the area related to nursing management, lack of punishment and reward system (39.5%) and lack of continuous monitoring and evaluation (35.1%) were reported as the most important factors. A significant difference was observed between male and female groups in terms of their rating of factors in the area of nursing management influencing poor nursing documentation (21). The results showed that personnel shortage, lack of time and fatigue affected the quality of nursing records and factors such as lack of punishment and reward system and lack of ongoing monitoring and assessment were key factors in nursing documentation(14).

According to study done in Iran on factors influencing poor nursing documentation reported personnel shortage (staffing) (72.7 %.), lack of time (57.1%) and fatigue (workload) (54.5%) as the most important factors influencing poor nursing documentation. In the area related to wards, high number of patients (70.1%) and high volume of tasks in the ward (62.3%) were rated as the most important factors(13).

A study done in Nigeria showed that lack of time (78.3%), too many workloads (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 (27). Also according to Study done in Uganda Lack of time and support from the nursing leadership and the interdisciplinary team was the challenge that

affected nursing documentation. Other challenges included overcrowding and lack of policies that guided nursing documentation and also the lack of a pre-designed documentation tool for documenting patient care(34)

In a research conducted 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%)(29). 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 (28).

In Africa research in nursing has not taken a priority. The reviewed literature shows that not much has been published on nursing documentation. In conclusion the reviewed literature on nursing documentation is disapproving cannot go back to the traditional system of focusing only on documenting doctor's orders. Need to achieve an effective nursing documentation in a systematic and accurate method. With the review of various aspects of nursing documentation including its purpose and principles, there is a need to determine nursing documentation practice and associated factors.

Significance of the Study

Nursing documentation serve as an integral part of safe and effective nursing practice that reflects knowledge, judgment, critical thinking and meaningful patient focused information. Also uses for meeting legislative requirements, quality improvement, purpose of communication, accountability and documentation is important as assessment (2). Additionally the study will help concerned body for preparation of effective strategies on how to improve nursing documentation practice among nurses which will directly or indirectly improve nursing care quality, patient satisfaction and documentation skill, attitude and knowledge. Also the finding from this study will help nursing personnel to find means of uplifting standards of nursing documentation and make the nurses realize the benefits of documentation in their daily practice. Also it may increase patient safety and enhance the quality of nursing. The result of this study will be used by the Nurses Association, Jimma University Medical Center Nursing Director Office and non-governmental organizations that seek to improve the quality of nursing care being provided. The aim of this study was to determine nursing documentation practice and associated factors.

Conceptual Framework

A conceptual framework developed after reviewing relevant literatures that describe the relationship among the nurses' practice of documenting their care and associated factors that affect their practice (20, 21, 23, and 38).

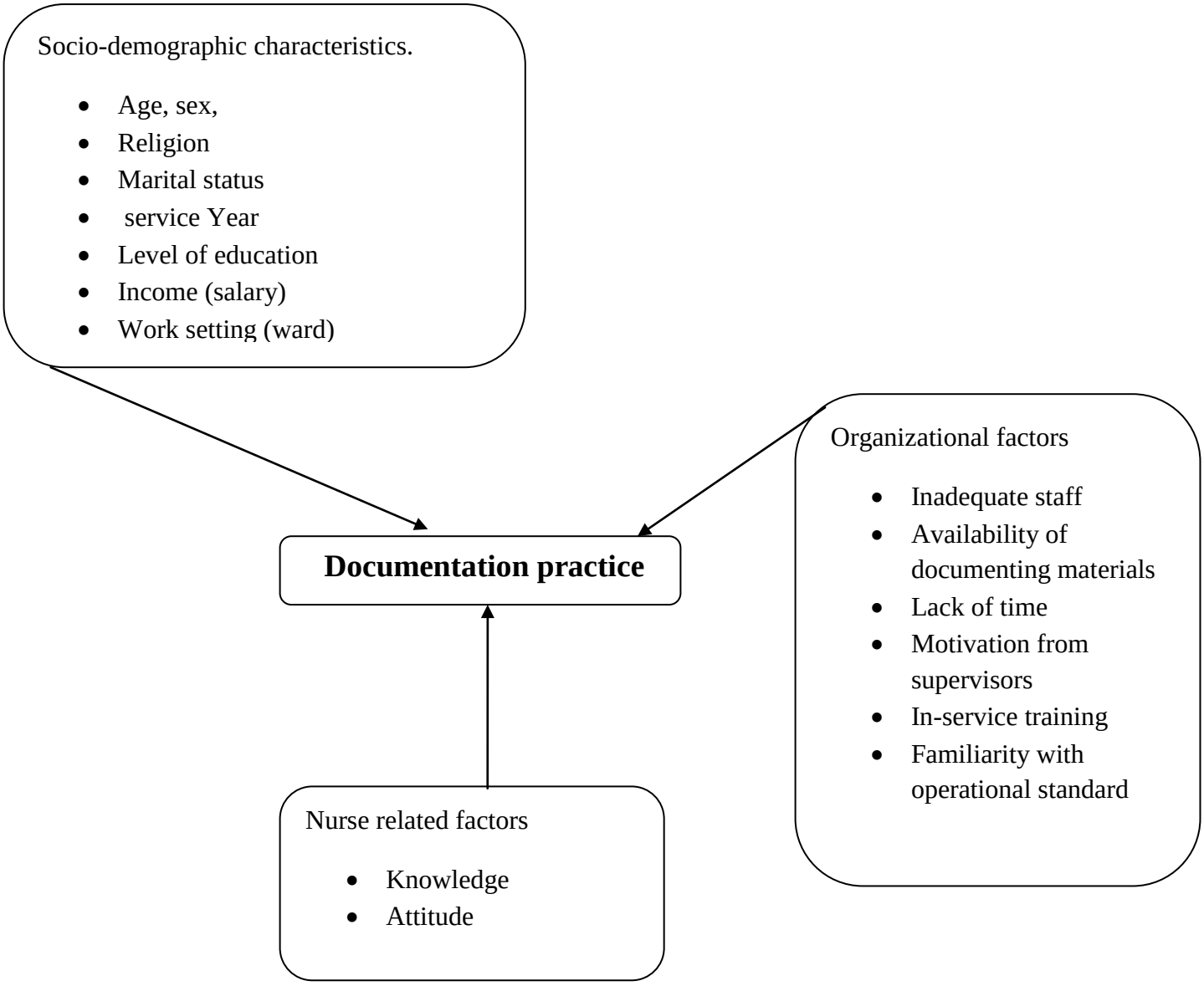


Figure1.Diagrammatic representation of conceptual framework for the study on nursing documentation practice and associated factors among nurses working in JUMC Jimma town south west Ethiopia 2018 .

