

DOCUMENTATION PRACTICES AND ASSOCIATED FACTORS AS PERCEIVED BY STAFF NURSES

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ABSTRACT

Background: Nursing documentation is essential for patient safety, continuity of care, communication, and legal accountability. However, inadequate knowledge and patient-related challenges may affect documentation practices.

Objective: To assess nurses' knowledge and perceptions of nursing documentation and identify associated patient-related and organizational factors.

Methodology: A cross-sectional correlational study was conducted among 150 staff nurses in two tertiary care hospitals in Lahore. Data were collected through a structured questionnaire and analyzed using descriptive statistics, Spearman's correlation, and non-parametric tests.

Results: The mean knowledge score was $4.78 \pm 1.81/9$, with 70% of nurses having poor knowledge. Perceptions toward documentation were strongly favorable (mean = 1.54 ± 0.39). Patient-related factors were significantly associated with documentation practices ($r = 0.333$, $p < 0.001$), while organizational factors were not significant ($r = 0.142$, $p = 0.082$). Knowledge also differed significantly by gender and work unit.

Conclusion: Nurses had favorable perceptions but inadequate knowledge of nursing documentation, particularly regarding legal and professional accountability. Regular documentation training and continuing professional development are recommended.

Keywords: Nursing documentation; Knowledge; Perceptions; Documentation practices; Patient factors; Staff nurses; Patient safety.

INTRODUCTION

CHAPTER 1

Nursing documentation is a vital component of professional nursing practice that facilitates effective communication among healthcare providers and enhances patient safety and quality of care. Accurate, clear, and timely documentation reflects nurse's professional, ethical, and legal

responsibilities while supporting continuity of care, clinical decision-making, patient outcome evaluation, and collaboration among healthcare teams (Riaz, Nazir et al. 2022).

A recent study also reported that 33% of patients had unrecorded vital signs, while more than 75% of adverse events were associated with missed vital sign documentation, emphasizing the critical role

of proper nursing records in preventing patient deterioration and improving healthcare quality (Samani and Rattani 2023).

Since Florence Nightingale's time, nursing documentation has been recognized as an important part of the patient care process and is a basic responsibility of nurses working in all healthcare settings (Nightingale 1992).

According to the World Health Organization, inadequate communication among medical staff is a significant factor in unfavourable outcomes and medical errors, many of which can be prevented with appropriate documentation standards since they promote sound clinical judgment, facilitate information sharing, and reduce the likelihood of errors in the delivery of care (World Health Organization 2017).

International research has shown that delayed, incorrect or insufficient nursing documentation can have an adverse effect on patient outcomes. Medication errors have been associated with incomplete documentation which can result in failure to identify the patient's worsening state, duplication or omission of nursing interventions, and higher rates of morbidity and mortality all (Rothman, Solinger et al. 2012, Feleke, Mulatu et al. 2015, Lee,

Thate et al. 2025). Moreover, poorly maintained records can also hinder healthcare organization's ability to carry out audits, guarantee legal protection, and apply evidence-based practice enhancements (Blair and Smith 2012, Mamseri 2012).

Nursing documentation shows visible flaws in many healthcare settings, especially in low and middle-income countries, despite its acknowledged significance. Studies conducted in Asia and Africa often indicate problems with nursing documentation, including incomplete assessments, missing signatures, a lack of chronological sequence, and poor legibility.

According to a cross-sectional survey, only 30.4% of Ethiopian nurses demonstrated good documentation practice (Molla, Temesgen et al. 2024), highlighting a significant gap between approved documentation standards and actual nursing practice. Similar findings showed that 52.2% of nurses in public hospitals had

inadequate documentation practices (Tasew, Mariye et al. 2019).

There are a number of factors that affect nursing documentation practices, which can be divided into three categories: organizational, patient, and nurse-related issues. Lack of training, negative attitudes about documentation, insufficient expertise, and a lack of awareness are all nurse-related problems. Organizational variables that have been repeatedly identified as significant obstacles to successful documentation include a high workload, a lack of staff, low nurse-to-patient ratios, a lack of documentation guidelines, a lack of documentation tools, and time constraints. Documentation practices may become more challenging due to patient-related factors, such as patient distress, anxiety, language problems, and unfavourable views toward nurses (Tasew, Mariye et al. 2019, Molla, Temesgen et al. 2024).

A statistically significant positive correlation was established between staff nurse's perception about patient safety results and efficient documentation practices. Better documentation was associated with improved patient identification, medication safety, effective handover communication, preventing falls and pressure injuries, and early detection of clinical deterioration. These findings support the notion that nursing documentation is more than just an administrative task but it is a therapeutic intervention that has a direct impact on patient safety and service quality (Adel Mohamed Tawfik, Hassan El-sayed Mahfouz et al. 2024).

