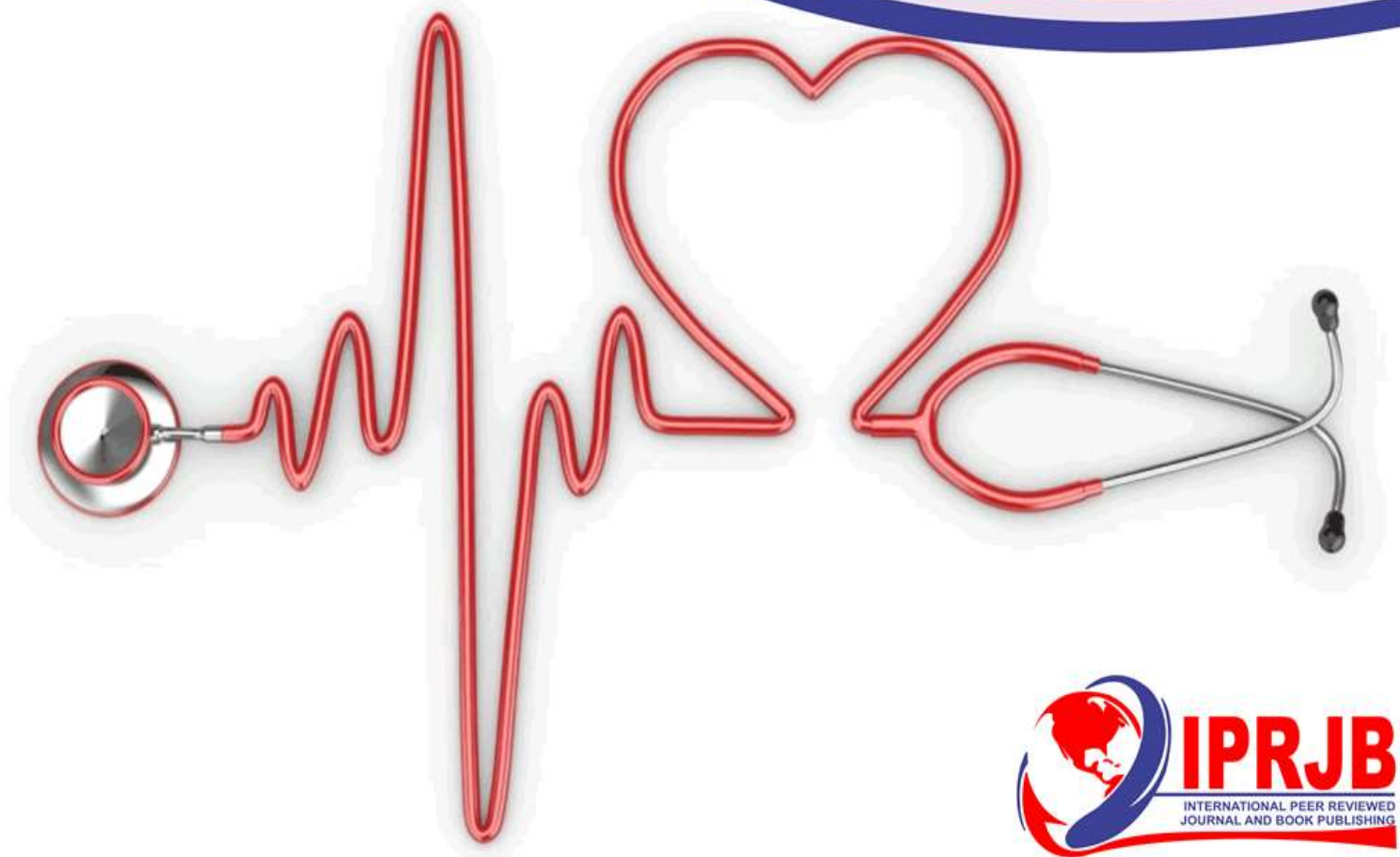


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**Enhancing Quality of Documentation of Nursing Care in Selected County Referral  
Hospitals in Kenya**

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**Enhancing Quality of Documentation of Nursing  
Care in Selected County Referral Hospitals in Kenya**



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**Abstract**

**Purpose:** Good health is a key Sustainable Development Goal, and quality nursing care documentation plays a vital role in achieving this goal by enhancing patient safety, care continuity, and accountability. Despite its importance, studies consistently show persistent gaps in nursing documentation that can compromise care outcomes and patient trust. This study describes efforts towards enhancing quality of nursing care documentation in County Referral Hospitals in Kenya.

**Methodology:** Using a mixed-methods design, the research combined baseline audits of 158 patient files with surveys from 88 nurses and interviews with five nurse managers. An intervention phase followed, where a Continuous Professional Development (CPD) module was implemented in Nyeri County Referral Hospital. This training used a systems thinking approach to highlight how people, processes, and resources interact to affect documentation practices.

**Findings:** Post-intervention, 62 patient files were audited, showing marked improvements: 93.5% of files contained patient details on every sheet (up from 44.4%), detailed assessments increased to 51.6%, and documentation of interventions, patient responses, and shift instructions all rose above 80%. Overall, there was improvement from 22% to 81.2% good nursing care documentation. Despite these gains, gaps remain, especially in timeliness and workload-related barriers.

