

Institutional Factors Affecting Quality of Documentation of Nursing Care in Selected County Referral Hospitals in Kenya

Anne Mukuna^{1*}, Wanja Mwaura-Tenambergen², Kezia Njoroge³

¹*Kenya Methodist University, P.O. Box, 267-60200, Meru, Kenya*

²*Riara University, P.O Box 49940 - 00100, Nairobi, Kenya.*

³*Liverpool John Moores University, Tithebarn building, 79 Tithebarn street, Liverpool, L2 2ER.*

**Correspondence Email: njerimukuna@yahoo.com*

Abstract

Nurses are responsible for continuous patient care. The proof of care activities is through documentation. Several studies have shown serious shortcomings in nursing care documentation. This study sought to determine the institutional factors that affect the quality of nursing care documentation. It was a descriptive survey, carried out in three County Referral Hospitals; Isiolo, Nyeri and Nyandarua in Kenya. The target population was nurse managers, and nurses in the selected hospitals, and patient case files in the medical surgical units of the sampled hospitals. Multistage technique was used to sample 88 nurses, 6 nurse managers, and 158 patient case files. Data was collected using a questionnaire and key informant guide. Themes and content analysis were used for qualitative data, while quantitative data were analyzed using regression analysis with SPSS (version 26.0). Findings were presented using frequency tables and charts. The results revealed only one-third (35.4%) of nursing care documentation practices were done well. Factors identified to influence nursing care documentation include existence of standard operating procedures on nursing care documentation, a high patient load per shift, and institutional culture on nursing documentation. Regression analysis demonstrated a positive relationship between the institutional factors, presence of SoPs, and institutional culture, with bivariate logistic regression scores of 1.335, 1.133, and 1.026 respectively. This association was not statistically significant, pointing to existence of confounding factors. This implies that improvement efforts must be made to identify and address other key process determinants. The study concludes that improvement of nursing care documentation practice requires identification and address of the multiple factors that affect the nursing practice. Health facility management is recommended to ensure that nurses have access to nursing documentation practices SOPs; to organize CPD sessions on nursing documentation; to build a positive culture on nursing documentation practices; and to adhere to the recommended nurse-patient ratios.

Keywords: *Institutional Factors, Quality Nursing care documentation, County Referral Hospitals, Kenya*

IJPP 13(2); 1-14

1.0 Introduction

Institutional factors refer to formal structures and social norms in an entity, which shape the behavior, character, and conduct across the entity (Fiveable, 2024). In the context of nursing care documentation, institutional factors include issues that are closely associated and affect the nursing process in one way or the other. These include availability of resources, and a culture that support the nursing process in an institution. This study focused on eleven such aspects.

Nurses undertake numerous activities in a hospital, ranging from patient admission, planning for their care, implementation of care activities, all the way to the discharge of the patient. They provide continuous 24-hour patient care, which is divided into several shifts (Asmirajanti et al., 2019). Providing proof that these patient care activities were accomplished, and the patients' response to the interventions is realized through accurate documentation.

Nursing care documentation has been defined as patients' information that is either paper based (handwritten) or electronically generated. The nurses write in different documents, and these should speak to each other, and should describe the exact clinical condition of the patient and the nursing interventions. The information serves as communication among nurses, and between nurses and the rest of the health care multidisciplinary team about the observations, decisions, interventions made and patients' responses to the undertaken interventions (Akhu-Zaheya et al., 2017). Mathioudakis et al. (2016) indicate that more appropriate healthcare decisions are facilitated by complete and accurate clinical notes that are up-to-date and contain sufficient information. Consequently, patients benefit as there is less time lost on repeating tests and by averting inaccurate diagnoses or the prescription of inappropriate treatments. The healthcare organization also benefits since appropriate decision making

improves care outcomes and energy is concentrated on the more needy patients.

Health systems, while facing multiple unparalleled pressure, remain focused on delivering quality health care that is effective, safe and patient-centered (Organization of Economic Corporation Development [OECD], 2019). Healthcare institutions are the vehicle of attainment of UHC, and must remain committed to meet desired health care outcomes (WHO, 2018). County referral hospitals, as part of the public health institutions in Kenya continue playing a central role in healthcare provision, forming 47% of the healthcare facilities (Ministry of Health [MoH], 2023). Efforts towards improving healthcare quality in these facilities is key, and would contribute towards achievement of the national and global healthcare goals. This study was aligned to efforts, towards improved nursing care documentation, for improved nursing quality and healthcare outcomes.

Majority of the medical errors occur, not because the nurses and other health care providers are incompetent, but because of errors in the system. The key to addressing these challenges lie in first identifying the system issues, and how they affect the documentation process.