Therefore, the aim of this study is to assess the knowledge and perceptions of staff nurses regarding documentation practices, and to identify the organizational and patient-related factors associated with those practices, in two tertiary care hospitals namely Bahria Town International Hospital and Bahria International Hospital in Lahore, Pakistan. By examining the factors influencing documentation among nurses in this context, this research aims to contribute evidence that can guide improvements in nursing practice and documentation quality.

Background

Nursing documentation is important for ensuring

quality care. Inadequate documentation increases the possibility of mistakes and compromises health care outcomes. Therefore, in order to minimize the possibility of errors, nurses must ensure accuracy and completeness when documenting and recording facts as quickly as possible. (Bjerkkan, Valderauene et al. 2021).

Lack of knowledge about documentation in nursing staff, lack of importance for such documentation and dissatisfaction among nursing staff regarding documentation practices was reported in previous studies in Pakistan (Khattak, Zaman et al. 2016).

Problem Statement

Despite ongoing improvements in healthcare systems, considerable gaps still remain in nursing documentation practices, including delayed, incomplete, or missing documentation. Previous studies have shown that nurses frequently encounter challenges such as heavy workloads, insufficient documentation training, and inconsistent administrative support, all of which negatively affect the quality of nursing documentation (Motea, Rantetampang et al. 2016, De Groot, De Veer et al. 2022).

Research Questions

What is the level of documentation practice among staff nurses?
What are the factors that might influence the documentation practices among staff nurses?
What is the relationship between perceived documentation practices and organizational and patient-related factors among staff nurses.

Conceptual Framework

The conceptual framework for this study is developed to illustrate the relationships among nursing documentation knowledge, perceptions, and associated factors, namely organizational, patient, and nurse-related factors – among staff nurses working in two tertiary care hospitals in Bahria Town Lahore, Pakistan, namely Bahria Town International Hospital and Bahria International Hospital.

The framework is guided by evidence from existing

literature, particularly the findings of (Tasew, Mariye et al. 2019, Adel Mohamed Tawfik, Hassan El-sayed Mahfouz et al. 2024, Molla, Temesgen et al. 2024), which highlights that nursing documentation knowledge, perceptions, and practices are shaped by multiple interacting factors.

Variables Explanation

In this study, documentation practices encompass perceived/self-reported documentation practices which serve as the primary focus of inquiry.

The conceptual framework proposes that there are three main types of factors that affect documentation practices which are organizational factors, patient factors, and nurse related factors. A nurse's knowledge, attitudes, abilities, education, and prior documented

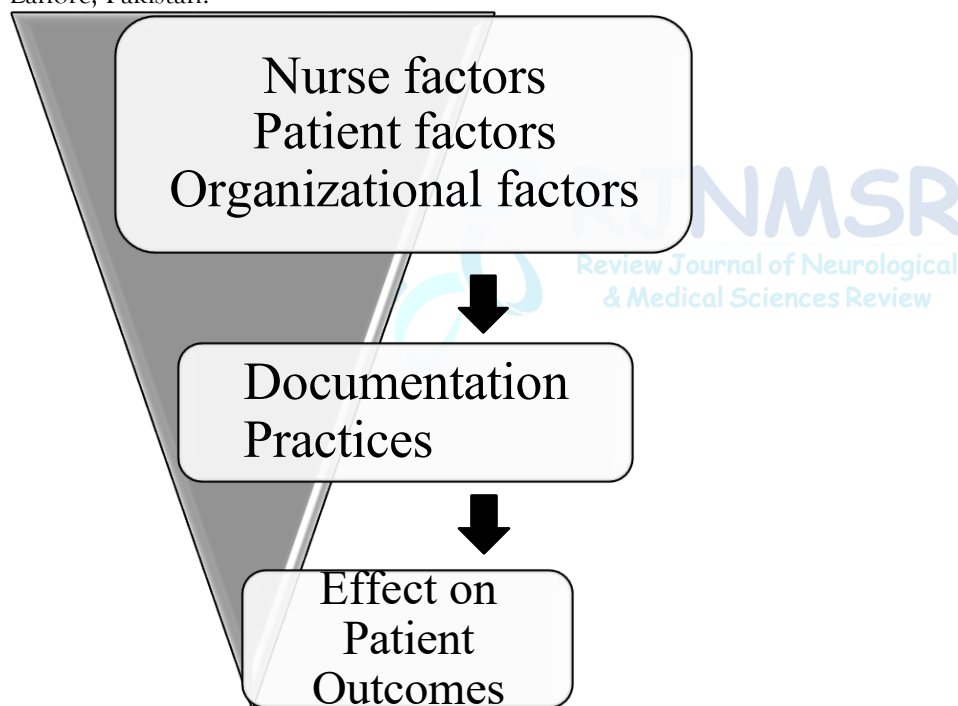
training are all considered nurse-related variables. Research indicates that nurses who possess sufficient knowledge and a positive attitude towards documentation are more likely to follow documentation guidelines and generate records of superior quality (Blair and Smith 2012, Molla, Temesgen et al. 2024).