**Unique Contribution to Theory, Practice and Policy:** This study makes a unique contribution by demonstrating the effectiveness of a systems thinking approach in improving nursing documentation within resource-constrained settings. The study recommends conducting routine refresher training, and addressing staffing shortages to allow nurses adequate time for thorough, timely records. High-quality documentation supports critical thinking, legal protection, interprofessional collaboration, and patient-centered care. Sustaining these improvements demands committed leadership and continuous mentorship. This research highlights that targeted interventions, guided by systems thinking, can significantly enhance nursing documentation quality, ultimately contributing to safer, more effective healthcare delivery in Kenyan County Referral Hospitals and beyond.

**Keywords:** *Nursing Documentation*

**JEL Code:** 118

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## INTRODUCTION

The first formal nursing model was established by Florence Nightingale in 1873, laying the foundation for modern nursing practice. Since then, nursing responsibilities have grown significantly, with nurses today expected to take on expanded clinical roles within complex healthcare environments (Grinberg & Sela, 2022). This evolution has occurred alongside a shift toward evidence-based practice, where data and accurate documentation are crucial for informed clinical decision-making (Abou et al., 2020). Comprehensive nursing care documentation is essential for this process, as it records all nursing actions undertaken during patient care. According to Tasew, Mariye, and Teklay (2019), nursing care documentation is the personalized record of care that a qualified nurse plans and delivers, or delegates to other caregivers under their supervision, for each patient.

Good health is recognized globally as one of the Sustainable Development Goals (SDGs) set by the United Nations (United Nations, 2021). To achieve this goal, countries need robust health systems built on six pillars: a strong health workforce, reliable health information systems, essential medical products and technologies, effective governance and leadership, sustainable financing, and efficient service delivery (Ferrinho, Daniel-Ribeiro, & Ferrinho, 2023). Nurses are central to the service delivery pillar, as they provide continuous, around-the-clock care, from patient admission and assessment to treatment, monitoring, and discharge planning (Asmirajanti, Hamid, & Hariyati, 2019).

Research consistently shows that nursing care has a measurable impact on patient outcomes (Wilkinson, Carryer, & Budge, 2018), and the quality of documentation plays a critical role in ensuring that care is safe, effective, and coordinated (Bolado et al., 2023). Clear, complete records allow nurses to demonstrate that all required patient care activities have been carried out, which is increasingly important as healthcare systems face pressure to deliver better outcomes and patient satisfaction (Ahmed & Rafiq, 2019). Various tools support nursing documentation, including nursing kardexes, fluid charts, observation records, nursing care plans, and specialized charts. These records should provide an accurate and interconnected account of the patient's condition and the nursing interventions delivered (Rahman, Ibrahim, & Diab, 2021). Proper documentation also enables smooth communication among nurses and other members of the healthcare team, ensuring continuity of care during shift handovers and patient transfers.

Accurate nursing documentation also directly affects patient safety. Kimiafar, Vafae Najar, and Sarbaz (2018) emphasize that clear, precise records help prevent miscommunication and clinical errors. However, studies continue to identify shortcomings in documentation practices. Issues like incomplete notes, missing signatures, illegible handwriting, or vague language can undermine care quality and create confusion for other caregivers (Wolters Kluwer, 2018). According to Saputra (2020), nursing records must be timely and comprehensive, and if a care activity is not documented, it is generally considered not to have been done. These documentation lapses are rarely due to negligence but often stem from systemic problems such as heavy workloads or poor record-keeping systems (Wolters Kluwer, 2018). Nonetheless, the consequences can be significant. Poor documentation can lead to fragmented care, medical errors, and weakened patient trust. As Brown (2024) reminds us, nursing documentation provides the foundation for care decisions, and its quality reflects the professionalism and accountability of the nursing workforce. Russell (2019) also argues that robust nursing records

are crucial for defending care decisions and demonstrating compliance with best practices and legal standards

Despite the recognized importance of accurate nursing documentation, significant discrepancies exist across countries and care settings. For instance, Zaheya, Maaitah, and Hani (2017) found that documentation practices in Jordan were more structured in electronic health records compared to paper-based systems, which were prone to omissions and illegibility. Conversely, Mutshatshi et al. (2018) observed that nurses in South African public hospitals often struggled with incomplete and delayed documentation due to staffing shortages and high patient loads, challenges similarly reported in Kenyan settings (Omoit, 2021). In contrast, studies from higher-income countries such as the United States report more consistent documentation practices, largely due to standardized protocols and widespread use of electronic health records (Mathioudakis et al., 2016). These variations underscore the influence of institutional capacity, infrastructure, and policy enforcement on documentation quality. While global standards emphasize completeness, timeliness, and accountability, local implementation remains uneven, particularly in resource-constrained environments.

At baseline, nursing care documentation in Kenyan County Referral Hospitals was characterized by significant inconsistencies, incomplete records, and systemic challenges that compromised care quality and patient safety. Audits revealed widespread issues such as missing patient identifiers on documentation sheets, inadequate initial and shift-based assessments, vague or subjective entries, untimely record updates, and unsigned notes. These lapses made it difficult to trace care actions, undermined continuity during shift handovers, and exposed institutions to legal and clinical risks. Nurse managers attributed these problems largely to heavy workloads, staffing shortages, lack of refresher training, and limited institutional oversight, factors that created a culture where documentation was often deprioritized. As such, the baseline data highlighted a critical need for targeted interventions to standardize, professionalize, and reinforce documentation practices across all levels of nursing care.

