

CORRELATES OF THE LEGAL, QUALITATIVE AND SCIENTIFIC DIMENSIONS OF NURSING DOCUMENTATIONS IN THE PRIMARY, SECONDARY AND TERTIARY HEALTH CARE INSTITUTIONS

Dr. Chiejina E. N., Ph. D*

Department of Nursing Science, Faculty of Health Sciences and Technology, Nnamdi Azikiwe University, Nnewi Campus Nigeria.

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***Corresponding author: Dr. Chiejina E. N.**

Department of Nursing Science, Faculty of Health Sciences and Technology, Nnamdi Azikiwe University, Nnewi Campus Nigeria.

ABSTRACT

Legislation and standards of practice of Nursing profession require nurses to document the care they provide demonstrating accountability for their actions and decisions. This study focused on the correlates of the legal, qualitative and scientific dimensions of nursing documentations in the Primary, Secondary and Tertiary healthcare institutions. Purposive and simple random sampling techniques were used to obtain documented nursing actions for 264 clients in six health care institutions in Anambra State of Nigeria. One research question and three null hypotheses guided the study. Checklist on nursing documentation was used for data collection. Standard descriptive statistics on frequency distribution, means and standard deviation (SD) were used to summarize the variables. Pearson Product Moment Correlation was used to answer the research question. Analyses of variance (ANOVA) was adopted in testing the null hypotheses at 0.05 level of significance. The result revealed significant correlation between nursing documentation and preciseness of the documentation. Significant differences were also observed in the nursing documentations across the different levels of healthcare institutions with regard to the legal implications of the documentation, the impacts on quality assurance and nursing science respectively.

KEYWORDS: Nursing documentation, Preciseness, Legal implications, Quality assurance, Nursing Science.

INTRODUCTION

Tools are needed to support the continuous and efficient shared understanding of a patient's care history that simultaneously aids sound intra and inter-disciplinary communication and decision-making about the patient's future care (Joint Commission on the Accreditation of Health care Organisations, 2005). Such tools are vital to ensure that continuity, safety and quality of care endure across the multiple handovers made by the many clinicians involving in patient care. Generally, tools are implements held in the hands, which in the healthcare setting refer to documentation. Potter and Perry (2010) describe documentation as anything written or electronically generated that describes the status of a client or the care or services given to that client. Nursing documentation refers to written or electronically generated client information obtained through the nursing process (ARNNL, 2010). Nursing documentation is a vital component of safe, ethical and effective nursing practice regardless of the context of practice or whether the documentation is paper based or electronic, it is an integral part of nursing practice and professional patient

care rather than something that takes away from patient care, and it is not optional.

According to Potter and Perry (2010), nursing documentation must provide an accurate and honest account of what and when events occurred, as well as identify who provided the care. The documentation should be factual, accurate, complete, current (timely), organized and compliant with standards (Professional and Institutional). Potter and Perry (2010) further stated that these core principles of nursing documentation apply to every type of documentation in every practice setting.

Documentation in nursing covers a wide variety of issues, topics and systems (Yocum, 2002; Huffman, 2004, Lindsay et al 2005; Johnson et al 2006). Such areas of coverage include all aspects of nursing process, plan of care, admission, transfer, transport, discharge information, client education, risk taking behaviours, incident reports, medication administration, verbal orders, telephone orders, collaboration with other health care professionals, date and time of any event as well as signature and designation of the recorder.

The primary purpose of documentation is to facilitate information flow that supports the continuity, quality and safety of care. Potter and Perry (2010) pointed out that data from documentation allow for communications and continuity of care, quality improvement/ assurance and risk management, establish professional accountability, make provision for legal coverage, funding and resource management, and also expand the science of nursing. Potter and Perry (2010) also explained that clear complete and accurate health records serve many purposes for the clients, families, registered nurses and other health care providers. Delaune and Ladner (2002) further affirmed that documentation is the professional responsibility of all health care practitioners, and that it provides written evidence of the practitioner's accountability to the client, the institution, the profession and the society.