Documentation procedures are also associated with organizational settings. This includes the nurse-to-patient ratio, the daily workload, time limits, and insufficient documentation training. Nurse's time is frequently restricted by heavy workloads and personnel shortages. This increases the likelihood of incomplete or delayed documentation. It has been shown that having access to standardized documentation formats, regular supervision, and supportive management all improve documentation standard compliance (Tasew, Mariye et al. 2019).

Patient-related factors, such as patient's perception of illness, severity of illness, patient cooperation, communication barriers, and emergency situations, also influence nurse's ability to document effectively. Critically ill patients and life-threatening situations require prompt clinical attention, which can lead to delayed or missed reporting, affecting record quality and completeness (Molla, Temesgen et al. 2024).

However, insufficient documentation practices can negatively affect the patient by increasing the

possibility of adverse events that can lead to miscommunication, missing nursing interventions, and resulting in duplicated interventions. As a result, the conceptual framework highlights the importance of nurse's documentation practices in the healthcare settings. In summary, this conceptual framework offers an organized presentation of how organizational factors, patient factors, and nurse factors collectively shape nursing documentation knowledge and perceptions among staff nurses. This framework serves as a guide for the current study's identification of key variables, understanding their interrelationships, and investigation of the factors associated with documentation practices among staff nurses in the two tertiary care hospitals in Lahore, Pakistan.



Significance

For Students:

Understand the importance of documentation practices

For Faculty & Institutions:

Improve the existing documentation practices

For Policymakers:

Implement measures to address lack of organizational support, staff shortages, and insufficient training (Alhawri, Rampal et al. 2020, Rostamvand, Abdi et al. 2022). **For Nursing Profession:**

Enhance documentation practices to reduce the risk of adverse events, including pressure injuries, incorrect medication administration, and

misinterpretation of clinical changes (Cengiz, Celik et al. 2016, Bjerkan, Valderaune et al. 2021).

Hypothesis

Null Hypothesis (H_0):

There is no statistically significant relationship between documentation practices and associated factors as perceived by staff nurses.

Alternative Hypothesis (H_1):

There is a statistically significant relationship between documentation practices and associated factors as perceived by staff nurses.

Objectives

Assess nurse's knowledge regarding documentation practices
Assess nurse's perceptions regarding documentation practices
Assess patient factors affecting documentation practices
Assess organizational factors affecting nursing documentation.

CHAPTER 2

LITERATURE REVIEW

Nursing documentation serves as a legal, professional, and clinical record that reflects the quality of nursing care provided and supports communication among healthcare professionals. Accurate documentation ensures continuity of care, facilitates clinical decision making, and plays a vital role in promoting positive patient outcomes (Riaz, Nazir et al. 2022).

Several studies have examined nurse's knowledge, perceptions, and documentation practices and the factors influencing them in different healthcare settings. A cross-sectional study conducted among nurses working in eight public hospitals in the Amhara region of Ethiopia found only 30.4% of nurses demonstrating good documentation practice. Factors such as lack of training, heavy workload, absence of documentation guidelines, and poor supervisory support were significantly associated with poor documentation practices, (Molla, Temesgen et al. 2024).

Another study conducted in Egypt further

supported these findings, highlighting that nurse's knowledge and attitudes toward documentation significantly influenced their documentation practices. Nurses who had received training and perceived documentation as an essential component of patient care demonstrated higher levels of compliance with documentation standards (Adel Mohamed Tawfik, Hassan El-sayed Mahfouz et al. 2024).

Inconsistent or incomplete documentation can disrupt communication during handovers, increase the likelihood of errors, and compromise continuity of care (Davis and Shephard 2024).

Research Gap

Although international studies provide substantial evidence on nursing documentation knowledge, attitudes, and practices and their impact on patients, there is limited evidence regarding nurse's perceived documentation practices and associated organizational and patient-related factors in hospitals in Pakistan. due to unique challenges faced by nurses in Pakistani hospitals, such as high patient load, limited resources, and staffing shortages, which require context-specific research. Assessing nurse's knowledge, perceptions, and the factors associated with their documentation practices can provide valuable insights for improving nursing practice, healthcare policies, and ultimately patient outcomes.

This study is guided by the principle that nurse factors (knowledge, attitude, skills), administrative support (policies, supervision), and environmental conditions collectively shape documentation practices and perceptions. Therefore, this study seeks to assess documentation practices, perceptions, and the organizational and patient-related factors associated with documentation practices among nurses working in two hospitals in Lahore, Pakistan, with particular attention to the patient related factors.

CHAPTER 3 MATERIALS AND METHODS

Study Design:

A cross-sectional correlational study design was used.