### **Statement of the Problem**

Nursing documentation is a vital element of effective communication, patient safety, and quality care delivery in healthcare systems worldwide. It provides evidence of nursing assessments, interventions, and patient outcomes, forming a critical medico-legal and professional record. Despite its importance, studies in Kenya and globally reveal persistent gaps in documentation quality, often due to incomplete records, limited training, and poor system usability. These deficiencies compromise care continuity and increase legal risks. As Kenya advances toward universal health coverage, thorough, accurate documentation remains essential for ensuring safe, high-quality patient care, reinforcing the nursing profession's accountability and contribution to health system strengthening

### **Theoretical Framework**

This study is grounded in general systems theory (von Bertalanffy, 1936), Newman's systems model (1972), McGregor's Theory Y (1960), and Deming's theory of variation (Bowen, 2010). Von Bertalanffy's theory highlights hospitals as open systems where interconnected components, such as healthcare workers, interact to influence service quality. Nurses, as both influencers and products of the system, directly impact care documentation. Newman's model interprets stress management and system defenses as applicable to nursing documentation, where institutional standards and adaptability affect documentation quality. McGregor's

Theory Y suggests that motivated nurses, driven by intrinsic satisfaction, are essential for high-quality care outcomes, and that collaboration with managers can enhance documentation practices. Deming's theory underscores the need to identify and address both systemic and situational causes of variation in nursing documentation, helping standardize best practices. These theories align with Oldland et al. (2020), who emphasize clinical leadership and governance as central to nurses' responsibilities in ensuring healthcare quality.

## METHODOLOGY

This was a mixed method study, where descriptive and intervention designs were utilized. The baseline phase was carried out in three County Referral Hospitals in Isiolo, Nyeri and Nyandarua counties in Kenya. The intervention, and post intervention evaluation was undertaken in Nyeri County Referral Hospital. The target population was nurses in the medical and surgical wards in the selected hospitals, and patient case files. The sample was 88 nurses, five (5) nurse managers, and 158 patient case files in the baseline phase, and 34 nurses and 62 case files in the post intervention phase. Three (3) data collection instruments were used i) a questionnaire for the nurses, ii) a key informant interview guide for the nurse managers, and iii) a checklist to audit the patient case files for the quality of nursing care documentation. The tools were pre-tested to ensure reliability and validity of the tools. Data was analyzed using SPSS version 26.

## RESULTS AND DISCUSSION

### Respondents' Socio-Demographic Characteristics

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

**Table 1: Socio demographic characteristics of respondents (N=88)**

Variable	Frequency	Percent
<b>Gender</b>		
Male	33	37.5
Female	55	62.5
<b>Age of respondents in years</b>		
<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)	
<b>Years of experience</b>		
$\leq 5$	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)	
<b>Nursing education level/qualification</b>		
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, 53 (61.6%) were female and 33 (38.4%) were male. This resonates with Okoroafor et al, (2022) and Wakaba et al., (2014) who indicate that the female gender dominates the nursing field. This perhaps is related to the perception of nursing being a caring field, and female gender generally being associated with caring (WHO, 2017). As relates to performance, Mao, Cheng, Van and Tam (2021) found out that male nurses were determined to stand out, and identified professionalism as key for them to gain respect and trust from the multidisciplinary team and the patients. As such, they may thus demonstrate better nursing care documentation than their female counterparts. Similarly, WHO (2020) found out that globally, 9 out of every 10 nurses are female.

Most of the respondents 33 (38.4%) 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 respondent had a diploma in nursing at 56 (65.1%). These findings on age, experience and education level perhaps are related to emigration of nurses to other countries as they gain experience. Most of the countries seeking to recruit nurses from other countries put a condition of some experience, and while this at least this allows a nurse to give back even though slightly to their own country, also 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 explored opportunities in management as they identified little chance to advance in clinical practice (East, Arundo, Loefer, and Evans, 2014). The Nursing Council of Kenya 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, 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<sup>1</sup>, Nursing Council of Kenya, 2022<sup>2</sup>). The aim is to have a legal framework for institutionalization of the Advanced nurse practice in Kenya.

### **Quality of Nursing Care Documentation**

High-quality nursing care documentation is essential for patient safety and is widely recognized as an indicator of the overall standard of healthcare provided (Moldskred, Snibsoer, & Espehaug, 2021). Effective records enable the multidisciplinary team to detect and respond to changes in a patient's condition promptly. In the context of increasing healthcare-related litigation, accurate documentation also serves as crucial legal evidence to support care decisions (Samuels, 2023).

Clear, complete patient records are vital for assessing healthcare system performance (Ismawati et al., 2021; Tadese et al., 2024). Poor documentation is strongly linked to poor patient outcomes, while high-quality notes support better care by promoting critical thinking and clinical reasoning (Moldskred, Snibsoer, & Espehaug, 2021). Zaheya, Maaitah, and Hani (2017) similarly highlight that documented nursing care directly reflects the quality-of-care patients receive.

In this study, the quality of nursing documentation was assessed through an audit of 158 patient files from three hospitals. Records of patients hospitalized for over 72 hours were evaluated using 11 key indicators of quality nursing documentation and were cross-verified with nurses' questionnaire responses to gauge accuracy and thoroughness in practice.

The results are outlined in Table 2 below.