Literature has revealed that the tensions surrounding nursing documentation include the amount of time spent in documenting, the number of errors in the records, the need for legal accountability, the desire to make nursing work visible, and the necessity of making nursing notes understandable to the other disciplines (Sprague and Trapanier 1999; Castledine, 1998; Dimond, 2005; Pearson, 2003). This study explored the correlates of the legal, qualitative and scientific dimensions of nursing documentations in the primary, secondary and tertiary health care institutions.

Research Question

What is the relationship between documented nursing action and the preciseness of the documentations?

Hypotheses

- Legal implications of the documented nursing actions do not significantly differ across the Primary, Secondary and Tertiary Health Institutions.
- Documented nursing actions in the Primary, Secondary and Tertiary Health Institutions do not significantly differ with regard to their impacts on Quality assurance.
- Documented nursing actions in the Primary, Secondary and Tertiary Health Institutions do not differ significantly in their impacts on Nursing Science.

MATERIALS AND METHODS

Design and Sampling

The study was a retrospective research design. Judgmental sampling technique was adopted in selecting one Teaching Hospital and one specialist Hospital (tertiary Health Institutions) in Anambra State of Nigeria. Simple random sampling was used to select two General Hospitals (Secondary Health Institutions) and two comprehensive Health Centres (Primary Health Institutions) out of the 24 General Hospitals and 10 comprehensive Health Centres in Anambra State. This was to give all the primary and secondary health

institutions equal chance of being selected for the study (Nworgu, 1991).

Nursing documentations on Clients were obtained from three units (medical, surgical and maternity units) of each of the selected health institutions. Other units (e.g. Emergency unit, Out-patient Department, and other special units) were excluded in the study. Documented nursing actions for 96 clients were obtained from the selected tertiary health institutions, 72 were obtained from the secondary health institutions and 96 from the primary health institutions. On the whole nursing documentation for 264 clients were used for the study. Ethical approval were obtained from the six institutions used for the study. Informed consent was also obtained from the clients whose records were used. Confidentiality was ensured by not including the names of the health institutions in the data collection. Alphabetical codes were used to represent the selected health institutions while numerical codes were used for the patients whose records were obtained for the study.

Instrument

The instrument used for data collection in the study was checklist titled Checklist on Nursing Documentation in the clinical setting (CNDACS). Section A of the instrument provided general information of the health institution (eg level of health institution, clinical specialty, form of documentation, client's clinical diagnosis, documentation of accountability, section B of the instrument was made up of eight sub-sections designed to measure documented nursing actions (eg admissions, transfers, discharges, plan of care, client education, medication, incident reports, vital signs, etc), extent of ensuring core principles in the documentation (eg whether factual, accurate, complete, timely, organized and compliant with standards), ensuring promotion of interdisciplinary communication (eg name(s) of the people involved in the collaboration, date and time of the contact, information provided to or by healthcare provider, responses from healthcare provider, etc), timeliness of the documentation (eg how timely, chronological and frequency), preciseness of the documentation (eg objectivity, unbiased, legibility, clear and concise, etc), Legal implication (eg use of authorized abbreviations, informed consent, advanced directive, etc), impact on quality assurance/ improvement (eg facilitates quality improvement initiative, facilitates risk management, and used to evaluate appropriateness of care), and impact on the science of nursing (eg provides data for nursing/health research, used to assess nursing intervention and client outcomes, etc). The instrument was designed in a 4 – point scale ranging from 1 to 4 with poor/many omissions having 1 point, 2 points for fair/incomplete with few omissions, 3 points for good/almost complete, and 4points for very good/complete.

The instrument was subjected to reliability test by collecting data from nursing documentations for 15

patients from three levels of health institutions (primary, secondary and tertiary) in another State of Nigeria that was not used for the study. The instrument test/ retest reliability was 0.65.

Data Analysis

Standard descriptive statistics of frequency, means and standard deviation were used to summarize the variables.

Mean score, standard deviation and Pearson Product moment correlation (r) were used to answer the research question while Analysis of variance (ANOVA) was adopted in testing the null hypotheses at 0.01 and 0.05 levels of significance respectively. SPSS version 21 was used in the data analysis.

RESULT

Table 1: General Information of the Health Institutions used for the study.