CHAPTER THREE

3. Objectives

3.1. General Objective

To assess nursing documentation practice and associated factors among nurses working in Jimma University Medical Center, Jimma town South Western Ethiopia,2018

3.2. Specific Objectives

3.2.1 To determine level of nursing documentation practice among nurses working in JUMC

3.2.2 To identify factors associated with nursing documentation practice among nurses working in JUMC

CHAPTER FOUR

Methods and Materials

4.1. Study Area

The study was conducted in Jimma University Medical Center, in Oromia regional state Jimma zone, Jimma town. JUMC is one of the oldest public Hospitals in the country it was established in 1937 by Italian invaders352 km to Southwest of Addis Ababa. Bed capacity of 800 and has more than 1800 staff, among these there are 550 nurses. It has been serving for a catchment population of 15-20 million residing Oromia, Gambella, SNNPR and Benishangul regions. Based on figures from the Statistics office of Jimma university medical center (2009)

4.2. Study design and Study period.

Institutional based cross-sectional study design was employed from March 13to April 6/2018

4.3. Population

4.3.1. Source population.

For nurses: All staff nurses working in Jimma University Medical Center.

For document: All patient records from (medical, surgical, gyn/obs, pediatrics, ophthalmology psychiatry and OPD) units or wards during the study period.

4.3.2. Study population.

For nurses: Selected staff nurses of Jimma University Medical Center.

For document: selected patient records from (medical, surgical, gyn/obs, pediatrics, ophthalmology, psychiatry and OPD) units or wards

4.4. Eligibility criteria

4.4.1 Inclusion criteria

Nurses working in in-patient and out-patient departments of Jimma university medical center were included.

4.4.2. Exclusion criteria

Nurses who are not in routine nursing care activity (direct patient care) and those who are on sick leave, annual leave during the data collection period

4.5 Sample Size determination and sampling technique

4.5.1 Sample size determination

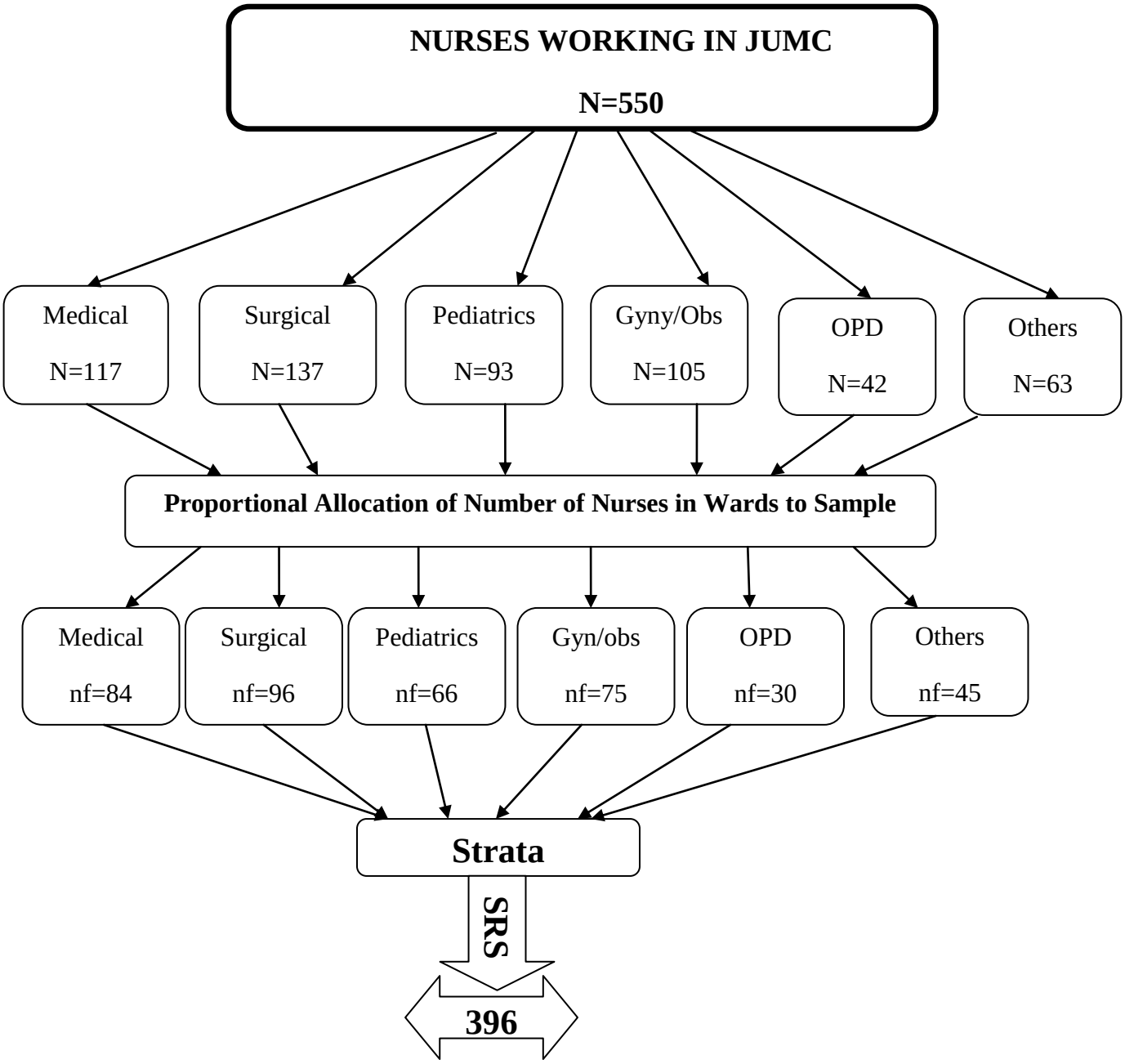
The sample size was determined using single population proportion formula by considering; Z=standard normal distribution (Z=1.96) taking the proportion of good documentation practice as 37.4% from previous study conducted in Northern Amhara region Public Hospital (28), 95% confidence interval (CI), and 5% margin of error. Thus, the sample size is calculated as follows:

$$n_i = \frac{(z\alpha/2)^2(p(1-p))}{d^2}$$

Where n= minimum sample size required for the study P=prevalence/ population proportion (p=0.374); d=is a tolerable margin of error (d=0.05) = 1.96(1.96) (0.374(1-0.374))/0.05(0.05) = 359.76 =>ni =360 by adding 10% non response rate the final sample size is **396**

4.5.2. Sampling technique

Stratified random Sampling technique was used. To form the strata ,list of all nurses was obtained from the nursing leaders (head nurses) of respective wards and the number of samples in each ward was selected according to proportional allocation formula as follows: (n f x n) /N or (Sample final × number of nurses in each ward)/number of total nurses, Where N=550. Then from each stratum nurses were selected using simple random sampling for the data collection process. Additionally Major wards was selected purposively (medical, surgical, gyn/obs, pediatrics,Opd ,ophthalmology for document review and Ninety (90) patient charts was drawn randomly from each unit by using lottery method.