Nursing care documentation includes providing guidance in the form of standard operating procedures, an optimal work load that can allow the nurse time to document the care provided, and building an institutional culture that promotes multidisciplinary collaboration among the healthcare team. In addition, the institution must ensure availability of resources to support the documentation process, as well

as quality assurance processes. Duclos-Miller (2016) notes that it is the duty of the nurse manager, regardless of the clinical setting to provide continuing instructions, timely and consistent feedback, and contribute to documentation and policy changes.

Many studies have identified deficiencies in practice of documentation among nurses across the globe. Manzari et al. (2018) found the nursing practice deficient in Mashhad University Hospital in Iran. Akhu-Zaheya et al. (2017) identified similar challenges in nursing care documentation in two hospitals in Jordan, while Duclos-Miller (2016) observed that absence of routine audits and feedback mechanisms exacerbates the problem, making it difficult to uphold standards across facilities in the United States. In countries like Ghana and Sudan, studies have highlighted that while nurses recognize the importance of proper documentation, factors such as heavy workloads, lack of standard operating procedures, and minimal supervisory support compromise the quality of nursing care documentation (Akhu-Zaheya et al., 2017; Ugochukwu & Agama, 2023). In Kenya, similar challenges have been identified, where Mbutia et al. (2023) found out that high workloads and task-shifting often led to missed, weakened or rushed documentation in three referral hospitals. This was aligned to the findings of Mwangi et al. (2019) who observed similar challenges in Thika level 5 hospital.

Incomplete nursing records which lack accuracy and are of poor quality are often reported (Tasew et al, 2019). While a number of studies have focused on institutional factors affecting nursing care documentation, none of these, to the best of my knowledge, have been conducted in the selected three hospitals. Gurung (2022) observed a gap in nursing care documentation among staff nurses in Nepal, and among the contributing factors were lack of in-service education to nurses

on nursing care documentation. In Ghana, a study in Tamale Hospital noted a gap in the documentation practice, with associated institutional factors to include standard operating procedures and lack of motivation. In Sudan, institutional factors noted to affect nursing care documentation process included limited documentation tools, and lack of standard guidelines. These, among other factors were observed to lead to poor nursing care documentation (Ali et al., 2020). Mbutia et al. (2023) identified a complex context in which the nurse in Kenya operates, as well as the unfavorable institutional factors such as high workload, inadequate resources, among others. These affect accomplishment of the nursing roles, including nursing care documentation.

Nursing care documentation is an output which can be affected by many factors, including individual and institutional factors (Tasew et al., 2019), pointing to interrelatedness and interconnectedness of different parts of the health system. Wolters (2018) report that majority of the medical errors occur, not because the nurses and other health care providers are incompetent, but because of errors in the system. The key to addressing these challenges lie in first identifying the system issues, and how they affect the documentation process.

County referral hospitals in Kenya are regional hubs for specialized healthcare, acting as referral points for primary level facilities in the county. Complex care actives with specialized investigations, demand top notch coordination and communication among the multidisciplinary team. In addition, these facilities are training sites for multidisciplinary cadres, and effective acquisition of learning outcomes call for optimal care. Well documented nursing care is therefore core to achieving quality care, and enhancing learning process. However, nursing care documentation has been observed to be a perennial gap across many health facilities (Nursing Council,

2023). It is thus imperative to identify factors in the health institution that affect nursing care documentation process, so that the gaps can be addressed.

The study was guided by the general systems theory, which looks at a system as characterized by interactions of its various components. Hospital systems consist of a structured arrangement where various parts are interconnected in specific ways. The actions of individual healthcare workers influence and are influenced by other components in the system. The nursing care documentation process is influenced by other factors in the system, and it affects the operations in the health system. The objective of the study was to assess the influence of institutional factors on the quality of documentation of nursing care practices in county referral hospitals in Kenya. The null hypothesis of the study stated that there exists a relationship between institutional factors and the nursing care documentation practice, while the alternative hypothesis was that there exists no relationship between institutional factors and the nursing care documentation practice.

2.0 Materials and Methods

This study was carried in three County Referral Hospitals in Isiolo, Nyeri and Nyandarua counties in Kenya. The study adopted a descriptive survey design, which was deemed appropriate as the study intended to describe the existing phenomenon. The target population comprised nurses in the medical and surgical wards in the selected hospitals. Multistage sampling technique was used, with clustered sampling used to select the counties. Multistage sampling allowed inclusion of counties with diverse climatic conditions, which may affect staff retention, and nursing care documentation. Purposeful sampling was used to select the nurses and nurses' managers. A population size of 108 nurses in the three hospitals was targeted, and 88 (81.5%) were sampled to participate in the study. Yamane (1967)

formula was used to calculate the sample size for the nurses and the patient case files. 88 nurses and 6 nurse managers were selected.

