



## ASSESSMENT OF CLINICAL DOCUMENTATIONS: A NEED FOR QUALITY NURSING CARE

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### ABSTRACT

Nurses bear a large burden in both managing and documenting the care given to clients. The need for accountability in the nursing practice and the need for evaluating care given are paramount. This study evaluated the clinical documentations of the nursing care given to clients by the care providers in primary, secondary and tertiary health institutions. Purposive and simple random sampling techniques were used to select documented nursing actions for 264 clients. One research question and three null hypotheses guided the study. The instrument used for data collection was Checklist on Nursing Documentation in the clinical setting. Standard descriptive statistics of frequency, means and Standard Deviation were used to summarize the variables. Pearson Product moment correlation was used to answer the research question and analyses of variance (ANOVA) were adopted in testing the null hypotheses at 0.05 level of significance. Nursing documentation was noted to have significant impact on nursing science. Significant differences were also observed among the primary, secondary and third party providers accountability with regard to ensuring core principles of nursing documentation, timeliness and preciseness in documentation.

**KEYWORDS:** Assessment, Nursing documentation, Providers' accountability, Clinical setting.

### 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.<sup>[1]</sup> Such tools are vital to ensure that continuity, safety and quality of care endure across the multiple handovers made by the many clinicians involved in patient care. Generally, tools are implements held in the hands, which in the healthcare setting, is referred to as documentation. Documentation is anything written or electronically generated that describes the status of a client or the care or services given to that client.<sup>[2]</sup> Nursing documentation refers to written or electronically generated client information obtained through the nursing process.<sup>[3]</sup> 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.

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). These core principles of nursing documentation apply to every type of documentation in every practice setting.<sup>[2]</sup>

Documentation in nursing covers a wide variety of issues, topics and systems.<sup>[4,5,6,7]</sup> Such areas of coverage include all aspects of nursing process, plan of care, admission, transfer, transport, discharge information, client education, risk taking behaviors, 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. Researchers have 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.<sup>[2]</sup> Clear, complete and accurate health records serve many purposes for the clients, families, registered nurses and other health care providers.<sup>[2]</sup> Documentation is the professional responsibility of all health care practitioners, and it provides written evidence of the practitioner's accountability to the client, the institution, the profession and the society.<sup>[8]</sup>

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.<sup>[9,10,11,12]</sup> This study therefore intends to assess the clinical documentations of nursing care by the providers in Health Care institutions.

### Research Question

To what extent does the documented nursing action relate with nursing science?

### Hypotheses

1. Significant difference does not exist among the primary, secondary and third party providers of nursing documentations with regard to ensuring the core principles in the documentations of the nursing actions.
2. Timeliness in the documentation of nursing actions does not significantly differ among the primary, secondary and third party providers.
3. Preciseness in the documentation of nursing actions does not significantly differ among the primary, secondary and third party providers.

## 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.<sup>[13]</sup>

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 (CNDCS). Section A of the instrument provided general information of the health institutions (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

Table 1 shows 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 unit 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
<b>Valid N (Listwise)</b>	264				

Total N = 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: Extent of the impact of nursing documentation on nursing science.**

Variables	N	X	SD	r	Critical value	Level of significance
Nursing Action Documentation	264	54.6402	9.86811	** 0.470	0.000	0.01
Impact on Nursing science	264	13.7462	2.43860			

Correlation was significant at 0.01 level (2-tailed).

Table 3 shows that r correlational value for the relationship between documented nursing actions and the

impact on nursing science was 0.470, and it was significant at 0.01 level.

**Table 4: Anova showing comparison of accountability among primary, secondary and third party providers with regard to ensuring core principles, timeliness and preciseness in nursing action documentation.**

Variable	Providers/ Accountability	N	X	SD	Source	Sum of squares	df	Mean squares	F-cal	F-crit (sig)
Core principles of Documentation	Primary Provider	247	19.2308	2.27736	Between Groups	28.217	2	14.108	2.517	0.083
	Secondary provider	15	19.9333	3.32666						
	Third party provider	2	16.0000	5.65685	Within Groups	1462.779	261	5.605		
	Total	264	19.2462	2.38101		1490.996	263			
Timeliness of Documentation	Primary Provider	247	9.5911	1.30618	Between Groups	10.014	2	5.007	2.884	0.058
	Secondary provider	15	9.2667	1.43759						
	Third party provider	2	7.5000	2.12132	Within Groups	453.134	261	1.736		
	Total	264	9.5568	1.32703		463.148	263			
Preciseness of Documentation	Primary Provider	247	31.9555	3.17031	Between Groups	25.314	2	12.657	1.162	0.315
	Secondary provider	15	32.2667	5.06341						
	Third party provider	2	28.5000	3.53553	Within Groups	2843.943	261	10.896		
	Total	264	31.9470	3.30299		2869.258	263			

NB: Probability: 0.05 level of significance.