Study Variables:

Independent Variables:

Nurse related factors, organizational factors and patient related factors

Dependent Variables:

Perceived documentation practices among nurses

Operational Definitions:

In this study, the following terms are operationally defined to ensure clarity and consistency in understanding:

Documentation Practices:

Documentation practices refer to the extent to which staff nurses accurately, timely, and consistently record patient-related information in clinical records.

Staff Nurses:

In this study, staff nurses include nurses working in medical, surgical, and specialized units of the selected hospitals in Lahore, Pakistan.

Nurse Factors:

Nurse factors refer to individual characteristics include level of education, clinical experience, knowledge, toward documentation, and prior training related to documentation. **Organizational**

Factors:

Organizational factors refer to institutional conditions that affect the nursing documentation practices, including workload, nurse-to-patient ratio, and guidellines.

Patient Factors:

Patient factors include characteristics of patients

that may influence nurse's ability to document care effectively, such as severity of illness, level of dependency, communication barriers, and emergency conditions.

Study Setting:

General and Critical Care Units of two hospitals in Bahria Town, Pakistan (Bahria Town International Hospital Lahore and Bahria International Hospital Orchid Lahore).

Study Population:

The study population consisted of staff nurses working in the selected hospitals. Staff nurses involved in direct patient care in various clinical units were included in the study.

Nurses working in administrative positions and those not directly involved in patient care were excluded to ensure that the data reflected actual clinical documentation practices.

Sampling Technique:

A non-probability convenience sampling technique was used to select participants for the study. This method was chosen due to the accessibility of participants and time constraints. A sample of staff nurses who met the inclusion criteria and were willing to participate was included from the selected hospitals.

Sample Size:

The sample size for this study was calculated using Cochran's formula for finite populations to ensure adequate statistical representation of the target population with a 95% confidence level, 0.05% margin of error, and an assumed response distribution of 0.5%.

The initial Cochran formula is:

$$n_0 = \frac{Z^2 \times p \times (1 - p)}{e^2}$$

Where:

n_0 = initial sample size

Z = standard normal deviation at 95% confidence level (1.96)

p = estimated proportion (0.5)

e = margin of error (0.05) Using the values:

$$(1.96)^2 \times (0.5) \times (0.5)$$

$$n_0 = \frac{384}{(0.05)^2}$$

The calculated initial sample size was approximately 384 participants.

Since the total population of staff nurses in the selected hospitals was finite ($N = 250$), the finite population correction formula was applied:

$$n = \frac{n_0}{1 + (n_0 - 1)/N}$$

$$n = \frac{384}{1 + (384 - 1)/250} = 152$$

The final calculated sample size was approximately 152 participants. Therefore, a rounded-off sample size of 150 staff nurses was considered adequate for this study.

Study Duration:

The study was conducted in a span of 8 months.

Eligibility Criteria:

Inclusion Criteria:

Staff nurses who met the following criteria were included in the study:

Registered nurses providing direct patient care

Nurses with at least six months of clinical experience

Nurses working in medical, surgical, or specialized units

Nurses willing to participate in the study

Exclusion Criteria:

The following nurses were excluded from the study:

Nurses working in administrative or managerial positions

Student nurses and nursing interns

Nurses on long leave during the data collection period

Data Collection Tool:

A structured questionnaire was obtained by getting the due permission from the author and giving the due credit.

Validity And Reliability:

The tool used for conducting this research was obtained from an already published and verified research study with express permission from the authors of that study. Internal consistency was used as it is in the original study that gave Cronbach's alpha values of 0.71, 0.78, and 0.88 for knowledge, attitude, and practice questions respectively. The reliability values belong to the original study/tool (Molla, Temesgen et al. 2024). Content validity of the tool was ensured through review by the expert supervisor of the research. Necessary modifications were made based on expert feedback to improve clarity, relevance, and appropriateness of the items.

Data Collection Procedure:

After obtaining formal permission from the concerned hospital authorities, data were collected from the participants during their duty hours. The purpose of the study was explained to the participants, and informed consent was obtained prior to data collection.

Confidentiality and anonymity of the participants were ensured throughout the study. Participants were given sufficient time to complete the

questionnaire, and completed questionnaires were collected by the researcher.

Ethical Consideration

Ethical approval was obtained from the institutional review board Bahria Town School Of Nursing. A formal letter was submitted to each selected hospital, and approval had been obtained from the participating hospitals. Written informed consent was obtained from each respondent. This study implemented stringent data security measures to protect sensitive data, incorporating encryption, anonymization techniques, and access restrictions.

Data Analysis Procedure

The collected data were revised, coded, tabulated and verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 25.0) was used to perform analysis procedure.

Data Analysis Plan

Data were analyzed using descriptive and inferential statistics. Frequency distributions and percentages described categorical variables; means and standard deviations described continuous

variables. The Spearman rank-order correlation was used to examine relationships between non-parametric scale variables. The Kruskal-Wallis H test compared knowledge scores across demographic groups, with Mann-Whitney U post hoc tests for significant pairings. A p-value of < 0.05 was considered statistically significant.