Three data collection instruments were used; namely, questionnaire for the nurses, containing 11 institutional factors that can affect nursing care documentation, such as SoPs, patient load, institutional culture, supervision, and quality improvement strategies; key informant interview guide for the nurse managers, which evaluated the institutional mechanisms that were in place to support nursing care documentation; and a checklist to audit the patient case files for the quality of nursing care documentation. The checklist contained 11 indicators of quality nursing care documentation. The tools were pre-tested to ensure reliability and validity of the tools. The pretest sample size consisted of 10 nurses 1 nurse manager and 16 patient case files. Ethical approval was sort from Kenya Methodist University Ethical Board, the National Commission for Science, Technology and Innovation (NACOSTI), and respective counties research departments. Piloting was done in Laikipia County Referral Hospital. Reliability testing of the tools was conducted on the findings by determining the Cronbach Alpha score, which was 0.708. Data was analyzed by generating themes, and content analysis for the qualitative data, while quantitative data were analyzed using regression analysis with SPSS (version 26.0). Findings were presented using frequency tables and charts. Research assistants were trained on the tool to ensure consistency during data collection. Informed consent was sort from the participants prior to data collection. A key limitation to the study was respondents perceiving the study as an audit of their professional duties, which could lead to biased responses. Strict confidentiality for all participants was assured to overcome the limitation. Themes and content analysis were used for the qualitative data, while quantitative data were analyzed using

regression analysis with SPSS (version 26.0).

3.0 Results and Discussion

Respondents' characteristics

socio-demographic

The socio-demographic characteristics of the respondents are shown in Table 1.

Table 1

Socio Demographic Characteristics of Respondents (N=88)

Variable	Frequency	Percent
Gender		
Male	33	37.5
Female	55	62.5
Age of respondents in years		
<25	5	5.7
25-30	33	37.5
31-35	8	9.1
36-40	19	21.6
41-45	12	13.6
>45	11	12.5
Mean \pm SD	35 \pm 8.43 (Range = 23 to 59)	
Years of experience		
≤ 5	33	37.5
6-10	17	19.3
11-15	18	20.5
16-20	11	12.5
21-25	3	3.4
>25	6	6.8
Mean \pm SD	10.34 \pm 7.87 (Range = 1 to 32)	
Nursing education level/qualification		
Certificate	1	1.2
Diploma	56	65.1
Higher Diploma	16	18.6
Bachelor's Degree	12	14.0
Master's Degree	1	1.2

Of the 88 nurses who participated in this study, 55 (62.5%) were female and 33 (37.5%) were male. This resonates with Okoroafor et al. (2022) and Wakaba et al. (2014) who indicate that the female gender dominates the nursing field. WHO (2020) support this, by documenting that globally, 9 out of every 10 nurses are female. This perhaps is related to the perception of nursing being a caring field, and female gender generally being associated with caring (WHO, 2017). In relation, the male nurses may perform better, since, as Mao et al. (2021) report, male nurses were determined to stand out, and identified

professionalism as key for them to gain respect and trust. As such, they may thus demonstrate better nursing care documentation than their female counterparts.

Most of the respondents, 33 (37.5%) were aged between 25–30 years. The ages of the participants ranged from 23 - 59 years with a mean age of 35 years (SD = 8.43). Most of the respondents 18 (20.5%) had worked for 6-10 years. On average, the participants had an experience of 10.34 years (SD=7.87) ranging from 1- 32 years. Most of the respondents had a diploma in nursing at 56(65.1%). The findings on age, experience

and education level perhaps are related to emigration of nurses to other countries as they gain experience. Most of the agents recruiting nurses for emigration put a condition of some experience. This depletes the system of the nurses with experience. On the other hand, many of the nurses find little or no opportunity in the clinical area, upon advancement in education, and they generally explore opportunities in management as they advance in clinical practice (East et al., 2014). The Nursing Council of Kenya (2022^a) identified this as a gap that hindered professional growth as nurses with advanced education did not have room to contribute to direct patient