Key: Others (dialysis, endoscopy, radiology, Physiotherapy, maxillofacial, dental, ophthalmology)

Figure 2: Schematic presentation of sampling procedure for study on assessment of nursing documentation practice and associated factors among nurses working in JUMC Jimma town south west Ethiopia

4.6. Variables

4.6.1. Dependent Variable

Documentation practice

4.6.2. Independent Variables

Socio demographic characteristics (age, sex, religion, marital status, income, year of service and level of education, work setting)

Knowledge towards nursing care documentation

Attitude towards nursing care documentation

Organizational related factors (inadequate staff, availability of documenting materials, familiarity with documentation guideline, availability of obligation from hospital and motivation from the supervisors, in-service training).

4.7. Operational Definitions

Documentation practice: The documentation practice of study participants was measured by 10 items with multiple options and multiple choice type questions. Then documentation practice was categorized as:

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.

Completeness of patient chart: It is the presence of all the necessary information of patients based on the standard formats attached at the annex and all entries are dated and signed.

Good: if completed greater than or equal to 50% of the parameters.

Poor: if completed less than 50% of the parameters.

4.7.1 Definition of Terms.

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 knew the availability of operational standard regarding nursing documentation in their hospital.

Nurse: refers to any individual who qualified as a nurse or midwife at diploma level and above

4.8 Procedure and tools

4.8.1 Data collection instruments

Data was collected by using structured self -administered questionnaire, which contain both open and closed ended question. English version of the questionnaire was used. The questions are developed based on the national guideline prepared by the FMOH (EHRIG 2016)(38), various books written on nursing documentation(5),(39) and literatures related to the topic (14), (28),(26),(34). In addition document review (patient chart) was conducted by using nursing care standard checklist which adopted from FMOH (40).

4.8.2 Data collection procedure.

Four nurses (three (Bsc) facilitators and one (Msc) supervisors) were recruited for the data collection process and the facilitators recruited based on their experience in data collection and was trained by the investigator for 1day.Data were acquired from nurses working in the in-patient admission wards and out-patient departments by using a structured self-administered questionnaire prepared in English language.

4.9 Data quality control

The facilitators were trained prior to the data collection and the collected Data was regularly checked by the facilitators, by the supervisor and after all checked by the principal investigator. The supervisor made close follow up and frequent checks on the data collection process, the completeness and the consistency of the gathered information. During data collection the supervisors were supervise the facilitators and codes was given to the questionnaires. Ten percent of the questionnaire was pre- tested at Shenen Gibe Hospital to assess clarity, sequence, consistency, understandability and for total time it takes before the actual data collection. The result of reliability tests showed that Cronbach's alpha for documentation practice, knowledge towards documentation, attitude towards documentation and organizational factors are 0.794, 0.838, 0.865 and 0.804 respectively on pre-test. Then necessary comments and feedbacks were incorporated in the final instrument.

4.10 Data processing and analysis

The collected data was checked for completeness and cleanness and were entered into Epidata 3.1 then exported to SPSS version 21 software for analysis. Descriptive statistics was used to organize and summarize the variables. Bivariate analysis for each independent variable with the outcome variable was performed to select candidates for multi variate logistic regression analysis. All independent variables with p-value less than 0.25 was taken as candidates for multivariable logistic regression model then finally p-value of less than 0.05 at 95% CI were used to declare statistical significance. The AOR from multivariate logistic regression were used to measure the strength of association between dependent and independent variables.

4.11 Ethical consideration

Ethical clearance was obtained from Institutional Review board of Jimma University. A formal letter from Institute of health science was given to JUMC and Shenen gibe hospital to obtain their co-operation. All the study participants were informed about the objective of the study and their informed consent was obtained. Additionally confidentiality and privacy of the information was seriously respected.

4.12 Dissemination of the findings

The result of the study will be presented and submitted to Jimma university school of nursing and midwifery. The result of this study will be communicated to Jimma university medical center and other stakeholders. Effort will be made to publish the result of this study on reputable national or international journal.

CHAPTER FIVE

RESULT

Socio-demographic characteristics of respondents

Out of the 396 sampled nurses, all returned the questionnaire and five was discarded due to incomplete information making the response rate 98.7%. From 391 nurses who participated in this study, 204 (52.2%) were females and mainly 236(60.4%) fall within the ranges of 25-34 years age group. Also most of them were single 182 (46.5%). Majority of the respondents 173(44.2%) orthodox religion followers and more than of the respondents were holding bachelor degree 275 (70.3%). Almost two third 79 % of the study participants worked as a nurse for 5 years or less. Also 24.3% (95) of the respondents were working in surgical followed by medical 21.2% (83) department in the hospital during the study period (See table 1 below).

Table 1: Socio demographic characteristics of nurses working in Jimma university medical center south west, Ethiopia, 2018 (n=391)

Variables		**N**	**%**
Age group (in a years)	≤ 24	83	21.2
	25-34	236	60.4
	35-44	55	14.1
	≥ 45	17	4.3
sex of respondents	Male	187	47.8
	Female	204	52.2
Educational level of respondents	College diploma	107	27.4
	Bachelor degree	278	71.6
	MSc and above	4	1.0
Religion of respondent	Orthodox	173	44.2
	Muslim	109	27.9
	Protestant	103	26.3
	Others	6	1.5
Marital status	Single	184	46.5

	Married	174	43.7
	Divorced	28	7.2
	Separated	4	2.3
	Widowed	1	0.3
work experience(in years)	<2	131	33.5
	2-5	182	46.5
	>5	78	19.9
Work setting of respondents (ward)	Medical	83	21.2
	Surgical	95	24.3
	Pediatrics	65	16.6
	Gyn/obs	73	18.7
	OPD	30	7.7
	**Others	45	11.5
Salary (income)	<3900	99	25.3
	3901-4550	181	46.3
	4551-5284	86	22.0
	≥ 5285	25	6.4

****others** (dialysis, endoscopy, radiology, Physiotherapy, maxillofacial, dental, ophthalmology)

Documentation Practice

Respondents were asked for their time preferences for documenting their care provision and nearly half of them document the care any time when convenient (44%), 154(39.4%) immediately or soon after the care provision and 65 (16.6%) at the end of shift hours. Among all nurses under the study, 248 (63.4%) of them check nursing notes written by their colleagues and majority of them 207 (83.4%) said the notes are providing adequate information. Concerning the system of documentation, majority 277 (70.8%) of them reported for not applying computerized nursing documentation in their hospital (See table 2 below)

Table 2: Practice of nursing documentation among nurses working in Jimma university medical center south west, Ethiopia, 2018 (n=391)