CHAPTER 4

ANALYSIS AND INTERPRETATION

Data was coded and entered into Epi Data version 4.6, and then exported to Statistical Package for Social Sciences (SPSS) version 25 after being thoroughly checked for completeness. After data had been cleaned, descriptive statistics such as frequency, percentage, and mean were used to analyze the data.

Sociodemographic Characteristics

Table 4.1 summarizes the sociodemographic profile of the 150 participating staff nurses. The majority of participants were female (72.7%), held a BSN degree (56%), and had 1–5 years of clinical experience (55.33%). The largest proportion was in the 26–30 age range (40.7%), and most worked in the Critical Care (31.3%) or Surgical (30.7%) wards.

Table 4.1: Sociodemographic Characteristics of Study Participants (N = 150)

Variable	Category	Frequency (n)	Percentage (%)
Age	20–25 Years	52	34.7
	26–30 Years	61	40.7
	Above 30 Years	37	24.7
Gender	Male	41	27.3
	Female	109	72.7
Educational Level	Diploma	64	42.7
	BSN	84	56
	MSN and Above	2	1.33

Current Work Unit	Medical Ward	35	23.3
	Surgical Ward	46	30.7
	Critical Care Ward	47	31.3

Variable	Category	Frequency (n)	Percentage (%)
	General Ward	22	14.7
Years of Experience	Less than 1 Year	52	34.63
	1–5 Years	83	55.33
	More than 5 Years	15	10
Monthly Income (PKR)	50,000–70,000	72	48
	70,000–90,000	69	46
	More than 90,000	9	6

Nursing Knowledge about documentation

Table 4.2 assesses the overall knowledge using 9 multiple-choice questions (MCQs). Each correct response was coded as 1 (correct) and 0 (incorrect),

yielding a total knowledge score ranging from 0 to 9. The mean knowledge score was 4.78 (SD = 1.81).

Table 4.2: Descriptive Statistics for Knowledge Score (N = 150)

Statistic	Value
Mean	4.78
Standard Deviation (SD)	1.81
Minimum	2
Maximum	9
Nurses with ≥ 5 correct answers	65 (43.3%)

Nurses with <5 correct answers	85 (56.7%)
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Item-Level Knowledge Analysis

Table 4.2.1 presents the percentage of nurses who answered each knowledge item correctly. Nurses demonstrated strong knowledge of fundamental documentation principles (Q1: 88.0%, Q2: 88.0%, Q4: 86.0%). However, significant knowledge gaps were identified in more nuanced areas including legal protection documentation (Q7: 27.3%), accountability (Q9: 22.0%), and

comprehensive documentation scope (Q6: 40.0%).

The mean knowledge score was 4.78 out of 9 (SD = 1.81), indicating an average score of 53.1%, which falls below the 60% threshold for 'Good Knowledge'. Only 30.0% (n = 45) of nurses demonstrated good knowledge (score ≥ 6), while the majority – 70.0% (n = 105) – had poor knowledge scores.

Table 4.2.1: Correct Response Rates by Knowledge Item (N = 150)

Item No.	Knowledge Statement	Correct Responses n (%)	Correct Answer
Q1	Documentation of a patient's care is part of professional responsibilities	132 (88.0%)	Yes
Q2	Documented inpatient files should be FACT (factual, accurate, complete & timely)	132 (88.0%)	Yes
Q3	Effective documentation may not necessarily include a change in client's condition	56 (37.3%)	Yes
Q4	Nursing care should be documented according to guidelines	129 (86.0%)	Yes
Q5	Principle NOT needed while documenting (Unsigned documentation)	66 (44.0%)	Unsigned doc
Q6	Main nursing activities to document (All activities)	60 (40.0%)	All

Item No.	Knowledge Statement	Correct Responses n (%)	Correct Answer
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Q7	Action NOT protecting from legal suit (Not recording frequently)	41 (27.3%)	Not recording frequently
Q8	NOT a component of medication documentation (Injection site)	68 (45.3%)	Injection site
Q9	Who should document care provided (Same individual who provided the care)	33 (22.0%)	Same provider

Documentation Practices and Perceptions Among Nurses

Table 4.3 shows documentation-related perceptions which were measured using 10 Likert-scale items (1 = Strongly Agree to 5 = Strongly Disagree). Lower mean scores indicate more favorable perception toward documentation. The composite attitude score mean was 1.54 (SD = 0.39), reflecting a strongly positive overall attitude toward documentation practices. All perception

items showed means between 1.44 and 1.77, indicating that nurses strongly agreed with positive perceptions of documentation across all dimensions. The most strongly endorsed item was that documentation enables detection of changes in patient condition (Mean = 1.44, SD = 0.63), while nurses acknowledged documentation's role in legal protection (Mean = 1.48) and continuity of care (Mean = 1.46).