Variable	Frequency	Percentage
Level of Health Institution:		
Primary	96	36.4
Secondary	72	27.3
Tertiary	96	36.4
Clinical Specialty:		
Medical unit	97	36.7
Surgical unit	63	23.9
Maternity unit	104	39.4
Form of Documentation:		
Written documentation	262	99.2
Electronic documentation	2	0.8
Client Diagnoses:		
Obstetric condition	105	39.8
Medical condition	93	35.2
Surgical condition	61	23.1
Sepsis/Infection	5	1.9
Demonstration of Accountability:		
Primary provider	247	93.6
Secondary provider	15	5.7
Third party provider	2	0.8

Total N = 264

Table 1 show the general information of the health institutions used for the study. Primary Health Centre constituted 36.4% of the Health institutions, 27.3% constituted secondary level while tertiary level constituted 36.4%. The clinical specialties of the health institutions that were used for the study were medical 36.7%, surgical unit 23.9% and maternity unit which formed 39.4%. Out of the forms of nursing documentations, 99.2% was written documentation while

electronic documentation formed 0.8%; 39.8% was obstetric conditions, medical conditions 35.2%, surgical conditions 23.1% while documented infective conditions constituted 1.9%. For demonstration of accountability in the documented nursing actions, 93.6% was done by primary providers, 5.7% by secondary providers, while third party providers accounted for 0.8% of the documentations. Total number of each variable was 264.

Table 2: Descriptive Statistics of the Measured Variables.

Variable	N	Minimum	Maximum	Mean	SD
Nursing Action Documentation	264	23.00	76.00	54.6402	9.86811
Core principles of Documentation	264	11.00	24.00	19.2462	2.38101
Promotion of interdisciplinary communication	264	9.00	36.00	30.8485	5.61433
Timeliness of Documentation	264	6.00	12.00	9.5568	1.32703
Preciseness of Documentation	264	18.00	40.00	31.9470	3.30299
Legal implication	264	11.00	24.00	19.6439	2.47153
Impact on Quality Assurance	264	4.00	12.00	9.6250	1.63129
Impact on Nursing Science	264	4.00	16.00	13.7462	2.43860
Valid N (Listwise)	264				

Table 2 shows the descriptive statistics of the measured variables. Out of the 264 documented nursing actions,

the mean was 54.6402 and the standard deviation (SD) was 9.86811. Mean for the core principles of the

documentation 19.2462 with SD of 2.38101. For promotion of interdisciplinary communication, the mean was 30.8485 with SD of 5.61433. Timeliness of documentation had a mean of 9.5568 with SD of 1.32703. Mean for preciseness of the documentation was

31.9470 with SD of 3.30299. For legal implications, the mean was 19.6439 with SD of 2.47153. Impact of the documentation on quality assurance had a mean of 9.6250 with SD of 1.63129, while impact on Nursing Science had a mean of 13.7462 with SD of 2.43860.

Table 3: Relationship between nursing action documentation and preciseness of the documentation.

Variables	N	X	SD	r	Critical value	Level of significance
Nursing action documentation	264	54.6402	9.86811	** 0.516	0.000	0.01
Preciseness of documentation	264	31.9470	3.30299			

** Correlation was significant at 0.01 level (2 – tailed).

Table 3 shows that the r correlational value between nursing documentation and preciseness of the

documentation was 0.516, and it was significant at 0.01 level.

Table 4: ANOVA showing comparison of the Primary, Secondary and Tertiary of Health Institutions with regard to legal implications of nursing documentation, the impacts on Quality assurance and Nursing Sciences.