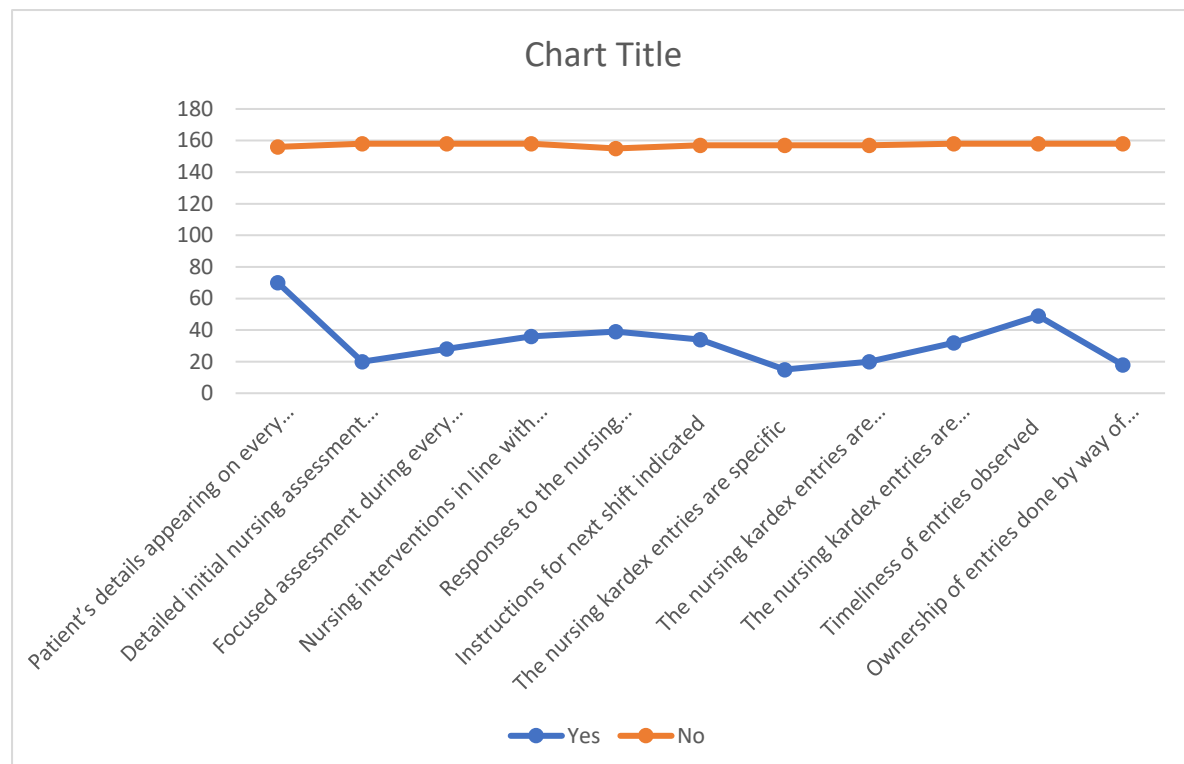
care, and to mentor novice nurses. Subsequently, NCK developed a regulatory framework in the form of scope of practice and training guidelines for advanced practice in nursing and advanced practice in midwifery (Nursing Council of Kenya, 2022^a; Nursing Council of Kenya, 2022^b). The aim is to have a legal framework for institutionalization of the advanced nurse practice in Kenya.

Quality of Nursing Care Documentation

The study revealed a gap in the quality of nursing care documentation as outlined in Figure 1.

Figure 1

Quality of Nursing Care Documentation



The study results showed that nursing care documentation was poorly done in most of the parameters checked in this study. Notably, the nursing kardex entries were only specific in 9.6% of entries. This means that the entries were general, with demonstration of lack of individualized and patient centered care. Yet, patient centered care has been recognized as central to health care quality (O'Neill, 2022; Wolters

Kluwer, 2022; & NEJM Catalyst, 2017). Only 11.4% of entries had the nurses' names and signature as a sign of ownership. Though there exist dearth of information in regard to this practice, Lukey (2023) notes this as an important component of nursing notes. Lack of ownership in documented information has potential to disrupt investigations should the care be questioned. Further, since the information

cannot be traced to the particular individual, there may be tendency to fail to pay attention to details and the standard operating procedures in regard to the activity, leading to poor quality documentation. Levels of the total score of the nursing care documentation practice were measured by 75th percentile cut off point. The overall results revealed a third (30.4%) of nursing care documentation practices were well done while most 64.6% were found to be poorly done. Given that documented patient information forms a critical part of the role of the nurses, and promotes care continuity among other benefits (Bolado et al., 2023), the situation calls for some intervention, to improve the care documentation process, and ultimately the healthcare outcomes. This is key, and will contribute towards achievement of both national and global health goals such as attainment of UHC and SDG 3, which

rely heavily on optimum quality of healthcare.

Institutional factors and documentation of nursing care

Institutional factors were gauged using eleven parameters. A hospital has been described by Kartika et al. (2021) as an institution that works towards promoting the wellness and health status of the persons seeking care therein, and, ensuring quality of the documented care is one way of achieving this objective. As such, it is to the best interest of the health facility to create an environment that can promote optimum care documentation practices. In addition to promoting quality of care, optimum care documentation is one way of mitigating against litigations related to healthcare provided. The findings are tabulated in table 2 below.