Table 4.3: Item-Level Perception Scores (N = 150)

Item	Practice Statement	Mean	SD	Interpretation
P1	Documentation enhances information exchange during shift change	1.59	0.90	Strongly Favorable
P2	Nurses should focus on documentation, not only actual patient care	1.77	0.93	Strongly Favorable

Item	Practice Statement	Mean	SD	Interpretation
P3	Proper documentation has a positive impact on patient safety	1.45	0.71	Strongly Favorable
P4	Nursing care plan requires tedious, time-consuming documentation	1.63	0.71	Strongly Favorable

P5	Documentation makes nurses' work visible	1.53	0.77	Strongly Favorable
P6	Nursing documentation helps gain sufficient knowledge about patients	1.47	0.70	Strongly Favorable
P7	Documentation enables medical staff to detect changes in condition	1.44	0.63	Strongly Favorable
P8	Nursing documentation gives legal protection	1.48	0.66	Strongly Favorable
P9	Documentation of nursing activities ensures continuity of care	1.46	0.65	Strongly Favorable
P10	The nursing care plan is a lot of paperwork	1.55	0.76	Strongly Favorable
	Overall Composite Attitude Score	1.54	0.39	Strongly Favorable

Organizational Factors Affecting Documentation Practices

Table 4.4 shows seven dichotomous items (Yes/No) that assessed the organizational-level factors influencing documentation practice. Supervisor motivation (79.2%) and availability of documentation guidelines (78.0%) were the most

frequently endorsed facilitators. Notably, 73.6% reported managing more than 10 patients per shift, suggesting a high patient load that could potentially challenge adequate documentation time, although 76.7% still reported adequate time availability.

Table 4.4: Organizational Factors Affecting Documentation Practice (N = 150)

Item	Organizational Factor	Yes n (%)	No n (%)
OF1	In-service training attended on documentation	112 (75.7%)	36 (24.3%)
OF2	Average patients per shift exceeds 10	109 (73.6%)	39 (26.4%)
OF3	Documentation guidelines are available	117 (78.0%)	33 (22.0%)
OF4	Familiar with documentation standards	112 (74.7%)	38 (25.3%)

OF5	Availability of documenting sheets	115 (76.7%)	35 (23.3%)
OF6	Motivated by supervisors to actively document	118 (79.2%)	31 (20.8%)
OF7	Adequate time available for proper documentation	115 (76.7%)	35 (23.3%)

Patient-Related Factors Affecting Documentation

Table 4.5 shows four dichotomous items assessed the influence of patient-related characteristics on nurse's documentation practices. The majority of nurses acknowledged patient-related challenges in documentation. Negative patient attitudes

(78.7%) and lack of patient interest (75.3%) were most frequently cited as barriers, followed by patient stress and distress (74.5%). Language differences were also identified by 68.7% of nurses as affecting documentation practice.

Table 4.5: Patient-Related Factors Affecting Documentation Practice (N = 150)

Item	Patient-Related Factor	Yes n (%)	No n (%)
PF1	Stress, anxiety, and distress of patient affects documentation	111 (74.5%)	38 (25.5%)
PF2	Negative attitudes of patient toward nurses affects documentation	118 (78.7%)	32 (21.3%)

Item	Patient-Related Factor	Yes n (%)	No n (%)
PF3	Lack of patient interest and concentration affects documentation	113 (75.3%)	37 (24.7%)
PF4	Language differences with patients affects documentation practice	103 (68.7%)	47 (31.3%)

Inferential Statistical Analyses: (Spearman's rank-order correlation)

The primary hypothesis regarding the relationship between nursing documentation practices and

organizational and patient related factors among staff nurses was examined using Spearman's rank-order correlation.

Table 4.6: Spearman's rank-order correlation Test

Variable Pair	Spearman r	p-value	Decision	Interpretation
Documentation practices vs Organizational Factors	0.142	0.082	Fail to Reject H_0	not statistically significant
Documentation practices vs Patient related factors	0.333	0.000031	Reject H_0	Moderate positive correlation
Organizational Factors vs Patient related factors	0.340	0.000021	Reject H_0	significant positive correlation

Decision on Main Hypothesis: Based on the Spearman correlation between documentation practice and perception(Part III) and patient-related factors(Part V), the null hypothesis was rejected because the relationship was statistically significant ($r = 0.333$, $p = 0.000031$).

Kruskal-Wallis Test: Knowledge Score by Demographic Variables

Table 4.7 shows the non-parametric Kruskal-Wallis H test was used to compare knowledge scores across demographic groups. Post-hoc Mann-Whitney U tests were applied where significant differences were identified.

Table 4.7: Kruskal-Wallis H Test – Knowledge Scores by Demographics

Demographic Variable	Kruskal-Wallis H	df	p-value	Significance
Age	2.189	2	0.335	Not Significant
Gender	12.049	1	0.001**	Significant
Educational Level	4.668	2	0.198	Not Significant
Current Work Unit	12.498	3	0.006**	Significant
Years of Experience	7.147	2	0.067	Not Significant

Significant differences in knowledge scores were found by gender ($H = 12.049$, $p = 0.001$) and

current work unit ($H = 12.498$, $p = 0.006$).

