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#### **Abstract**

**Objective:** The aim of this research was to explore the documentation practices among nurses employed in public hospitals, along with identifying the factors influencing these practices.

**Results:** This study included 317 participants, achieving a response rate of 99.7%. Findings indicated that the documentation of nursing care was found to be inadequate in 47.8% of cases. Several factors were significantly associated with this inadequacy, including the insufficiency of documenting sheets (AOR=3.271, 95% CI: 1.125-23.704), time constraints (AOR=2.205, 95% CI: 1.101-3.413), and compliance with operational standards of nursing documentation (AOR=2.015, 95% CI: 1.205-3.70). In conclusion, over half of the nurses surveyed did not adequately document their nursing care. It is recommended that healthcare institutions provide training to improve nurses' documentation skills, ensure access to sufficient documenting supplies, and consider hiring additional nursing staff.

Keywords: Nursing Practice, Documentation, Nurses, Influencing Factors

#### Introduction

Nursing documentation serves as the recorded account of planned and administered nursing care to individual patients, undertaken by qualified nurses or caregivers under the supervision of a qualified nurse. It stands as the primary clinical information source, meeting both legal and professional obligations. Whether conducted manually or electronically, nursing documentation is essential for ensuring safe, ethical, and efficient nursing practice, mandated to fulfill the legal requirements inherent in nursing care documentation. (Considine et al., 2016)

Evidence from a World Health Organization (WHO) survey suggests that inadequate communication among healthcare professionals contributes to medical errors. Additionally, research indicates a correlation between nursing documentation and patient mortality rates. Despite being a professional obligation, numerous studies worldwide have identified deficiencies in nursing documentation practices. Commonly cited issues include incomplete records, inaccuracies, and poor quality. Challenges related to documentation include staff shortages,

insufficient knowledge regarding documentation importance, heavy patient loads, lack of inservice training, and inadequate support from nursing leadership. (Taiye, 2015)

To address these challenges, researchers advocate for multidisciplinary approaches, such as developing policies and guidelines for nursing care documentation, and providing continuous training opportunities to enhance documentation effectiveness. Nursing leaders are also urged to support and motivate staff and increase staffing levels to improve documentation practices. (Tola et al., 2017)

Studies conducted in South Africa and Uganda revealed deficiencies in attitudes, knowledge, and practice behaviors among nurses. Similar findings emerged from studies in Kenya and Ghana, highlighting the absence of standardized methods and insufficient information regarding nursing documentation, issues such as inadequate data collection and poor data quality have been identified. Therefore, the objective of this study is to evaluate nursing documentation practices and associated factors in public hospitals located. (Motea et al., 2016)

#### Methods

A quantitative descriptive cross-sectional study design was employed for this research. The source population for this study comprised all nurses working in government-owned hospitals. The sample size was determined using a formula considering the proportion as 37.4%, derived from a previous study conducted in a public hospital, a 95% confidence interval (CI), and a 5% margin of error. The final sample size was 317. Selection of hospitals for the study was carried out using simple random sampling after identifying all hospitals in the region. Study participants were selected based on the lottery method, and the number of samples in each hospital was determined according to a proportional allocation formula.

Nurses working in inpatient wards and outpatient departments, those with a work status as a professional nurse for at least 6 months, and those who volunteered to participate were included in the study.

A structured self-administered questionnaire was developed to collect data regarding nursing documentation practice and its associated factors. Questions related to practice and knowledge of nursing documentation were formulated based on the national guideline prepared by the Federal Ministry of Health (FMOH), various books on nursing documentation, and relevant literature. Prior to actual data collection, the questionnaire was pre-tested with 5% (16 samples) of the total sample size of nurses working at Adwa Hospital using a self-administered questionnaire. The results were used to assess reliability, consistency, and completeness of the questionnaire, and necessary improvements were made in the wordings. The reliability of the questionnaire was assessed using Cronbach's alpha (0.79).

# **Documentation Practice:**

The practice of study participants was measured using 10 multiple-choice items. A score of 3, 2, 1, and 0 was assigned for "always," "sometimes," "rarely," and "never" options, respectively. For questions with multiple correct and incorrect responses (n=8), the scoring system utilized the proportion of correct responses.

# **Knowledge of Documentation:**

The knowledge of study participants was assessed using 10 items with multiple options, and scoring was based on the number of correct responses given in each question. A score of 1 was assigned for "yes" responses, and 0 for "no" and "I don't know" responses.