**Table 2: Quality of Nursing Documentation**

No	Phase/issue	Baseline (n=158)		Chi square	P-value
		Yes n(%)	No n(%)		
1.	Patient's details appearing on every sheet of nursing kardex	70(44.3)	88(55.7)	43.95	3.37
2.	Detailed initial nursing assessment documented	20(12.7)	138(87.3)	5.53	0.02
3.	Focused assessment during every shift indicating the specific status of previous health issues and any new health issues.	28(17.7)	130(82.3)	0.68	0.41
4.	Nursing interventions in line with issues identified clearly documented per shift	36(22.8)	122(77.2)	0.22	0.64
5.	Responses to the nursing interventions documented	39(25.2)	116(74.8)	1.34	0.25
6.	Instructions for next shift indicated	34(21.7)	123(78.3)	0.02	0.89
7.	The nursing kardex entries are specific	15(9.6)	142(90.4)	10.81	0.00
8.	The nursing kardex entries are objective	20(12.7)	137(87.3)	5.38	0.02
9.	The nursing kardex entries are complete	32(20.3)	126(79.7)	0.01	0.94
10.	Timeliness of entries observed	49(31.0)	109(69.0)	8.23	0.00
11.	Ownership of entries done by way of name and signature	18(11.4)	140(88.6)	7.49	0.01

The baseline phase of this study exposed critical gaps in nursing care documentation that directly impact patient safety and healthcare quality. Nurse managers confirmed these deficiencies, explaining that they face persistent challenges in ensuring that documentation meets required standards. Proper nursing documentation is not only a clinical necessity but also a legal safeguard and an indicator of institutional performance (Moldskred, Snibsoer, & Espehaug, 2021). Nurse managers play a vital role by motivating nurses to document competently, overseeing compliance, and cultivating a workplace culture that values high-quality, complete records (Samuels, 2023).

A significant issue identified was the lack of consistent patient details on every sheet in patient files. This is not limited to nursing documents but extends across records created by other healthcare cadres. Only 44.3% of the files reviewed were fully complete, while 55.7% were missing critical patient identifiers. If a single loose sheet were to fall out, tracing it back to the right patient would be impossible, risking serious mix-ups (Gurung, 2022; Akhu, 2020). This threat to patient safety is not theoretical; at Kenyatta National Hospital, a patient once underwent a craniotomy meant for another due to identification errors (Merab, 2018). The WHO (2023) identifies patient misidentification as a leading source of preventable harm, with consequences that may include wrong-site surgeries, medication errors, and severe adverse effects.

Such mix-ups have far-reaching effects, increasing the risk of complications like infections, falls, and extended hospital stays, all of which drive up treatment costs for patients and strain the health system (Auraen, Saar, & Klazinga, 2020). Inaccurate records can also damage nurses' professional reputations, leading to low morale and job dissatisfaction (Singh et al., 2024). Furthermore, legal action against facilities for such errors can drain institutional resources and erode public trust (Sumstine, 2023; Campbell, 2021). Strong leadership is key to preventing these risks. According to the American Nurses Association (2023), resilient health systems require leaders who build supportive environments, encourage safe practices, and prioritize continuous quality improvement.

Poor documentation also signals a failure in nursing leadership to uphold standards. Effective leaders foster collaboration, professional development, and evidence-based practice, all of which rely on complete, reliable records (Akmal et al., 2022). Leaders must emphasize data-driven decision-making, as quality documentation generates the information needed to monitor trends, inform policy, and improve outcomes (Wilkinson, Carryer, & Budge, 2018). When documentation is poor, this data is lost, and with it, opportunities for system-wide improvement.

Beyond clinical implications, errors in documentation affect patient trust. Campbell (2021) found that many patients change providers when they lose trust in record-keeping. Gibson (2022) notes that 50% of patients will switch providers if they find their health information has been mishandled. In the digital age, reputational damage spreads quickly, with complaints circulating online to vast audiences. Hooiveld (2024) and Alhur (2023) both argue that misplaced or inaccurate records break continuity of care and increase the risk of medical errors.

Respectful care begins with addressing patients by name. Soetan (2022) describes a person's name as their first "gift." Epic Systems (2021) and Feng (2016) note that using names fosters inclusivity and demonstrates respect. Riplinger, Jimenez, and Dooling (2020) emphasize that correctly naming patients in all records is a foundational safety measure that promotes accurate identification and continuity of care. Arslan, Goktas, and Buldukogu (2019) confirm that patients feel valued when called by name; a simple yet powerful action that strengthens trust.

Initial nursing assessments are another critical gap. Only 12.7% of patient files reviewed contained a detailed initial assessment. Yet assessments establish the baseline for care planning and individualized treatment (Bowen, Draper, & Moore, 2024). Without them, nurses have no rationale for interventions and no evidence to defend actions if questioned (Royal Children's Hospital, 2017). Nurse managers attributed this shortfall to high workloads and time pressures; challenges that can leave nurses struggling to balance care delivery with documentation. Ernstmeyer, Christman, and Eau (2022) stress that effective prioritization is key to avoiding burnout and maintaining high-quality care.

A lack of detailed assessments compromises patient-centered care and interprofessional collaboration. When nurses fail to document thorough assessments, other team members may disregard nursing notes altogether, undervaluing the nurses' contribution (Vera, 2023; Lamar University, 2021). Guan, Chen, Li, and Zhang (2024) found that better patient experiences correlate with lower mortality rates, highlighting how essential comprehensive assessments are to good outcomes.