Table 2

Institutional Factors and Documentation of Nursing Care

Statement	Agreed		Disagreed	
	n	%	n	%
i. My institution has adequate SOPs on nursing care documentation	67	76.1	21	23.9
ii. The SOPs offers sufficient guideline on nursing care documentation	64	72.7	24	27.3
iii. The patient load per shift is per the nursing Council of Kenya recommendations	29	33.0	59	67.0
iv. The patient load per shift positively affects my ability to document nursing care	69	78.4	19	21.6
v. The institutional culture on nursing care documentation is appropriate	68	77.2	20	22.7
vi. The institutional culture affects nursing care documentation	61	69.3	27	30.7
vii. The quality of nursing notes positively influences patients care outcomes	78	88.6	10	11.4
viii. My supervisor offers guidance frequently on nursing care documentation	72	81.8	16	18.2
ix. The institution has a system in place to audit nursing care documentation	59	67.0	29	33.0
x. My supervisor often audits the quality of nursing care documentation	56	63.5	32	36.5
xi. My supervisor often raises concerns regarding nursing care documentation in the unit	74	84.0	14	16.0

From the study, 67(76.1%) of respondents agreed that their institution had standard operating procedures (SOPs) in place for nursing care documentation. SOPs in care documentation allow standardization with the aim of minimizing gaps in documented information, and thus improving health. As such, having SOPs on documentation is critical and a step towards achieving this. With regard to the content of the SOPs, 64(72.7%) agreed that the SOPs provided sufficient guidelines. This indicates that the SOPs were useful and met the rationale for their existence. SOPs in a health facility are a cornerstone to optimal practice, and a catalyst to quality care (Barbosa, 2011), and is one way of strengthening the service delivery and leadership components in a health system. This aligns well to the health systems reforms in Kenya, such as the digital superhighway, that rely on accurate and timely information, and that are geared towards achievement of UHC. In addition, with increased access to information by the public, the healthcare provider must be more accountable, and this can only be demonstrated in care documentation. SOPs come in handy to ensure clear guidance to the provider, and allow smooth operations in the system.

Positive health care outcomes are positively related to adequate and competent number of nursing staff to provide care in the clinical setup (Khowaja & Rafiq, 2019). In line with this, 69(78.4%) agreed that a high patient case load affected their ability to adequately document. Nyawira et al., (2022) reported that there was inadequate number of health workers, insufficient skill mix and no adequate task shifting practices. These factors force nurses to take more advanced roles, on more patients than recommended, and this negatively affects the nursing care documentation process. Indeed, 59(67.0%) disagreed that the patient load per shift in their institution was per the Nursing Council of Kenya recommendation, with the nurses being required to handle more than the recommendation. Most agreed 68(77.2%)

that institutional culture on documentation was appropriate, while 61(69.3%) agreed that institutional culture affects nursing care documentation. The findings are in agreement with Mannion and Davies (2018) who said that several sub-cultures exist in every healthcare system, and these are related to the quality of care offered. This may be because culture within the care system reflects values, beliefs and ideas among the individuals in the organization, which create a distinction between right and wrong (Simpson et al., 2019). As such, a positive culture on documentation acts as an ingredient towards quality care documentation in the organization.

The majority 78(88.6%) of the respondents agreed that the quality of nursing notes positively influences patients care outcomes. This is because the notes form part of the communication between the multidisciplinary team, which is critical in continuity of care. Indeed, Asmirajanti et al. (2019) reaffirms that what nurses document should reflect critical thinking that is accurate, otherwise communication within the professional team is hampered. They further indicate that nursing managers should take it upon themselves not only to evaluate, but also to control and direct care documents.

Most 72(81.8%) respondents said that the supervisor offers guidance frequently on nursing care documentation, while 59(67.0%) of respondents agreed that their institution has a system in place to audit nursing care documentation. In addition, 56(63.6%) of respondents agreed that supervisor often audits the quality of nursing care documentation. These findings indicate a commitment by the health facilities and the managers to support nursing care documentation and to ensure it is implemented well. Yulianita et al. (2020) noted a significant positive relationship between supervision and nursing care documentation. This is because supervision actively provide room for support for quality improvement. Supervision,

Ugochukwu and Agama (2023) says is an interactive process between persons that is aimed at value addition to a process or an activity. Supervision is thus a powerful tool in behavior change towards quality improvement of the nursing documentation process. Supervision enhances the leadership pillar, which is the glue that keeps the other pillars together towards better health systems.

The quality of nursing notes raised significant concerns, with 37(42%) of respondents agreeing that this often happens to them. This indicated a gap in the content of the nursing notes, despite

demonstration of understanding of the importance of nursing notes, as well as the mechanisms to support this activity in terms of SOPs and supervision. Poorly documented nursing notes have been reported in several studies (Bolado et al., 2023; Gurung, 2022; & Obioma, 2017). This interferes with communication among the nurses and other health providers, and can compromise care continuity and quality.

Computation of the descriptive statistics of the agreed points was done, and the summary is provided in the table 3 below.