### **Attitude towards Practice:**

The attitude of study participants was measured using Likert scale questions with 10 items.

The collected data were manually checked for completion and cleanliness before being entered into a computer using SPSS version 22 software for both data entry and analysis. Descriptive statistics such as mean, frequency, and percentage were utilized. Binary logistic regression was employed for inferential statistics, with bivariate and multivariable logistic regression applied to measure the strength of association.

### **Good Practice:**

Respondents who scored above or equal to the mean score of practice questions were considered to have good practice.

# **Good Knowledge:**

Respondents who scored above or equal to the mean score of knowledge questions were considered to have good knowledge.

# **Favorable Attitude:**

Respondents who scored above or equal to the mean score of attitude questions were considered to have a favorable attitude.

#### **Results**

#### **Socio-demographic Characteristics of Respondents:**

A total of 317 respondents participated in this study, yielding a response rate of 99.7%. Among these, 207 (65.5%) were females and 109 (34.5%) were males. The majority (65.5%) fell within the age group of 25–34 years. Most respondents held a bachelor's degree (88.3%), with 102 (48.1%) identified as senior nurse professionals, 148 (46.8%) as junior nurse professionals, and 11 (5.1%) as junior clinical nurses. Regarding work experience, one-third of participants had been working as nurses for 2–5 years (33.9%), while 107 (31.6%) had over 5 years of experience and 100 (31.6%) had less than 2 years of experience.

# **Practice of Nurses towards Nursing Documentation:**

Participants' practice towards nursing documentation was assessed using 10 multiple-choice questions, with a mean score of 7.26 (SD±2.03). Responses were categorized as good if the score was equal to or above the mean and poor if below. 47.8% of respondents exhibited good practice, while 52.2% had poor practice. A majority of nurses (72.8%) checked nursing notes written by colleagues, with 56.5% finding them incomplete. Most participants (82.2%) reported the absence of computerized nursing documentation systems in their hospitals.

### **Knowledge of Respondents towards Nursing Documentation:**

The knowledge of respondents regarding nursing documentation was assessed using 10 multiple-choice questions, yielding a mean score of 4.9 (SD±1.9). 43% of respondents scored above or equal to the mean, indicating good knowledge, while 57% had poor knowledge.

### **Attitude of Respondents towards Nursing Documentation:**

Participants' attitudes towards nursing documentation were assessed using a Likert scale with a potential score of 50. The mean attitude score was 42 (SD±4.9). 55.7% of respondents exhibited a favorable attitude, while 44.3% had an unfavorable attitude.

### **Reasons for Poor Nursing Care Documentation Practice:**

Among respondents who did not document every care provided to patients (40.5%), the most cited reason was a lack of time (41.9%), followed by shortages of documenting sheets (24.5%), inadequate staff (18.1%), lack of motivation from supervisors (11%), and lack of obligation from employing institutions (4.5%).

### Factors Associated with Documentation Practice of Nursing Care Plan:

Binary logistic regression analysis revealed that nurses unfamiliar with operational standards of nursing documentation were twice as likely to have poor documentation practice compared to those who were familiar (AOR=2.015, 95% CI: 1.205-3.370). Additionally, those lacking time and documenting sheets were two times (AOR=2.205, 95% CI: 1.101-3.413) and three times (AOR=3.271, 95% CI: 1.125-23.704) more likely to exhibit poor documentation practice, respectively, compared to those with adequate time and documenting sheets.

Table 1 Socio demographic characteristics of respondents in selected public hospitals

Variable	Frequency (n=316)	Percent
Age group of respondents (in years)		
<24	50	15.8
25–34	208	65.8
35–44	33	10.4
45–54	18	5.7
55–60	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	19	6
Professional level of respondents		
Junior clinical nurse	16	5.1
Junior nurse professional	148	46.8
Senior nurse professional	152	48.1
Respondents' work experience (in years)		
<2	100	31.6
2–5	109	34.5
>5	107	33.9
Work setting of respondents		
In-patient admission ward	161	50.9
Out-patient department	155	49.1

Table 2 Practice of nursing documentation among nurses working in selected public hospitals