Variables		**N**	**%**
Nursing documentation for every patient	Always	206	52.7
	Sometimes	143	36.6
	Rarely	38	9.7
	Never	4	1.0
Time preference to document a care	Any time when convenient	172	44.0
	Immediately or soon after care given	154	39.4
	At the end of shift hours	65	16.6
Ways to keep confidentiality of record	Access for authorized ones only	300	76.7
	Protect computer pass words	106	27.1
	Obtain informed consent	60	15.3
	Confidentiality continues after death	57	14.6
	I don't know	19	4.9
Read colleague's notes	Yes	248	63.4
	No	143	36.6
Colleague 's notes provide adequate information (n=248)	Yes	207	83.4
	No	41	16.6
Documents health information given	Always	182	46.2
	Sometimes	174	44.5
	Rarely	22	5.7
	Never	13	3.3
Uses computerized documentation system	Yes	114	29.2
	No	277	70.8
Reports any medical error voluntarily	Yes	225	57.5
	No	166	42.5
Way of error recording(n=225)*	No words like" error" or "mistake"	86	38.2
	Facts only	134	59.6
	I don't know	9	4.0
Documents patient response to care	Yes	221	56.5
	No	170	43.5

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

The score of respondents' for practice questions was added up and dichotomized into two based on the mean practice score which was 8.35 (S.D ±1.89) (See figure 3 below)

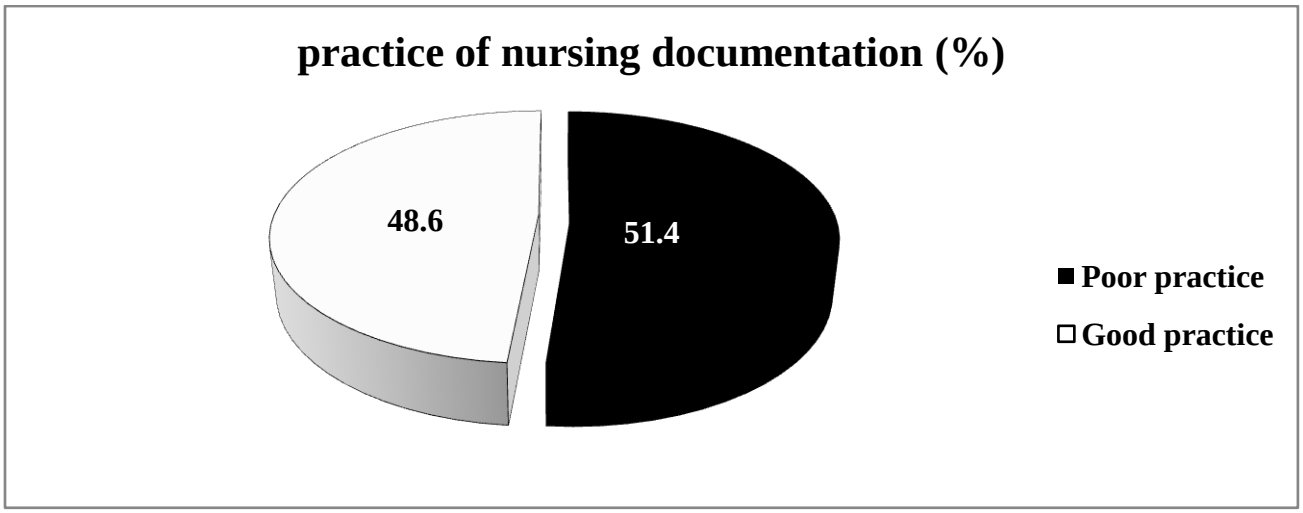


Figure 3: Level of nursing documentation practice on a study of documentation practice and associated factors among nurses working in Jimma university medical center south west Ethiopia, 2018 (n=391)

Additionally the completeness of patient records (charts) was assessed in terms of nursing care plan, medication administration sheet, vital sign sheet, admission record and nursing activity sheet. Accordingly, the result showed that nursing care plan was completed for 15(17.65%) out of 90 sampled charts, medication administration format was completed for 73 (85.9%), vital sign completed for 27(31.8), admission discharge was recorded for 46(54.1%) and at last nursing activity sheet was completed for 12(48%) (See figure 4).

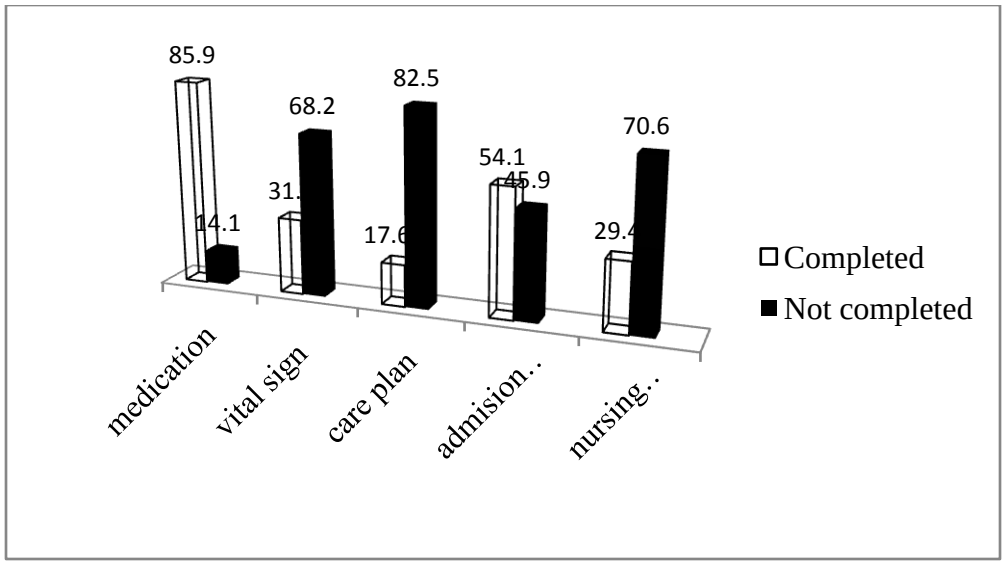


Figure 4: completeness of documents on the study of documentation practice and associated factors among nurses working in Jimma university medical center south west Ethiopia, 2018 (n=90)

****Care Plan**: The eleven Gorden's functional model including diagnose, goal, expected out come and interventions also patient teaching plan and input-output follow-ups.

Based on the cut-off point the result of document review shows that poor documentation which support or in-line with the above result (see table 3).

Table: 3 Result of document review on the study of documentation practice and associated factors among nurses working in Jimma university medical center south west Ethiopia, 2018

Dimension	Indicators	Weight given (out of 100)	Observed result	Judgment parameter
Completeness	Medication administration	20	17	Good if ≥ 50% ,poor if <50%
	Vital sign chart	20	6.36	
	Care plan	20	3.4	
	Admission discharge	20	10.82	
	Nursing activity	20	5.88	
Total		100	**43.46%**	

Knowledge of respondents towards nursing documentation

The mean score for knowledge questions which was 16.465 (S.D ± 5.79). Based on this cut-off point, 49.6 % (n = 194) of the study participants had a good knowledge of nursing care documentation.