Table 3
Summary Descriptive Statistics

Parameter	value	
	Agreed	Disagreed
Mean	71.6	14.4
Mode	76	10
Standard deviation	11.4	11.4

The interviews with the nursing care managers revealed multiple challenges in the area of nursing care documentation. Among the identified influencing factors was the experience of the nurses, with documentation reported to become better with experience. The managers reported that there was a young nurse population, occasioned by rapid turnover. This was supported by the fact that 52.3% of the respondents were 35 years old and below. The young nursing population was linked with little experience in many clinical aspects, to include documentation. Ha and Nuntaboot (2020) reported years of experience among the factors that affect nurses' competencies. Yet, a competent workforce is critical for optimal functioning and achievement of organization goals (Aregaw et al., 2023). In the health field, a competent health workforce is the engine that ensures that health systems remain responsive to changing patients' needs. Almarwani and

Alzahrani (2023) opine a strong link between health system performance and the competencies of the health workers. Competency deficit is reported to be caused by inadequate training, contributed by structural, process and systemic factors (Nyamtema et al., 2022). The following are excerpts from some nursing managers:

"... most of nurses are young and have not much experience. Not to mention that we do not have adequate number of nurses in comparison to the number of patients that we have. This affects the documentation process but we try to address this on a daily basis ..."(Key informant, Nurse Manager, 01)

"... we have high turnover among our nursing staff. We spend a lot of time training and we have to keep training ..."

(Key informant, Nurse Manager, 05)

The workload in regard to nurse-to-patient ratio, coupled with demanding shifts based on the patient care demand, was reported as a contributing factor to poor nursing care documentation, and also led to burn out. Optimal performance calls for adequate human resources. This is the pacemaker for effective health system for achievement of the health care outcomes and goals. Boniol et al. (2022) observed an acute shortage of human resource for health. Haddad et al., (2022) observed a huge gap in the number of nurses and midwives, and Tasew et al. (2019) found this as a contributing factor to poor nursing care documentation. Mutshatshi et al. (2018) and Tyagi et al. (2019) noted that nurses spend about 50% of their time documenting the care they have provided, while insufficient time was noted by Tasew et al. (2019) as a factor that hindered nursing care documentation.

The logistic regression analysis was used to explore the relationship between three institutional factors; availability of standard operating procedures (SOPs), patient load interventions, and institutional culture; and the quality of nursing documentation. The use of regression analysis assumed that a linear relationship exists between the institutional factors and nursing care documentation practice. This means the relationship can be adequately represented by a straight line. The results showed that none of these factors were significantly associated with good nursing documentation. Specifically, the availability of SOPs had an adjusted odds ratio (AOR) of 1.269 (95% CI: 0.500–3.222; $p = 0.521$), indicating that nurses who had SOPs at their disposal were 26.7% more likely to have good documentation compared to when SOPs were unavailable. Likewise, recommended patient load interventions had an AOR of 1.299 (95% CI: 0.497–3.524; $p = 0.779$), and a positive institutional culture had an AOR of 1.096 (95% CI: 0.396–3.029; $p = 0.956$),

indicating a 29.9% and 9.6% chances of better nursing care documentation respectively. In all instances, the confidence intervals crossed 1, and the p -values were above the 0.05 significance level, confirming the lack of statistically significant associations. These findings imply that other factors may have a more substantial impact on the quality of nursing documentation, highlighting the need for further research to identify key determinants.

The bivariate results revealed that nurses who had SOPs were 1.335 times more likely to adhere to good nursing care documentation practices than their colleagues who operated with no clear SOPs. This is because SOPs promote efficiency (Dettling, 2024), by fostering adherence to processes. Nurses who worked in health institutions where the patient – nurse workload was optimal were 1.333 times more likely to adhere to good nursing care documentation practices than their colleagues who had heavy patient workload than recommended by the regulator. A high patient workload increases the demand on the nurse's time, and as Rasu (2024) observes, a high workload forms a barrier to nursing care documentation. Nurses who worked in health institutions which had positive institutional culture that encouraged good nursing care documentation practices were 1.026 times more likely to adhere to good nursing care documentation practices than their colleagues who worked in institutions which did not cultivate a positive culture towards nursing care documentation practices.

Overall, the study findings show that these factors are important and have an influence on nursing care documentation practices, but other factors that affect the practice must be considered if nursing documentation is to be fully improved. This points to the interrelationship of multiple set of factors that affect the practice, such as individual factors, cohesion of the

multidisciplinary team in the institution, among others. Thus, to improve nursing care documentation requires identification of other factors, so that they can also be addressed.

A regression analysis was conducted to explore the significance of relationship of institutional factors and nursing care documentation process. The results are presented in the table 4 below.

Table 4

Relationship Between Institutional Factors and Nursing Care Documentation Practice

Variable	Quality of nursing documentation		Bivariate Logistic Regression		Multivariate Logistic Regression
	Poor	Good	COR	P-value	AOR (95% CI)
	N	N			
Standard operating procedures					
Unavailable	14	24	1		
Available	18	23	1.335	0.521	1.269 (0.500 - 3.222)
Patient load interventions					
Heavy workload	17	23	1		
Recommended	15	24	1.133	0.779	1.299 (0.497 - 3.524)
Institutional culture					
Negative	15	22	1		
Positive	16	24	1.026	0.956	1.096 (0.396 - 3.029)

4.0 Conclusion

The study evaluated the institutional factors at the time, establishing a baseline against which future studies can reference. This contributes to the scientific knowledge by unearthing beyond the institutional documentation barriers, which is key towards holistic address of this gap. The quality of nursing care documentation was found to be poor, despite demonstrated understanding of its importance.