Focused assessments per shift were documented in only 17.7% of the files reviewed. Kleber (2021) explains that these assessments detect subtle changes in a patient's condition, enabling early interventions that improve outcomes. Without regular focused checks, the continuity and responsiveness of care is compromised, raising the risk of complications and delays. The study also found that only 22.8% of patient files showed nursing interventions clearly aligned with assessment findings. This alignment is essential for demonstrating that nurses use clinical judgment and evidence to guide care (Monteiro, 2024). Interventions without supporting data reflect a trial-and-error approach rather than evidence-based practice. This gap undermines the scientific aspect of nursing, which depends on applying knowledge and critical thinking to clinical situations (Tanner, 2006).

Jemal et al. (2021) and Asadi, Ahmadi, Mohammadi, and Vaismoradi (2024) emphasize that nurses play a crucial role in implementing and clarifying medical orders. Without up-to-date



assessment data, nurses cannot exercise the clinical judgment needed to decide when to clarify a doctor's orders or advocate for patients' needs. Nurses have professional autonomy but must operate within their scope of practice (Nursing Council of Kenya, 2021) while collaborating with the wider team to achieve shared outcomes.

Another significant issue was the poor state of nursing Kardex updates. Incomplete or outdated Kardexes disrupt communication, delay care, and increase the risk of medication errors. They also damage nurses' professional image and undermine teamwork (Dhandapani & Gopichandran, 2019). A robust Kardex reflects the unique, 24/7 role nurses play in coordinating patient care (Balasi et al., 2020). Without clear, timely updates, nurses miss opportunities to assert their contribution and build trust with the multidisciplinary team. Responses to nursing interventions were documented in only 25.2% of files. Yet this step is vital, as it shows whether care goals are met and what adjustments are needed (Ernstmeyer & Christman, 2021). Without documented responses, nurses cannot justify their actions, guide the next shift, or refine care plans.

Similarly, only 21.7% of files included clear instructions for the incoming shift. Fernandez et al. (2022) and Park (2020) emphasize the value of structured handovers using models like SBAR (Situation, Background, Assessment, Recommendations) to improve continuity and avoid critical gaps. When outgoing nurses fail to document updates, incoming staff waste time piecing together fragmented information, risking delays and errors in patient care. These gaps also reflect missed opportunities for nurses to demonstrate achievement; a motivating factor in any profession (Steinmayr, Weidinger, Schwinger, & Spinath, 2019). Documenting results shows pride in work and a commitment to high standards. Gonzalo (2023) and Virginia Henderson's theory remind us that nursing bridges gaps in patient capability and knowledge, so measuring success is crucial for refining care strategies.

The audit found that 90.4% and 87.3% of Kardex entries lacked specificity and objectivity, respectively. Notes were often incomplete (79.7%), untimely (69%), and unsigned (88.6%). The American Nurses Association (2010) and Nursing Council of Kenya (2024) stress that quality documentation must be factual, complete, specific, and timely. Vague or subjective notes can lead to misinterpretation, poor decisions, and legal liability (Mrayyan et al., 2023). Specific documentation supports clear communication among the care team, enables precise prioritization, and fosters trust (Iraizoz et al., 2023). Christidis et al. (2022) argue that nurses must contextualize records for professional audiences, not just academic purposes. Well-documented care notes improve teamwork and job satisfaction by ensuring colleagues have reliable, actionable information.

Timeliness is equally critical. The Nursing Council of Kenya (2024) recommends that notes be written immediately or shortly after care is given to prevent omissions and ensure accuracy. Timely records provide a coherent narrative of the patient's journey, supporting early intervention and better outcomes. The issue of unsigned entries signals a lack of accountability, and a major concern raised by nurse managers. Wong (2022) and Tadese et al. (2024) stress that nurses must sign their notes to take responsibility for their content. This ownership builds trust within the team and makes it easier to follow up if questions arise (Schmit, 2024). Accountability is a hallmark of professional nursing (Amin, 2024) and underpins patient safety and interprofessional collaboration.

In summary, the baseline findings reveal that significant work remains to ensure nursing documentation fully supports safe, effective, and patient-centered care. Improving specificity,

objectivity, completeness, timeliness, and accountability in nursing records is essential for building a culture of excellence and trust within the health system

Further, levels of the total score of the nursing care documentation practice were measured by 75<sup>th</sup> percentile cut off point. The overall results revealed 22% of nursing care documentation practices were well done while most (78%) 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.



*Figure 1: Quality of Nursing Care Documentation in the Baseline Phase*

### **Intervention Phase**

The baseline results revealed significant gaps in nursing care documentation, posing risks to effective communication, patient safety, and the achievement of desired health outcomes by the multidisciplinary team. Asmirajanti (2019) emphasizes that every nursing activity addressing patient health needs must be supported by clear documentation that demonstrates critical thinking and sound clinical reasoning. To address this gap, a Continuous Professional Development (CPD) module was developed and implemented at Nyeri County Referral Hospital.

This CPD session engaged the multidisciplinary healthcare team, including facility and ward managers, underlining the importance of leadership in driving documentation quality. After the training, a five-day follow-up provided mentorship for 34 nurses at Nyeri Referral Hospital, who had participated in the baseline survey. Post-intervention evaluations included a reassessment of documentation practices and an analysis of individual factors influencing these practices, compared with baseline data to measure impact.