Table 4.7.1: Post-Hoc Analysis – Knowledge Scores by Gender (Mann-Whitney U)

Group	n	Mean Knowledge Score	SD	Mann-Whitney U	p-value
Male	41	5.73	2.10	3039.0	0.001**
Female	109	4.42	1.55		

Male nurses demonstrated significantly higher knowledge scores (Mean = 5.73, SD = 2.10) compared to female nurses (Mean = 4.42, SD =

1.55) in this sample, a statistically significant difference (U = 3039, p = 0.001).

Table 4.7.2: Knowledge Scores by Work Unit

Work Unit	n	Mean Score	SD
Medical Ward	35	4.54	1.80
Surgical Ward	46	4.15	1.44

Work Unit	n	Mean Score	SD
Critical Care Ward	47	5.40	1.94
General Ward	22	5.14	1.78

Nurses in Critical Care units demonstrated the highest knowledge scores (Mean = 5.40, SD = 1.94), followed by those in General Wards (Mean = 5.14). Surgical ward nurses had the lowest scores (Mean = 4.15). The Kruskal-Wallis test confirmed differences across units (H = 12.498, p = 0.006), suggesting that clinical specialty may influence documentation knowledge.

Summary of Key Findings

The findings indicate a need for targeted in-service training and continuing education programs to address knowledge gaps in the legal aspects of documentation (Q7: 27.3% correct) and professional accountability (Q9: 22.0% correct). Furthermore, the high patient workload, with 73.6% of nurses caring for more than 10 patients per shift, warrants a review of staffing levels to

ensure that documentation quality is not compromised. The observed differences in knowledge by gender and work unit also suggest the need for targeted orientation and educational programs, particularly for female nurses and those working in surgical settings.

CHAPTER 5 DISCUSSION AND CONCLUSION

This cross-sectional study examined nursing documentation practices, perceptions, and related characteristics among nurses in two tertiary care institutions in Bahria Town, Lahore. The findings demonstrated that although nurses generally had favorable perceptions toward nursing documentation, important gaps were identified in their knowledge, particularly regarding the legal and professional responsibilities associated with

documentation. In addition, patient-related factors showed a statistically significant positive relationship with documentation practices, while organizational factors did not demonstrate a statistically significant relationship. Differences in knowledge scores were also observed according to gender and current work unit.

The overall knowledge findings indicated a moderate-to-low level of knowledge regarding nursing documentation. The mean knowledge score was 4.78 ± 1.81 out of 9, equivalent to 53.1%. Using the study criterion of 60% for good knowledge, only 30.0% ($n = 45$) of nurses achieved a good knowledge score, while 70.0% ($n = 105$) demonstrated poor knowledge. These findings indicate that although most nurses understood basic documentation principles, considerable gaps remained in more specific aspects of documentation practice.

In contrast, this finding was lower than the results of the studies conducted in Tigray public hospitals (Tasew, Mariye et al. 2019). The possible reasons for this discrepancy might be due to differences in workload and differences in familiarity with documentation guidelines because the Ethiopian nurses Tigray have a relatively low workload and are familiar with documentation guidelines compared to Lahore, Pakistan.

Despite the knowledge gaps, nurses demonstrated strongly favorable perceptions toward documentation. The overall composite perception score was 1.54 ± 0.39 , with lower scores indicating more favorable perceptions. All ten perception items had mean scores ranging from 1.44 to 1.77, indicating generally favorable views toward documentation. The most favorable perception was related to the ability of documentation to help healthcare staff detect changes in patients' conditions (mean = 1.44, SD = 0.63), followed by continuity of care (mean = 1.46, SD = 0.65) and gaining sufficient knowledge about patients (mean = 1.47, SD = 0.70).

These findings are comparable with the study by a study in Egypt which examined factors influencing effective documentation and its relationship with patient safety as perceived by staff nurses (Adel Mohamed Tawfik, Hassan El-sayed Mahfouz et al.

2024).

The findings regarding organizational factors showed that most nurses reported the availability of several supportive conditions. 79.2% reported being motivated by supervisors to actively document, 78.0% reported that documentation guidelines were available, 76.7% reported availability of documentation sheets, and 76.7% reported having adequate time for proper documentation. Furthermore, 75.7% had attended in-service training on documentation and 74.7% reported familiarity with documentation standards.

At the same time, workload remained an important concern because 73.6% of nurses reported caring for more than 10 patients per shift. This finding is consistent with previous literature identifying heavy workload, staffing shortages, limited time, and low nurse-to-patient ratios as barriers to effective nursing documentation (Tasew, Mariye et al. 2019, Molla, Temesgen et al. 2024, De Groot, De Veer et al. 2022).