Health institutions have a key role in ensuring optimum nursing care documentation, by way of enhancing resource and support to the nurses. This study demonstrates that optimum nursing care documentation is an output of many

factors that touch on the different pillars of health systems strengthening.

5.0 Recommendations

The study recommends that health institution should put in place SOPs on nursing care documentation, and ensure its dissemination and accessibility to all health providers. This would promote their utility, and ensure they meet the purpose for which they are developed. Additionally, health institutions should provide a conducive working environment that encourages a positive culture that supports nursing documentation practices. This improves job satisfaction; and adherence to the recommended nurse-patient workload in order to allow nurses sufficient time to adequately document the nursing activities.

References

- Akhu-Zaheya, L., Al-Maaitah, R., & Bany Hani, S. (2018). Quality of nursing documentation: Paper-based health records versus electronic-based health records. *Journal of Clinical Nursing*, 27(3–4), e578–e589. <https://doi.org/10.1111/jocn.14097>
- Ali, A. M. A., Albashir, W. A. M., & Mariod, A. (2020). Nursing Documentation in Selected Hospitals in Khartoum State-Sudan. *Journal of International Health Sciences and Management*, 6(10), 108-120. <https://dergipark.org.tr/en/pub/jihsm/issue/53910/677654>
- Aregaw, Y. G., Endris, E. A., & Bojago, E. (2023). Factors Affecting the Competence Level of Agricultural Extension Agents: A Comprehensive Analysis of Core Competencies in Northwestern Ethiopia. *Education Research International*, 2023, 1–21. <https://doi.org/10.1155/2023/7928467>
- Asmirajanti, M., Hamid, A. Y. S., & Hariyati, R. T. S. (2019). Nursing care activities based on documentation. *BMC Nursing*, 18(1), 1-5. <https://doi.org/10.1186/s12912-019-0352-0>
- Barbosa, C. M., Mauro, M. F. Z., Cristóvão, S. A. B., & Mangione, J. A. (2011). The importance of standard operating procedures (SOPs) for clinical research centers. *Revista Da Associação Médica Brasileira*, 57(2), 134–135. <https://doi.org/10.1590/S0104-42302011000200007>
- Bolado, G. N., Ayalew, T. L., Feleke, M. G., Haile, K. E., & Geta, T. (2023). Documentation practice and associated factors among nurses working in public hospitals in Wolaita Zone, Southern Ethiopia. *BMC Nursing*, 22(1), 330. <https://doi.org/10.1186/s12912-023-01490-8>
- Boniol, M., Kunjumen, T., Nair, T. S., Siyam, A., Campbell, J., & Diallo, K. (2022). The global health workforce stock and distribution in 2020 and 2030: A threat to equity and ‘universal’ health coverage? *BMJ Global Health*, 7(6), e009316. <https://doi.org/10.1136/bmjgh-2022-009316>
- Detling R., (2024). *Writing effective standard operating procedures*. <https://www.researchgate.net/publication/386453557>
- Duclos-Miller, P. A. (2016). *Improving nursing documentation and reducing risk*. Hcpro, a division of BLR.
- East, L. A., Arudo, J., Loeffler, M., & Evans, C. M. (2014). Exploring the potential for advanced nursing practice role development in Kenya: a qualitative study. *BMC nursing*, 13(1), 1-11. <https://doi.org/10.1186/s12912-014-0033-y>
- Fiveable, (2024). *Institutional factors – International Economics*. <https://library.fiveable.me/key-terms/international-economics/institutional-factors>
- Gurung, N. (2022). Knowledge and Practice of Documentation Techniques among Staff Nurses. *Journal of College of Medical Sciences-Nepal*, 18(1), 36–41. <https://doi.org/10.3126/jcmsn.v18i1.43293>
- Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2025). Nursing Shortage. In *StatPearls*. StatPearls Publishing. <http://www.ncbi.nlm.nih.gov/books/NBK493175/>