A unique aspect of the CPD module was its use of systems thinking, an approach that recognizes that healthcare challenges exist within complex, interdependent environments rather than in isolation (Rehbock et al., 2023). Systems thinking helps identify how various elements interact and affect outcomes, enabling solutions that consider the broader context (WHO European Region, 2022; Morgan et al., 2023). Health systems, by nature, are complex

and adaptive, shaped by dynamic interactions between people, processes, equipment, infrastructure, and policies (Clarkson et al., 2018; Kapur, 2023). The World Health Organization (WHO) framework for health systems strengthening illustrates this complexity through six interconnected building blocks; service delivery, health workforce, health information systems, medical products and technologies, financing, and leadership/governance (Kwamie, Ha, & Ghaffar, 2021). Addressing weaknesses in nursing documentation requires considering how these blocks interact. For instance, poor staffing or lack of materials can weaken documentation quality, while supportive leadership and sufficient resources strengthen it.

The module applied Ferlie and Shortell's (2001) model, which conceptualizes health systems at four levels: individual patients, care teams, health facilities, and the broader political and economic context. Each level influences nursing documentation. At the patient level, factors like age, communication ability, and attitudes affect how nurses record observations. Within care teams, the team's culture and commitment to quality documentation shape practice (Demsash et al., 2023). At the facility level, available resources directly impact how well nurses can maintain detailed and timely records. At the broader system level, governance, policy, and funding decisions set the conditions under which all this occurs.

The CPD module emphasized that good nursing documentation must reflect individual patient details, including subjective aspects like pain and stress, to ensure continuity of care and clear communication across the team. It also highlighted the WHO's seventh building block; people; proposed by Health Systems Global (2014). This stresses the importance of capturing patients' voices in records rather than making unsupported assumptions. In summary, the CPD module's systems approach addressed the complexity of nursing documentation and equipped nurses with skills to improve their practice within the larger health system. This approach helps ensure that documentation not only meets standards but also supports patient-centered, safe, and high-quality care.

### **Quality of Nursing Care Documentation Results in The Post Intervention Phase**

An evaluation of the quality of nursing care documentation was conducted six months after the intervention phase to assess the impact of the implemented changes. During this evaluation, a total of 62 patient case files were audited using the same 11 parameters that had been assessed during the baseline phase. The audit was carried out in Nyeri County Referral Hospital, the facility where the intervention had been implemented. Each case file was reviewed in detail, and the documented nursing care was assessed against the same 11 quality indicators previously used. The results of this post-intervention review are presented in Table 5.

**Table 5: Comparison of Quality of Nursing Care Documentation in the Baseline and Post Intervention Phase in Nyeri County Referral Hospital**

No	Phase /issue	Baseline results at Nyeri referral hospital (n=63)		Chi square	P-value	Post intervention (n=62)		Chi square	P-value
		Yes n (%)	No n (%)			Yes n (%)	No n (%)		
1.	Patient's details appearing on every sheet of nursing kardex	28(44.4)	35(55.6)	0.2	0.66	58(93.5)	4(6.50)	47.03	0.00
2.	Detailed initial nursing assessment documented	9(14.3)	54(85.7)	16.82	0.00	32(51.6)	30(49.4)	0.065	0.80
3.	Focused assessment during every shift indicating the specific status of previous health issues and any new health issues.	10(15.9)	53(84.1)	15.1	0.00	40(64.5)	22(35.5)	5.23	0.02
4.	Nursing interventions in line with issues identified clearly documented per shift	9(14.3)	54(85.7)	16.82	0.00	54(87.1)	8(12.9)	34.13	0.00
5.	Responses to the nursing interventions documented	10(15.9)	53(84.1)	15.1	0.00	54(87.1)	8(12.9)	34.13	0.00
6.	Instructions for next shift indicated	13(20.6)	50(79.4)	10.64	0.00	54(87.1)	8(12.9)	34.13	0.00
7.	The nursing kardex entries are specific	7(11.1)	56(88.9)	20.66	0.00	50(80.6)	12(19.4)	23.29	0.00
8.	The nursing kardex entries are objective	9(14.3)	54(85.7)	16.82	0.00	54(87.1)	8(12.9)	34.13	0.14
9.	The nursing kardex entries are complete	13(20.6)	50(79.4)	10.64	0.00	40(64.5)	22(35.5)	5.23	0.02
10.	Timeliness of entries observed	22(34.9)	41(65.1)	2.35	0.13	38(61.3)	24(38.7)	3.16	0.00
11.	Ownership of entries done by way of name and signature	8(12.7)	55(87.3)	18.67	0.00	58(93.5)	4(6.5)	47.03	0.07



In the post intervention phase, an improvement was observed with 58(93.6%) of the case file having the details on every sheet. The improvement noted can go a long way towards reducing medical errors and missed nursing care, with improved quality and care outcomes. Awang, et al., (2023) shed light on the role of quality in a health system, to include reducing wastage and avoiding adverse health care outcomes such as death, and disease complications. This requires a paradigm shift from perceiving the consumers of health care services as patients to customers (Young & Smith, 2025). Overall, the high compliance rate of 58(93.5%), up from 16(12.7%) in the baseline phase in regard to documentation ownership is a strong indicator of the positive impact of the intervention on reinforcing professionalism and accountability in nursing practice.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