Variable	Levels of Health Institution	N	X	SD	Source	Sum of squares	df	Mean	f-cal	f-crit (sig)
Legal Implications	Primary	96	18.1042	2.38627	Between Groups	361.336	2	180.668	37.869	0.000
	Secondary	72	20.6944	1.00195						
	Tertiary	96	20.3958	2.58122	Within Groups	1245.194	261	4.771		
	Total	264	19.6439	2.47153		1606.530	263			
Impact on Quality Assurance	Primary	96	9.1042	1.76205	Between Groups	44.764	2	22.382	8.917	0.000
	Secondary	72	10.0972	1.14030						
	Tertiary	96	9.7917	1.67908	Within Groups	655.111	261	2.510		
	Total	264	9.6250	1.63129		699.875	263			
Impact on Nursing Science	Primary	96	12.9271	2.91726	Between Groups	107.896	2	53.948	9.670	0.000
	Secondary	72	14.4444	1.81456						
	Tertiary	96	14.0417	2.08714	Within Groups	1456.101	261	5.579		
	Total	264	13.7462	2.43860		1563.996	263			

NB: Probability: 0.05 level of significance.

Table 4 shows F-ratios of 37.869, 8.917 and 9.670 for legal implications of nursing documentation, impacts of the documentations on Quality assurance and nursing science respectively across the Primary, Secondary and Tertiary health institutions. The results were more than the critical values of 0.000 for each of the variables. Therefore the null hypotheses are rejected. Scheffe Post-Hoc test (Akuezilo and Agu, 2004) of multiple comparison of means were used to determine the order of significant differences across the three levels of healthcare institutions.

Table 5: Scheffe Post-Hoc test of multiple comparison of the means of legal implications and impact of nursing documentations on Quality assurance across the Primary, Secondary and Tertiary health Institutions.

Dependent variable	(I) Level of Health Institution	(J) Level of Health Institution	Mean Difference (I – J)	Standard Error	Sig (F – Crit)
Legal Implication	Primary	Secondary	-2.59028*	0.34053	0.000
		Tertiary	-2.29167*	0.31527	0.000
	Secondary	Primary	2.59028*	0.34053	0.000
		Tertiary	0.29861	0.34053	0.381
	Tertiary	Primary	2.29167*	0.31527	0.000
		Secondary	-0.29861	0.34053	0.381
Impact on Quality Assurance	Primary	Secondary	-0.99306*	0.24700	0.000
		Tertiary	-0.68750*	0.22867	0.003
	Secondary	Primary	0.99306*	0.24700	0.000
		Tertiary	0.30556	0.24700	0.217

Key: *The mean difference was significant at 0.05 level.

For legal implications of nursing documentation, table 5 indicates that the mean difference of 2.59028 existing between primary and secondary health institutions was in favour of secondary health institution; also, mean difference of 2.29167 between primary and tertiary health institutions was in favour of tertiary health institution. For the impact of nursing documentation on Quality assurance, the mean difference of 0.99306 between primary and secondary health institutions was in favour of secondary health institution.

DISCUSSION

Findings from the study indicate significant correlation ($r=0.516$) between nursing documentation and preciseness of the documentation (table 3). Inaccuracies in documentation can result in inappropriate care decisions and client injury (Kozier et al 2004). Correct spelling and legibility of documentation demonstrates a level of competency and attention to detail (Kozier et al, 2004). Misspelled words and or illegible entries can result in misinterpretation of information and could result in client harm (Perry and Potter, 2010). There should be no blank space in paper-based documents as this presents an opportunity for others to add information unbeknownst to the original author (Perry and Potter, 2010).

The significant differences existing across the primary, secondary and tertiary health care institutions with regard to the legal implications of nursing documentation and impacts of the documentations on quality assurance and nursing science respectively (table 4) could be related to variations in institutional policies. Kozier et al (2004) state that each health care organization has policies about recording and reporting client data, and each nurse is accountable for practicing according to these standards.

The mean differences in the impact of nursing documentations on quality assurance and the legal implications of nursing which favoured the tertiary and secondary health institutions against the primary level (table 5) could be related to complexity of the functions

of tertiary and secondary healthcare services. DeLaune and Ladner (2002) stated that secondary and tertiary healthcare services take care of diagnoses and treatment of diseases as well as rehabilitation and restoration of health. Documentation of nursing actions in these areas will not only have more impact on quality assurance but will certainly have increased legal implications.

CONCLUSION

This study has revealed significant relationship between nursing documentation and its preciseness. The study also indicates that significant differences exist in the nursing documentations across the different levels of healthcare institution with regard to the legal implications of the documentation, impacts on quality assurance and nursing science respectively.

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