- Khawaja, A., & Rafiq, N. (2019). Improving nursing documentation via reducing the written work load. *Iris Journal of Nursing & Care*, 1(2), 1–7.
https://ecommons.aku.edu/pakistan_fhs_son/389/
- Mannion, R., & Davies, H. (2018). Understanding organisational culture for healthcare quality improvement. *BMJ*, 363, k4907.
<https://doi.org/10.1136/bmj.k4907>
- Manzari, Z. S., Vafaei, S. M., Heydari, A., Froutan, R., & Farahani, L. A. (2018). Nurses' perception of nursing services documentation barriers: A qualitative approach. *Electronic Journal of General Medicine*, 15(3), em28.
<https://doi.org/10.29333/ejgm/86184>
- Mathioudakis, A., Rousalova, I., Gagnat, A. A., Saad, N., & Hardavella, G. (2016). How to keep good clinical records. *Breathe*, 12(4), 369-373.
<https://doi.org/10.1183/20734735.018016>
- Ministry of Health (2023). *Kenya Health Facility Census report*. Government of Kenya.
<https://www.health.go.ke/sites/default/files/202401/Kenya%20Health%20Facility%20Census%20Report%20September%202023.pdf>
- Mutshatshi, T. E., Mothiba, T. M., Mamogobo, P. M., & Mbombi, M. O. (2018). Record-keeping: Challenges experienced by nurses in selected public hospitals. *Curationis*, 41(1), a1931.
<https://doi.org/10.4102/curationis.v41i1.1931>
- Nursing Council of Kenya. (2022a). *Scope of practice for advanced practice in nursing*. Nursing Council of Kenya.
https://www.treasury.go.ke/wp-content/uploads/2024/10/Nursing-Council-of-Kenya-2021_2022.pdf
- Nursing Council of Kenya. (2022b). *Student training guidelines: Advanced practice in nursing*. Nursing Council of Kenya.
<https://nckkenya.com/downloads>
- Nyamtema, A., Karuguru, G., Mwangomale, A., Monyo, A., Malongoza, E., & Kinemo, P. (2022). Factors affecting production of competent health workforce in Tanzanian health training institutions: A cross sectional study. *BMC Medical Education*, 22(1), 662.
<https://doi.org/10.1186/s12909-022-03719-7>
- Nyawira, L., Tsoba, B., Musiega, A., Munywoki, J., Njuguna, R. G., Hanson, K., Mulwa, A., Molyneux, S., Maina, I., Normand, C., Jemutai, J., & Barasa, E. (2022). Management of human resources for health: Implications for health systems efficiency in Kenya. *BMC Health Services Research*, 22(1), 1046.
<https://doi.org/10.1186/s12913-022-08432-1>
- O'Neill, N. (2022). *The Eight Principles of Patient-Centered Care*.
<https://www.oneviewhealthcare.com/blog/the-eight-principles-of-patient-centered-care/>
- Obioma C. (2017). *Improving the Quality of Nursing Documentation in Home Health Care Setting* [Doctoral Dissertations, Walden University]. Walden University ProQuest Dissertations & Theses.
<https://www.proquest.com/openview/5a7b2b07f82f7fb3fe45613c357b9889/1?pq-origsite=gscholar&cbl=18750>
- Rasu, S. (2024). The Relationship Between Workload and Nurse Performance in Nursing Care Documentation: A Cross-Sectional Study. *East Asian Journal of Multidisciplinary Research*, 3(11), 5417 –5426.

<https://doi.org/10.55927/eajmr.v3i11.12437>

- Seidu, A. A., Abdulai, A., & Aninanya, G. A. (2021). Factors Influencing Documentation in Nursing Care by Nurses at the Tamale Teaching Hospital, Ghana. *UDS International Journal of Development*, 8(1), 540–558.
<https://doi.org/10.47740/567.udsijd6i>
- Simpson, D., Hamilton, S., McSherry, R., & McIntosh, R. (2019). Measuring and Assessing Healthcare Organisational Culture in the England's National Health Service: A Snapshot of Current Tools and Tool Use. *Healthcare*, 7(4), 127.
<https://doi.org/10.3390/healthcare7040127>
- Tasew, H., Mariye, T., & Teklay, G. (2019). Nursing documentation practice and associated factors among nurses in public hospitals, Tigray, Ethiopia. *BMC research notes*, 12(1), 1-6. <https://doi.org/10.1186/s13104-019-4661-x>
- Ugochukwu, O. S., & Sunday, A. C. (2023). The Role of Supervision of Instruction in the Administration of Education. *Nnadiesube Journal of Education in Africa*, 8(2), 75-85.
<https://acjol.org/index.php/njea/article/view/3645/3568>
- Wolters Kluwer (2022). *Why patient-centered care is so important*.
<https://www.wolterskluwer.com/en/expert-insights/why-patientcentered-care-is-so-important>
- World Health Organization (2017). *Human resources for health country profiles: Japan*.
<https://iris.wpro.who.int/bitstream/handle/10665.1/13631/9789290618188-eng.pdf>
- World Health Organization, Organization of Economic Corporation Development, & International Bank for Reconstruction and Development (2018). *Delivering Quality Health Services: A Global Imperative*. OECD Publishing.
- World Health Organization. (2020). *State of World's Nursing: Investing in Education, Jobs and Leadership*.
<https://www.who.int/publications/i/item/9789240003279>