After the intervention, nursing documentation at Nyeri County Referral Hospital improved significantly. Patient details appeared on 93.6% of sheets, reducing errors and enhancing patient safety (Awang et al., 2023). Detailed assessments rose to 51.6%, while alignment of nursing actions with identified issues improved to 87.1%, reflecting stronger clinical reasoning (Asadi et al., 2024). Timeliness, completeness, and clear shift handover instructions also increased, improving care continuity (Seada et al., 2022). Nurse signatures rose to 93.5%, demonstrating accountability. These improvements align with global standards outlined by the World Health Organization (WHO, 2018), which emphasize accurate, timely, and complete documentation as essential to quality, patient-centered care and safety. The gains also reflect key principles from the International Council of Nurses (ICN), including accountability, continuity, and professional responsibility in nursing records.

Success was driven by strong leadership engagement, institutional goodwill, and real-time mentorship. However, persistent staffing constraints may have limited sustained progress. Overall, these results underscore that high-quality documentation is fundamental to reducing harm, supporting interprofessional collaboration, and strengthening nursing professionalism in line with international best practices.

### **Recommendations**

The study makes the following recommendations for health facilities to improve the institutional dynamics that support nursing documentation practices. The health facility management should:

- i) Implement targeted refresher training and conduct regular audits, utilizing standardized checklists to monitor progress and evaluate improvements in previously identified weak areas.
- ii) Address systemic barriers such as inadequate staffing. Improvements in nurse-to-patient ratios, along with reductions in overtime hours and sick leave, would serve as indicators of progress in resolving staffing-related challenges

## REFERENCES

- Ahmed A., and Rafiq N., (2019). Improving nursing care documentation via reducing the written workload.
- Asmirajanti, M., Hamid, A. Y. S., & Hariyati, R. T. S. (2019). Nursing care activities based on documentation. *BMC Nursing*, 18(1), 1-5.
- Bolado G., et al (2023). Documentation practice and associated factors among nurses working in public hospitals in Wolaita Zone, Southern Ethiopia
- Brown, L. (2024). The role of documentation in nursing accountability. *Journal of Nursing Ethics and Practice*, 31(2), 112–120
- Christidis, L., Thompson, K., & Malik, J. (2022). Effective clinical communication through nursing records. *Clinical Nursing Review*, 40(1), 56-63
- Clarkson, J., Dean, J., & Ward, J., (2018). Complex systems in healthcare: An adaptive approach.
- Demsash, A., Mekonnen, A., & Kassa, H., (2023). Team dynamics and documentation quality among nurses. *East African Medical Journal*
- Dhandapani, S., & Gopichandran, V., (2021). Communication gaps due to poor Kardex documentation. *Nursing Reports*
- 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.
- Epic Systems (2021). Using patient names for safer care: A data perspective. *Epic White Papers*
- Feng, Y. (2016). Respect and identity in patient-centered care. *International Journal of Healthcare Communication*
- Ferlie, E., & Shortell, S. M., (2001). Improving the quality of health care in the United Kingdom and the United States: A framework for change. *The Milbank Quarterly*
- Gibson, R. (2022). Patient trust and electronic health records: A growing concern. *Journal of Health Communication*, 27(3), 145–152.
- Gonzalo, J. D. (2023). Measuring outcomes in nursing: The missing link in care improvement. *International Journal of Nursing Practice*, 29(1), 35–42.
- Guan, Y., Chen, H., Li, X., & Zhang, W. (2024). Patient experience and hospital outcomes: A cross-sectional study. *Journal of Patient Experience*, 11, 1–10.  
<https://doi.org/10.1177/2374373524123456>
- Haddad L., Annamaraju P., Tammy J., Bultler T. (2022). Nursing shortage. *National Library of Medicine*
- Hooiveld, M. (2024). Digital reputations and healthcare: The patient voice online. *Health Informatics International*, 18(2), 88–96.
- Iraizoz, B., Gómez, A., & Torres, F. (2023). Clarity in clinical documentation: Impact on team performance. *Journal of Clinical Nursing Documentation*, 15(4), 203–210