Out of total respondents who have participated in the study, majority of them 364 (93.1%) knew that documentation is a professional responsibility and their main source of information was from the hospital management67.6 %, for 53.0 % nursing school and friends from staff for 22.9%.Regarding the responsibility of documentation, 259(66.2%) of the nurses said the care provider himself should document while 67 (17.1%) said the observant, 51 (13.0%) said the assistant and 14(3.6%) said don't know (See table 4 below).

Table 4: Knowledge towards documentation on a study of documentation practice and associated factors among nurses working in Jimma university medical center, south west Ethiopia, 2018 (n=391)

Variables		**n**	**%**
Documentation is a professional responsibility	Yes	364	93.1
	No	27	6.9
Source of information about the responsibility (n=364)	Hospital management	246	67.6
	Nursing school	193	53.0
	Friends	83	22.9
Principles of documentation	Free from error	198	50.6
	Complete	292	74.7
	Easily readable	162	41.4
	Chronological	106	27.1
	Do not know	20	5.1
Advantages of documentation	Improves quality of care	307	78.5
	Better communication within staff	248	63.4
	For education and research	159	40.7
	For legal protection and planning	179	45.8
	Do not know	8	2.0
Main nursing activities to be documented	Assessment data	298	76.2
	Progress of patients	242	61.9
	Admission and discharge of patients	233	59.6

	Care provided and evaluation of outcomes	174	44.5
	Don't know	4	1.0
Consequences of inadequate documentation	Possible imprisonment	164	41.9
	Lack salary increment	134	34.3
	Injury or death to the client	159	40.7
	Poor development of a profession	208	53.2
	Don't know	10	2.5
Effects of using non standard abbreviation	Leads to error	228	58.3
	Wastes time	173	44.2
	Causes confusion	224	57.3
	Don't know	22	5.6
Documentation that protects from legal suit	Record date and time of care	258	66.0
	Record performed actions only	215	55.0
	Record chronologically	126	32.2
	Make corrections clearly	69	17.6
	Record frequently	139	35.5
	Don't know	10	2.6
Components of medication administration	Names of medications	316	80.8
	Date and time of administrations	341	87.2
	Route and dosage of administration	311	79.5
	Name and signature of administrator	210	53.7
	Don't know	8	2.0
Who should document a care	Observant of the care	67	17.1
	Assistant of the care	51	13.0
	The care provider	259	66.2
	Don't know	13	3.3

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

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 35.4 (S.D ± 5.8). Among all respondents, most 268 (68.5%) of them agreed that nursing documentation helps for good nurse to patient relationship; 265 (67.8%) said it helps for patient safety; 267 (68.3%) said that quality documentation is important. On the other way, 53 (13.6%) respondents did not accept that a written report can replace oral shift report; 107(27.4%) did not agree patients should know what we are documenting in their chart and 58(14.8%) of them did not agree that nurses have sufficient knowledge of the documentation procedure.

Table 5: Attitude towards documentation on a study of documentation practice and associated factors among nurses working in Jimma university medical center, south west Ethiopia, 2018 (n=391)

Variables	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Documentation helps for good nurse to patient relationship	268	68.5	80	20.5	43	11
Quality documentation can add value to hospital	267	68.3	82	21	42	10.7
Documentation helps for patient safety	265	67.8	85	21.7	41	10.5
Complete and accurate documentation is important	271	69.3	67	17.1	53	13.6
A written report can replace oral report	271	69.3	67	17.1	53	13.6
Documented care is as important as actual care	233	59.6	96	24.6	62	15.9
Nurses' notes are meaningful and give legal protection	233	59.6	96	24.6	62	15.9
Patients should know what we are documenting in their chart	129	33	155	39.6	107	27.4
Nurses have sufficient knowledge of the documentation procedure	273	69.8	60	15.3	58	14.8
Nursing admission assessment should be completed within 1hr	268	68.5	80	20.5	43	11

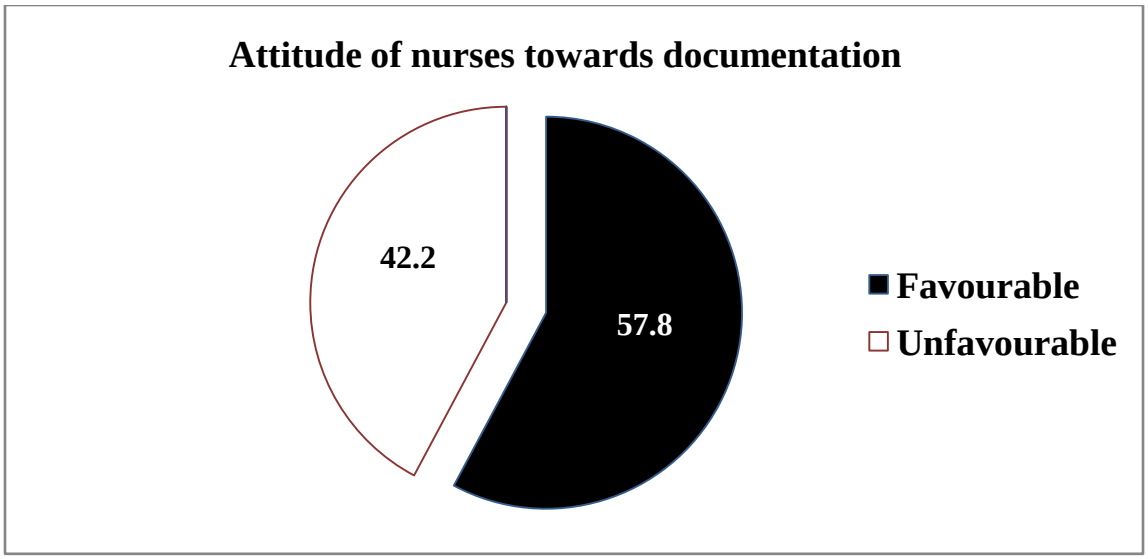


Figure 5: Attitude of nurses towards documentation on a study of documentation practice and associated factors among nurses working in Jimma university medical center, south west Ethiopia, 2018.

Organizational related factors

Among study respondents who reported not to document always47.3 %(n= 185), motivation from immediate supervisors was a barrier for most of them 78.9 % (n=146)followed by lack of time to document 64.3 %(n=119)and 28.6% (n=112) of the respondents are unfamiliar with operational standards of nursing care documentation. Additionally 67.5% (n=264) attend in-service training on nursing documentation.

Among all respondents under the study, 279 (71.4%) of them knew the availability of guideline while 112 (28.6%) of them did not know whether it is available or not. Among those who knew availability of the guideline, most 186 (66.7%) agreed that the assessment, planning, implementation and evaluation of patient care must be documented and almost all 73.4% (n=287) respondents agreed that head nurses are responsible to monitor the documented work (See table 6 below).