The study also examined differences in knowledge scores across selected demographic characteristics using the Kruskal-Wallis test. No statistically significant differences were found according to age ($H = 2.189$, $p = 0.335$), educational level ($H = 4.668$, $p = 0.198$), or years of experience ($H = 7.147$, $p = 0.067$). However, statistically significant differences were found according to gender ($H = 12.049$, $p = 0.001$) and current work unit ($H = 12.498$, $p = 0.006$).

The gender comparison showed that male nurses had a higher mean knowledge score (5.73 ± 2.10) than female nurses (4.42 ± 1.55), with the Mann-Whitney U test demonstrating a statistically significant difference ($U = 3039$, $p = 0.001$). Although this difference was statistically significant in the present sample, the study design does not establish the reason for the difference. Therefore, gender should not be interpreted as a direct cause of differences in documentation knowledge.

Overall, the findings demonstrate an important distinction between nurse's perceptions and their knowledge of documentation. Nurses showed strongly favorable perceptions toward

documentation, but the overall knowledge score was only 53.1%, and 70.0% of participants were classified as having poor knowledge according to the study's stated criterion. The largest knowledge gaps concerned legal protection and professional accountability, with only 27.3% and 22.0% answering these items correctly, respectively.

The inferential findings provide further context. Organizational factors were not significantly correlated with the documentation-practice score ($r = 0.142$, $p = 0.082$), whereas patient-related factors showed a statistically significant moderate positive relationship ($r = 0.333$, $p = 0.000031$). Knowledge also differed significantly by gender and work unit.

Conclusion

The findings are broadly consistent with previous studies that have identified deficiencies in nursing documentation knowledge and practice and have emphasized the importance of training, workload management, documentation guidelines, and organizational support. However, the present study also demonstrates that these factors may not have the same statistical relationship with documentation practices in every setting. The differences between the present findings and previous studies may be related to differences in hospital settings, workload, staff characteristics, sampling methods, documentation systems, and measurement approaches.

Another possible reason for the discrepancy might be due to the difference in data collection methods because the current study used an established questionnaire, but the previous study in Ethiopia used a self-administered questionnaire to collect data, which may cause the documentation practices to be overestimated due to social desirability bias. In fact, data collected using a self-administered questionnaire are vulnerable to social desirability bias compared to those collected using an established questionnaire (Tasew, Mariye et al. 2019).

The study provides useful evidence regarding nurse's knowledge, perceptions, and perceived barriers to documentation, but it cannot establish causal relationships or objectively determine the quality of clinical documentation.

Implication for Practice

The study's findings imply that nursing care documentation practices need a great deal of attention, necessitating interventions from a variety of stakeholders. Health institutions better provide sustained continuing training opportunities for nurses to enhance their knowledge and favorable attitudes regarding documentation. Patients with complex or high-dependency needs should be managed in units with lower nurse-to-patient ratios to support effective nursing care and accurate documentation. Moreover, nursing leaders (matrons/nursing directors) better motivate and enhance the attitudes of nurses and avail the necessary documentation materials.

Limitations

This study has several limitations that should be considered when interpreting the findings. Since the data were collected through self-reported questionnaires, the responses may have been influenced by social desirability bias, leading participants to report more favorable behaviors than they actually practice. Additionally, the study was conducted in only two hospitals, which limits the generalizability of the findings to other healthcare settings. The use of convenience sampling may have further reduced the representativeness of the sample and affected the applicability of the results to the wider nursing population. Moreover, participants may have overestimated their positive documentation practices, potentially introducing response bias and influencing the accuracy of the study outcomes.

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Recommendations

Hospital administrators should prioritize the development and implementation of educational programs focused on nursing care documentation standards while ensuring that nurses are encouraged to document all nursing interventions

accurately and promptly. Regular training courses should be organized to strengthen nurse's documentation knowledge and practices.

Furthermore, nurses should actively participate in continuous professional development programs to update their knowledge and skills regarding documentation guidelines. Ongoing education should emphasize the importance of accurate documentation as a legal record, a communication tool, and a valuable resource for future research. Integrating patient safety concepts into nursing education and lifelong learning programs will further improve the quality of healthcare services and promote safe, evidence-based practice.

Ethical Considerations

The rules and regulations set by the ethical committee of Bahria Town School of Nursing Lahore will be followed while conducting the research and the rights of the research participants will be respected.

Written informed consent will be taken from all the participants.

All information and data collection will be kept confidential.

Participant's identity will be kept confidential throughout the study.

The subjects will be informed that there are no disadvantages or risks on the procedure of the study.

They will also be informed that they will be free to withdraw at any time during the process of the study.

There is no known risk associated with this research.

Participants' privacy will be protected. And their identity will not be revealed in any publication resulting from this study.

The participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate any time. You will not be penalized in any way should you decide not you participate or to withdraw from this study.

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