- Jemal, Y., Abate, M., Teshome, D., & Alemu, H. (2021). Nurses' roles in clarifying and implementing medical orders: A clinical perspective. *International Journal of Nursing Studies*, 58(2), 101–109.
- Kapur, A. (2023). Health systems as adaptive networks: A systems thinking approach. *Global Health Governance Review*, 19(1), 44–52.
- Kleber, R. J. (2021). Focused assessments in nursing: Enhancing early intervention and care planning. *Journal of Advanced Nursing Practice*, 33(3), 176–183.
- Kwamie, A., Ha, B. T., & Ghaffar, A. (2021). Strengthening health systems through governance and leadership: Lessons from LMICs. *Health Policy and Planning*, 36(Suppl\_1), i1–i6. <https://doi.org/10.1093/heapol/czaa161>
- Mannion R., and Davies H. (2018). Understanding organization culture for healthcare quality improvement
- Mao A., Cheng P., Van and Tam H. (2021). "I am called girl, but that doesn't matter" - perspectives of male nurses regarding gender-related advantages and disadvantages in professional development.
- Mathioudakis, A., Rousalova, I., Gagnat, A. A., Saad, N., & Hardavella, G. (2016). How to keep good clinical records. *Breathe*, 12(4), 369-373.
- Merab, E. (2018, August 6). Wrong patient underwent brain surgery at KNH, report shows. *Daily Nation*. <https://nation.africa>
- Miller P. (2016). Improving nursing documentation and reducing risk. *HCPPro*. ISBN: 978-68308-068-8.
- Monteiro, L. F. (2024). Aligning nursing interventions with assessment data: Towards evidence-based care. *Journal of Clinical Nursing Practice*, 30(1), 91–98.
- Morgan, H., Singh, A., Bello, R., & Tan, M. (2023). Systems thinking in healthcare quality improvement: A review of best practices. *Global Health Systems Journal*, 14(2), 101–110.
- 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), 1-6.
- NEJM Catalyst, (2017). What is patient centered Care?
- Nursing Council of Kenya, (2022<sup>1</sup>). Scope of practice for advanced practice in nursing
- Nursing Council of Kenya, (2022<sup>2</sup>). Student training guidelines; Advanced practice in nursing
- Nyawra L., et al (2022). Management of human resources for health: implications for health systems efficiency in Kenya. *BCM Health services research*
- O'Neill, N. (2022). The Eight Principles of Patient-Centered Care
- Obioma C. (2017). Improving the Quality of Nursing Documentation in Home Health Care Setting.
- Omoit D. (2021). Compliance with the Medical Records Documentation Standard Operating Procedure Among Health Workers in Bungoma Hospital County, *Kenya*.

- Park, S. H. (2020). Improving shift handovers using structured communication tools. *Nursing Management Today*, 28(4), 55–61.
- Rahman, F., Ibrahim, M., & Diab, S. (2021). Enhancing nursing documentation accuracy through structured record tools. *Journal of Advanced Health Documentation*, 12(3), 140–148.
- Rehbock, A., Müller, L., Schmid, F., & Becker, H. (2023). Applying systems thinking to nursing practice: Bridging theory and application. *International Journal of Nursing Systems*, 9(1), 23–32.
- Riplinger, L., Jimenez, E., & Dooling, J. (2020). Name accuracy in patient records: A foundational element of patient safety. *Journal of Health Information Management*, 34(2), 67–74.
- Royal Children's Hospital. (2017). Clinical practice guideline: Nursing assessment and documentation standards. Melbourne: Royal Children's Hospital Publications.
- Saputra, R. A. (2020). Timely and complete documentation: A professional obligation in nursing. *Indonesian Journal of Nursing Practice*, 5(2), 89–96.
- Schmit, R. J. (2024). Accountability in nursing documentation: A systems-based approach. *Journal of Nursing Regulation*, 15(1), 25–33.
- Seada, A. M., El-Sayed, N. A., Taha, M. A., & Salem, H. M. (2022). Impact of structured handover tools on nursing documentation and patient safety. *International Journal of Nursing Studies*, 59(3), 143–151.
- Simpson D., Hamilton S., McSherry R., and McIntosh R. (2019). Measuring and assessing healthcare organizational culture in the England's National Health services: *A snapshot of Current tools and tool use*.
- Singh, P., Kumar, R., Patel, V., & Shah, S. (2024). Emotional burnout and documentation errors among nurses: A multicenter study. *Asian Journal of Nursing and Health Sciences*, 8(1), 27–35.
- Soetan, F. A. (2022). The significance of names in nursing care: Respect and identity in clinical practice. *Journal of Holistic Nursing*, 40(2), 96–103.
- Steinmayr, R., Weidinger, A. F., Schwinger, M., & Spinath, B. (2019). Motivation and achievement in learning: How feedback and recognition influence performance. *Educational Psychology Review*, 31(2), 211–234.
- Tadese, M., Bekele, D., Mulu, E., & Yimer, H. (2024). Quality of nursing documentation in public hospitals: A cross-sectional study in Ethiopia. *BMC Nursing*, 23(1), 15–24.
- Tanner, C. A. (2006). Thinking like a nurse: A research-based model of clinical judgment in nursing. *Journal of Nursing Education*, 45(6), 204–211.
- 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.
- Vafaei, S. M., Manzari, Z. S., 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).



- Vera, M. J. (2023). Interprofessional collaboration in nursing: Documenting value and voice. *International Journal of Collaborative Practice*, 10(4), 58–65.
- WHO. Human resources for health country profiles: Japan, 2017, <https://iris.wpro.who.int/bitstream/handle/10665.1/13631/9789290618188-eng.pdf>. Accessed 11 May 2023.
- Wolters Kluwer, (2018). Why patient-centered care is so important
- Wong, H. Y. (2022). Signature practices in clinical records: Linking accountability to care outcomes. *Journal of Professional Nursing Practice*, 38(1), 72–79.
- World Health Organization, Organization of Economic Corporation Development, & International Bank for Reconstruction and Development, (2018). Delivering Quality health services; *A global imperative for universal health coverage*
- World Health Organization. (2020). State of World's Nursing: Investing in Education, Jobs and Leadership.
- Young, K. M., & Smith, L. R. (2025). Rethinking patient care: From service recipients to healthcare customers. *Journal of Healthcare Management and Innovation*, 12(2), 101–108.
- Zaheya A., Maaitah R., Hani B. (2017). Quality Nursing Documentation: Paper- Based Health Records versus Electronic- Based Health Records. *Journal of clinical Nursing* 27 (3-4)