Table 6: Organizational factors affecting practice of documentation among nurses working in Jimma university medical center, Ethiopia, 2018 (n=391)

Variables		**N**	**%**
Reasons for not documenting regularly(n=185)*	Shortage of documenting sheets	113	61.1
	Inadequacy of staff	96	51.9
	Lack of time	119	64.3
	Did not know how to document	73	39.5
	No obligation from the hospital	26	14.1
	motivation from supervisors	146	78.9
Familiar with operational standard regarding documentation	Yes	279	71.4
	No	112	28.6
Components of operational standard regarding documentation(n=279)*	Begin with date and time	174	62.4
	Assessment, planning, implementation and evaluation	186	66.7
	Appropriate documentation of any care	37	13.3
	End with authorized signature	100	35.8
Attend in-service training on nursing documentation	Yes	264	67.5
	No	127	32.5
Responsible person to monitor the documentation	Nursing director	54	13.8
	Nursing supervisors	35	9.0
	Head nurses	287	73.4
	None	15	3.8

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

Factors Associated With Documentation Practice

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.

Bivariate logistic regression analysis result

On bivariate analysis, work setting ,level of education , motivation from supervisors, knowledge towards documentation, adequacy of sheets ,adequacy of time , lack of skill , familiarity with operational standard of nursing documentation , in-service training and adequacy of staff were significantly associated with documentation practice to be candidates for multivariate logistic regression analysis see table 7).

Table 7: Bivariate logistic regression analysis on study of documentation practice and associated factors among nurses working in Jimma university medical center south west, Ethiopia, 2018 (n=391)

Variables		**Good**	**Poor**	**COR(95%CI)**	**P-value**
		N	**N**		
Age of respondents	< 24	40	43	1	
	25-34	115	121	1.022(0.619,1.685)	0.933
	35-44	27	28	1.037(0.524,2.050)	0.918
	≥ 45	8	9	0.956(0.336,2.717)	0.932
Sex of respondents	Female	100	104	1	
	Male	90	97	0.965(0.69,1.435)	0.860
Level of education	<BSc	41	66	1	
	≥ BSc	149	135	1.777,(1.128,2.798)	0.013*
Work setting	OPD	10	20	1	
	Medical	47	36	2.611,(1.089,6.260)	0.031*
	Pediatrics	22	43	1.023,(0.409,2.559)	0.961
	Gyn/obs	39	34	2.294,(0.944,5.573)	0.067
	Surgical	53	42	2.524,(1.068,5.966)	0.035*
	Others	19	26	1.462,(0.558,3.826)	0.440

Marital status	Single	92	95	1	
	Married	84	92	0.943(0.625,1.423)	0.779
	Divorced	14	14	1.033(0.67,2.285)	0.937
Work experience	<2	63	68	1	
	2-5	86	96	0.967(0.617,1.516)	0.883
	>5	41	37	1.196(0.682,2.096)	0.532
Salary (income)	≤ 3900	42	57	1	
	3901-4550	91	90	1.372(0.838,2.248)	0.209
	4551-5284	47	39	1.636(0.914,2.928)	0.098
	>5285	10	15	0.905(0.370,2.212)	0.826
Knowledge	Poor	80	117	1	
	Good	110	84	1.915 (1.281,2.862)	0.002*
Attitude	Unfavorable	76	89	1	
	Favorable	114	112	1.192 (0.797,1.782)	0.392
Lack of formats	No	180	139	1	
	Yes	10	62	0.125 (0.062,0.252)	0.000*
Inadequate Staff	No	170	132	1	
	Yes	20	69	0.225 (0.130,0.389)	0.000*
Time shortage	No	166	159	1	
	Yes	24	42	0.547(0.317,0.945)	0.000*
Lack of skill	No	169	149	1	
	Yes	21	52	0.356(0.205,0.619)	0.000*
Motivation from supervisors	No	34	112	1	
	Yes	156	89	5.774(3.631,9.181)	0.001*
Familiarity with standard	No	39	73	1	
	Yes	151	128	2.208 (1.402,3.48)	0.028*
In-service training	No	71	56	1	
	Yes	119	145	0.647(0.423,0.991)	0.045*

P-value <0.25 and * 1 indicates the reference variable

Multi variate logistic regression analysis result

Based on findings from the multi variate binary logistic regression, nurses who are familiar with operational standard of nursing documentation were two times more likely to document their care than those not familiar with operational standard [AOR=2.165(95% CI (1.288, 3.641)] . On the other hand, those respondents who had no adequate documenting sheet were 64% less likely to perform good documentation than those who adequate documenting sheet [AOR=0.357(95% CI (0.159, 0.802)].Similarly nurses who attend in-service training on nursing care documentation were 53% less likely to perform good documentation than those who do not attend in-service training [AOR =0.462, 95% CI (0.277, 0.771)]. On top of that, respondents who have been motivated from their supervisors were almost four times more likely to practice good documentation than non-motivated ones [AOR=4.237(95% CI: (2.437, 7.366)]. (See table 8)

Table 8: Multi variate logistic regression analysis result on a study of documentation practice and associated factors among nurses working in Jimma university medical center south west, Ethiopia

Variables		**Multi variate logistic regression**			
		B	**S.E**	**AOR(95%CI)**	**P-value**
Shortage of formats	No			1	
	Yes	-1.031	0.413	0.357,(0.159,0.802)	0.013**
Motivation from immediate supervisors	No			1	
	Yes	1.344	0.282	4.237,(2.437,7.366)	0.000***
Familiarity with operational standard	No			1	
	Yes	0.773	0.265	2.165,(1.288,3.641)	0.004**
In-service training	No			1	
	Yes	-0.772	0.261	0.462,(0.277,0.771)	0.003*
Time shortage	No			1	
	Yes	-0.606	0.313	0.546 (0.296,1.000)	0.053
Inadequate Staff	No			1	
	Yes	-0.302	0.364	0.739, (0.362,1.509)	0.407
Lack of skill	No		0.473	1	
	Yes	-0.135		0.874, (0.345,2.210	0.775
Knowledge	Poor			1	
	Good	0.378	0.237	1.460, (0.918,2.321)	0.110
Level of education	<BSc			1	
	≥BSc	0.313	0.276	1.368,(0.796,2.350)	0.257

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

CHAPTER SIX

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 level of nursing care documentation was practiced by 48.6 % of nurses. This finding is almost similar to a study done in England 47% (41),Canada 53.5%(42) and Ghana 54.6%(22).

On the other hand, it is higher than a finding from European Hospital which was 28%(35)and Iran 15 %((13).This discrepancy might be due to difference in sample size (larger sample in European Hospital). A recent study conducted in the University of Gondar hospital also identified documentation practice of 37.4 % (28) and in Indonesia 37 %(26).This might be related to the difference in attitude level of the participants towards nursing documentation which is a known factor to affect documentation practice as indicated in those studies(28).

In contrast with this, satisfactory level of good documentation was reported to be practiced in Jamaica 98%(25), Studies from Nigeria 70%(21) and 77.4%(27)and in different hospitals of Cape town 68.3% (33).These discrepancies might be related to the difference in the countries socio demographic factors for nurses and organizational facilities that facilitate nursing documentation(25) and adequate knowledge level of study participants regarding documentation as indicated in those studies.