In table 4, the calculated F-ratio for providers accountability of the core principles of nursing documentation was 2.517 with a critical value of 0.083; for timeliness of documentation, F-cal 2.884 with F-crit of 0.058; and for the providers' preciseness, the F-cal was 1.162 with F-crit of 0.315. The calculated F-ratios were more than the critical values. Hence the null hypotheses are rejected.

## DISCUSSION

Findings from the study indicate that nursing documentation has impact on the science of nursing ( $r=0.470$ ) (table 3). Students in health disciplines often use client records as educational tools, and a record can frequently provide a comprehensive view of the client, the illness, effective treatment strategies and factors that affect the outcome of treatment.<sup>[14]</sup> The information contained in a record can be a valuable source of data for nursing and health related research.<sup>[14]</sup> Data obtained from health records is also used in health research to assess nursing interventions, evaluate client outcomes, and determine the efficacy and effectiveness of care.<sup>[8]</sup> Also the type of research made possible through the

information in health records can enable nurses to further improve nursing practice.

The significant differences across the providers of documentation with regard to ensuring the core principles of documentation, timeliness of documentation and preciseness in the documentation is ideal. College of Registered Nurses of Nova Scotia explained that Legislation and Standard of Practice of the profession require nurses to document the care they provide demonstrating accountability for their actions and decisions.<sup>[15]</sup> First-hand knowledge means that the professional who is doing the recording is the same individual who provided the care. Documentation made by the professional (Registered Nurse) who is the primary provider of care should ideally be of better quality in comparison with documentations done by the secondary or the third party provider.

## CONCLUSION

This study indicates that nursing documentations have significant impact on nursing science, and that significant differences exist among the primary, secondary and third party providers of nursing

documentation with regard to ensuring the core principles of documentation, timeliness and preciseness of the documentation,

## REFERENCES

1. Joint Commission on the Accreditation of Healthcare Organisation. Hospital accreditation Standards, Oakbrook Terrace II: Joint Commission Resources, 2005.
2. Potter PA, Perry AG. Canadian Fundamentals of Nursing. Toronto, ON: Elsevier Canada, 2010.
3. Association of Registered Nurses of Newfoundland and Labrador (ARNNL). Documentation Standards for Registered Nurses. St. John's NL: Author, 2010.
4. Yocum R. Documenting for quality patient care. *Nursing*, 2002; 32(8): 58-63.
5. Huffman M. Redefine care delivery and documentation. *Nursing Management*, 2004; 35(2): 34-38.
6. Lindsay PM, Kelloway L, McConnel H. Research to practice nursing Stroke assessment guideline link to clinical performance indicators. *AXON*, 2005; 26(4): 22-27.
7. Johnson K, Hallsey D, Meredith RL, et al. A nurse-driven system for improving patient quality outcomes. *Journal of Nursing Care Quality*, 2006; 21(2): 168-175.
8. DeLaune SC, Ladner PK. Fundamentals of Nursing: Standards & Practice (2<sup>nd</sup> ed.). New York: Delmar Thomson Learning, 2002.
9. Sprague A, Trepanier MJ. Charting in record time. *AWHONN Lifeline*, 1999; 3(5): 25-30.
10. Castledine G. The blunders found in nursing documentation. *British Journal of Nursing*, 1998; 7: 1218.
11. Dimond B. Exploring the legal status of healthcare documentation in UK. *British Journal of Nursing*, 2005; 14: 517-518.
12. Pearson A. The role of documentation in making nursing work visible. *International Journal of Nursing Practice*, 2003; 9: 271.
13. Nworgu BG. Educational Research: Basic Issues and Methodology. Owerri: Wisdom Publishers Limited, 1991.
14. Kozier B, Erb G, Berman A, Snyder SJ. Fundamentals of nursing: Concepts, Process and Practice (7<sup>th</sup> ed). Upper Saddle River, NJ: Person Prentice Hall, 2004.
15. College of Registered Nurses in Nova Scotia. Documentation Guidelines for Registered Nurses, Suite 4005-7071 Bayers Road, Halifax, NS B3L 2C2, 2012.