Variable	Frequency (n=316)	Percent
Nursing documentation for every patient		
Always	188	59.5
Sometimes	118	37.3
Rarely	8	2.5
Never	2	0.6
Time preference to document a care		
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		
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		
Yes	230	72.8
No	86	27.2
Colleague's notes fulfill standard		
Yes	100	43.5
No	130	56.5
Documents education or advice		
Always	116	36.7
Sometimes	109	34.5
Rarely	34	10.8
Never	57	18
Uses computerized documentation system		
Yes	54	17.1
No	262	82.9
Reports any medical error voluntarily		
Yes	225	71.2
No	91	28.8
Way of error recording		
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		
Yes	187	59.2
No	129	40.8

Table 3 Bivariate and multivariate logistic regression analysis for association between practice of nursing documentation with knowledge, attitude and organizational factors among nurses working in selected public hospitals

Variables	<b>Practice level</b>	Odds Ratio (95% CI)
	Poor	Good
Knowledge		
Poor	96 (53.3%)	84 (46.7%)
Good	69 (50.7%)	67 (49.3%)
Attitude		
Unfavorable	76 (54.3%)	64 (45.7%)
Favorable	89 (50.6%)	87 (49.4%)
Lack of sheets		

Yes	30 (78.9%)	8 (21.1%)
No	135 (48.6%)	143 (51.4%)
Staff inadequacy		
Yes	18 (64.3%)	10 (35.7%)
No	147 (51%)	141 (49%)
Time shortage		
Yes	53 (81.5%)	12 (18.5%)
No	112 (44.6%)	139 (55.4%)
Lack of motivation		
Yes	14 (82.4%)	3 (17.6%)
No	151 (50.5%)	148 (49.5%)
Familiarity with hospital policy		
Unfamiliar	87 (43.7%)	25 (49%)
Familiar	26 (51%)	14 (21.2%)
Work setting		
Out-patient	91 (58.7%)	64 (41.3%)
In-patient	74 (46%)	87 (54%)

#### Discussion

This cross-sectional study aimed to explore nursing documentation practices and associated factors among nurses in public hospital.

The findings of this study revealed that familiarity with operational standards of nursing documentation, lack of time, and inadequacy of documenting sheets significantly influenced nursing care documentation practice. The prevalence of inadequate nursing care documentation practice was observed to be 47.8% among nurses, which aligns with findings from Nigeria where both documentation practice and knowledge were insufficient. However, this prevalence was higher than reported in Indonesia (33.3%) and the University of Gondar Hospital (37.4%). This discrepancy could be attributed to differences in the study period, as advancements in technology, such as the introduction of smart care systems in most hospitals, may have influenced documentation practices. Additionally, variations in nurses' educational development across countries could contribute to this difference. (Urquhart et al., 2009)

A significant proportion (52.2%) of study participants exhibited poor nursing documentation practice, similar to findings from Felege Hiwot Referral Hospital (87.5%), where medication administration errors were attributed to nursing documentation errors. However, this prevalence was lower than reported in studies from South Africa (68.3%) and Nigeria (70%). This discrepancy may be linked to insufficient knowledge, favorability of the working environment, and organizational structure, as indicated in those studies. (Daskein et al., 2009)

Various barriers hindering nursing documentation practice were identified in this study. Nurses familiar with the operational standards of nursing documentation were twice as likely to document their care compared to unfamiliar ones. Lack of time and scarcity of sheets were identified as leading factors negatively influencing nursing documentation practice. Respondents who lacked time were twice as likely to document, similar to findings from Nigeria and England. (Collins et al., 2013)

Although not statistically significant, knowledge has shown an association with documentation practice in other studies. In this study, the knowledge level of participants was 43%, contrasting

with findings from the University of Gondar Hospital (58.3%), South Africa (74.9%), Iraq (59%), and Indonesia (82.7%). These inconsistencies might be related to sociodemographic variability among study participants or differences in familiarity with the documentation guideline. (Lindo et al., 2016)

### **Conclusions**

Nursing care documentation practice was found to be poor among nurses in the studied public hospitals. Inadequacy of documenting sheets, lack of time, and unfamiliarity with operational standards of nursing documentation were identified as key factors associated with nursing care documentation practice.

Based on these findings, the following recommendations should be forwarded to healthcare facilities:

- Implement a comprehensive training program aimed at enhancing the knowledge of nurses regarding nursing documentation practices. This training should include familiarizing nurses with institutional policies and guidelines related to documentation.
- Provide adequate documentation materials and resources to ensure that nurses have the necessary tools to carry out effective documentation practices.

By implementing these recommendations, healthcare facilities can work towards improving nursing documentation practices, thereby enhancing the quality and safety of patient care delivery.

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