On this study, respondents who had good knowledge practiced good documentation by 56.7% while those with poor knowledge practiced 40.6%.Similarly; those who were having favorable attitude had good practice of 50.4% than unfavorable ones (46.1%).

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(26) and also this study found that nurses who attend in-service training was 53% less likely document care than those do not attend training, which is in contrast with the study of Gondar which is more than two times more likely document their care (28).This discrepancy might be related to lack of continues monitoring and evaluation.

On this study respondents who did not attend training on nursing documentation practiced good documentation by 55.9% while those attend training practiced 45.1%. This finding shows that only delivering training does not guarantee nurses' documentation practice.

LIMITATION OF THE STUD

Limitation

- ✓ The responses might have been liable social desirability bias.
- ✓ Self- report may over/underestimation the level of documentation practice.

.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion

Nursing documentation practice was poor among nurses under the study. Adequacy of documenting sheet (p-=0.013), presence of motivation (p=0.000), in-service training (p=0.003) and familiarity with operational standard of nursing documentation (p=0.004) were significantly associated with practice of nursing care documentation.

7.2. 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. For staff nurses: To improve their documentation practice by updating their knowledge and set in to practice what they attend on training of documentation

2. For Administrative/ head nurses: To provide sustained continuing monitoring and evaluation after delivery of training. Also create awareness and familiarize them with the guideline regarding documentation to enhance their knowledge and develop their documenting skill. Nursing leaders (nursing directors) should support and motivate the employees and avail the necessary documenting materials besides adequate staffing. Additionally nursing director office needs to conduct proper analysis & outline the best course of action & should focus their core resources on proper monitoring and evaluation after delivery of training.

3. For researchers: Considering longitudinal study to examine actual practice and to carry out large scale studies in order to address the problem in wider context.

.

ANNEXES

ANNEX 1: REFERENCES

1. June DR. Standards for. 2015;2015(June):1–17.
2. Obioma C. Improving the Quality of Nursing Documentation in Home Health Care Setting. 2017;
3. Edmonton A. Nursing Documentation 101. Coll Licens Pract Nurses Alberta. 2014;1–58.
4. Alkouri OA, Just T, Kawafhah M. Importance And Implementation Of Nursing Documentation: Review Study. Eur Sci J [Internet]. 2016;12(3):101–6. Available from: http://eujournal.org/index.php/esj/article/view/6955/6671
5. CRNNS. Documentation Guidelines. Coll Regist nurses Nov Scotia. 2012;31.
6. Committee PD, Council N, Kong H. 1 Developed by the Professional Development Committee of the Nursing Council of Hong Kong. 2006;1–4.
7. CRNBCN. Nursing Documentation. Coll Regist Nurses Br Columbia [Internet]. 2013;5. Available from: https://www.crnbc.ca/Standards/PracticeStandards/Pages/documentation.aspx
8. Case B, Leonardi D. Professional Documentation : Safe , Effective , and Legal. 2015;
9. Federal Ministry of Health Ethiopia. Health Managment Information System (HMIS) / Monitoring and Evaluation (M& E) Strategic PLan for Ethiopian Health Sector. Challenges. 2008;(January).
10. John Snow Inc. Health Management Information System (HMIS) - Facilitator ' s Guide for Training of Hospital Staff. Meas Eval. 2010;(June):1–83.
11. Statements S, Reading S. PR ACTICE STAndARd Therapeutic Nurse-Client Relationship , Revised 2006 Table of Contents. Practice. 2006;
12. Björvell C. Nursing documentation in clinical practice: Instrument development and evaluation of a comprehensive intervention programme [Internet]. 2002. 1-65 p. Available from: http://publications.ki.se/jspui/handle/10616/38039
13. Bijani M, Sadeghzadeh M, Jeihooni KA, Hannan KS. Factors influencing poor nursing documentation from the perspective of nursing staff. Int J Med Res Heal Sci [Internet]. 2016;5(11):717–8. Available from: www.ijmrhs.com
14. Cheevakasemsook A, Chapman Y, Francis K, Davies C. The study of nursing documentation complexities. Int J Nurs Pract. 2006;12(6):366–74.

15. Rosenbaum MJ. Nursing Documentation. Dimens Crit Care Nurs. 1992;0–16.

16. Chelagat D, Sum T, Chebor A, Kipto R, Bundtich P. Documentation : Historical perspectives , purposes , benefits and challenges as faced by nurses. Int J Humanit Soc Sci [Internet]. 2013;3(16):236–40. Available from: http://www.ijhssnet.com/journals/Vol_3_No_16_Special_Issue_August_2013/28.pdf

17. Molla M. Assessment of Factors Affecting Implementation of Nursing Process Among Nurses in Selected Governmental Hospitals, Addis Ababa, Ethiopia; Cross Sectional Study. J Nurs Care [Internet]. 2014;03(03). Available from: http://www.omicsgroup.org/journals/assessment-of-factors-affecting-implementation-of-nursing-process-among-nurses-in-selected-governmental-hospitals-addis-ababa-ethiopia-cross-sectional-study-2167-1168-3-170.php?aid=26429

18. Duclos-miller PA. Improving Nursing Documentation and Reducing Risk Improving Nursing Documentation and Reducing Risk.

19. College and ASsociation of Registered Nurses of Alberta. Documentation Standards for Regulated Members. 2013;(January):1–11.

20. Nakate GM, Dahl D, Petrucka P, Drake KB, Dunlap R. The Nursing Documentation Dilemma in Uganda: Neglected but Necessary. A Case Study at Mulago National Referral Hospital. Open J Nurs. 2015;5(December):1063–71.

21. Hussainat Taiye B. Knowledge and Practice of Documentation among Nurses in. IOSR J Nurs Heal Sci Ver I [Internet]. 2015;4(6):2320–1940. Available from: www.iosrjournals.org

22. Asamani JA, Amenorpe FD, Babanawo F, Maria A, Ofei A. of inpatient care in eastern Ghana. 2015;(February).

23. Published F. Professional Nursing Documentation. 2015;

24. Practice RC. Recording Clinical. :1–16.

25. Evaluation of registered nurses' knowledge and practice of documentation at a Jamaican hospital.

26. Mote P, Rantetampang AL, Pongtiku A. The Factor Relate to Job Performance of Nurse with Health Nursing Documentation at Paniai General Hospital Papuan Province. 4531:231–47.

27. Nursing documentation_ Experience of the use of the nursing process model in selected hospitals in Ibadan, Oyo State, Nigeria - Ofi - 2012 - International Journal of Nursing Practice - Wiley Online Library.

28. Nursing care documentation practice_ The unfinished task of nursing care in the University of Gondar Hospital_ Informatics for Health and Social Care_ Vol 42, No 3.

29. Engeda EH. Incident Reporting Behaviours and Associated Factors among Nurses Working in Gondar University Comprehensive Specialized Hospital , Northwest Ethiopia. 2016;2016.

30. Jansson I. Evaluation of documented nursing care plans by the use of nursing-sensitive outcome indicators. 2010;16:611–8.

31. Hameed RY, Nursing CH, Allo RR, Lecturer A. Assessment Of Nurses ' Knowledge About Nursing Documentation Rifaie Yaseen Hameed / Assistant Professor , PhD in Community Health Nursing / Technical Institute of Mosul / Medical Department / Nineveh / ** Rami Ram. 2014;1–9.

32. Nurse's Knowledge and Practice of the Principles of Nursing Documentation at Hospitals of Kerman University of Medical Sciences - Iran Journal of Nursing -

33. African S, African S, Council N, Metropole CT, Africa S. Record keeping : self-reported attitudes , knowledge and practice behaviours of nurses in selected Cape Town hospitals. 2011;15(4).

34. Nakate G, Dahl D, Drake KB. Knowledge and Attitudes of Select Ugandan Nurses towards Documentation of Patient Care Knowledge and Attitudes of Select Ugandan Nurses towards Documentation of Patient Care. 2015;2(January):56–65.

35. Ball JE, Murrells T, Rafferty AM, Morrow E, Griffiths P. ' Care left undone ' during nursing shifts : associations with workload and perceived quality of care. 2013;(February 2017).

36. Dike FM, Onasoga OA, Njoku E, Dike FM. Documentation in labour among midwives in Madonna university teaching hospital elele , rivers state , Nigeria. 2015;4(5):1404–9.

37. Hailu FB, Worku Kassahun C, Woldie Kerie M. Perceived nurse - Physician communication in patient care and associated factors in public hospitals of Jimma zone, South West Ethiopia: Cross sectional study. PLoS One [Internet]. 2016;11(9):1–21. Available from: http://dx.doi.org/10.1371/journal.pone.0162264

38. Handbook A. FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA MINISTRY OF HEALTH ETHIOPIAN HOSPITAL. 2016;(September).

39. Russell KA. Nurse Practice Acts Guide and Govern: Update 2017. J Nurs Regul. 2017;8(3):18–25.

40. Managers H. for Nurses and Healthcare Managers in Ethiopia. 2011;

41. Law L, Akroyd K, Burke L. Improving nurse documentation and record keeping in stoma care. Br J Nurs [Internet]. 2010;19(21):1328–32. Available from: http://www.magonlinelibrary.com/doi/abs/10.12968/bjon.2010.19.21.80002

42. Voyer P, McCusker J, Cole MG, Monette J, Champoux N, Ciampi A, et al. Nursing Documentation in Long-Term Care Settings. Clin Nurs Res [Internet]. 2014;23(4):442–61. Available from: http://journals.sagepub.com/doi/10.1177/1054773813475809

43. Schans V Der, Cees P, Paans W, Nieweg RMB, Schans CP Van Der, Sermeus W. What factors influence the prevalence and accuracy of nursing diagnoses documentation in clinical practice ? A systematic literature review What factors influence the prevalence and accuracy of nursing diagnoses documentation in clinical practice ? A syst. 2011;

JIMMA UNIVERSITY

INSTITUTE OF HEALTH SCIENCE

SCHOOL OF NURSING AND MIDWIFERY

QUESTIONAERE

ANNEX1: Information sheet

Good morning/good afternoon! My name is _____. I am here today to collect data for a study to be conducted by Selam Ayele from Jimma University, school of Nursing and Midwifery, post graduate program. The objective of this study is to assess factors influencing the practice of nursing care documentation among nurses in Jimma university medical center. 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 917019143 Email: fsolmate2@gmail.com

Consent form

In signing this document, I am giving my consent to participate in the study entitled "Assessment of factors influencing nursing care documentation practice among nurses in Jimma university medical center. I have been informed that the purpose of this study is to assess factors influencing nursing care documentation practice 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 Selam Ayele 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: Selam Ayele, Mobile number- +251 917019143,e-mail-fsolmate2@gmail.com.

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

Signature _____

Date _____

ANNEX 2: QUESTIONS

Part I: Socio demographic characteristics of the nurses working in JUMC south west, Ethiopia, 2018.

S.No.	Question	Response
1	Your age(in years)	_____
2	Sex	1.male 2.female
3	Religion	1.orthodox 2. Muslim 3. protestant 4. others specify_____
4	Marital status	1.single 2. married 3. divorced 4. separated 5. widowed
5	What is the highest level of education you have attained?	1. College diploma 2. Bachelor degree 3. MSc and above
6	Where is your working setting (ward) in the hospital?	_____
7	Years of experience (in years)	_____
8	Income (salary)	_____

Part II- Practice of documentation among nurses working in JUMC south west, Ethiopia

Instruction-Please read the following questions carefully and **encircle** on the correct answer option. Please note that **more than one answer is possible (for question 2, 4, 6, 12).**

Questions	Response
1. How often do you document the care you have done for every patient?	1.Always 2.Sometimes 3.Rarely 4.Never
2. If not "Always" to Q 01, 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. motivation from immediate supervisors 7. If others, please specify_____
3. Does your hospital have operational standard for nursing documentation?	1.yes 2.No 3. I don't know
4. If "Yes" to 03, 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.others specify_____
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 provided 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
8. If "yes" to Q 07, does your colleague's recording provide you adequate information?	1.Yes 2.No
9. How often do you document health information or advice you have provided to a patient?	1.Always 2.Sometimes 3.Rarely 4.Never
10. Doyou 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 you have provided?	1.Yes 2.No
14. Did you attend in-service training on the nursing documentation or health management information system?	1. Yes 2. No
15. Who monitors the documented work?	Nursing director office Nursing supervisors Head nurses None others specify _____

Part III- Knowledge of nursing documentation among nurses working in JUMC south west, Ethiopia, 2018

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 **01** and **10.**

Question	Response
1. Documentation of patients care is part of professional responsibilities	1.Yes 2.No
2. If" Yes" to 01, 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

Part IV- Attitude of nurses towards nursing documentation working in JUMC

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

ANNEX 3: Nursing care standard checklist

S.no.	Activities	YES	NO
1	Medication given		
2	Vital sign taken		
3	Patient demography (on all formats)		
4	Health perception and management		
5	Activity and exercise pattern		
6	Sleep and rest pattern		
7	Nutrition and metabolism pattern		
8	Elimination pattern		
9	Role and relationship pattern		
10	Copping and stress tolerance pattern		
11	Cognitive pattern		
12	Self perception and self concept pattern		
13	Sexual and reproductive pattern		
14	Belief and value		
15	Nursing diagnoses clearly stated		
16	Goal and outcome stated		
17	Nursing intervention		
18	Patient progress stated		
19	Input and output follow up		
20	Teaching plan stated		
21	Admission discharge recorded		
22	Nursing activity sheet		

THANK YOU FOR YOUR PARTICIPATION