EFFICACY OF NURSING ACTION DOCUMENTATIONS IN THE CLINICAL SETTINGS

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Abstract

Nursing documentation is a vital component for safe, ethical and effective nursing care. This study investigated the efficacy of Nursing action documentations in the clinical settings. Documented nursing actions for 264 clients were obtained from two Tertiary, two Secondary and two Primary health care institutions in Anambra State of Nigeria using judgmental and simple random sampling techniques. 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 and Analysis of Variance were adopted to answer the research question and in testing the hypotheses at 0.01 and 0.05 levels of significance respectively. The result indicated significant relationship between the core principles of nursing documentation and the timeliness of the documentation, significant relationship between preciseness of nursing documentation and the legal implications, as well as significant differences in nursing documentations across the three levels of healthcare institutions

Keywords: *Efficacy, Nursing actions, Documentations, Clinical settings, Levels of Healthcare Institutions.*

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 involved in patient's 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 out 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 (Spraque and Trapanier 1999; Castledine, 1998; Dimond, 2005; Pearson, 2003). This study therefore intends to investigate the efficacy of nursing documentations in the clinical settings.

Research Question.

- What is the relationship between the core principles of nursing documentation and the timeliness of the documentation?

Hypotheses.

- The impact on Quality assurance is not significantly related to the impact on the science of nursing in the documentations made by nurses in the clinical settings.

- There is no significant difference across the Primary, Secondary and Tertiary Health Institutions with regard to the nursing actions documented by the nurse clinicians.

- Significant relationship does not exist between the preciseness of nursing documentations in the clinical settings and the legal implications.

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 (CNDCS). 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 I 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 the 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 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
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.

Table3. Relationship between the core principles of nursing documentation and the timeliness of the documentation.

Variables	N	$\overline{X}$	SD	r	Critical value	Level of significance
Core principles of nursing documentation	264	19.2462	2.38101	** 0.650	0.000	0.01
Timeliness of documentation	264	9.5568	1.32703			

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

In table 3, the r correlational value for the relationship between the core principles of documented nursing actions and the timeliness of the documentation was 0.650, and it was significant at 0.01 level.

Table 4. Pearson Product moment (r) correlation between the Quality assurance of nursing action documentation and Science of Nursing.

Variables	N	$\overline{X}$	SD	r	Critical value	Probability
Impact on Quality Assurance	264	9.6250	1.63129	** 0.635	0.000	P<0.01
Impact on Science of Nursing	264	13.7462	2.43860			

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

In table 4, the r correlational value between the Quality assurance of nursing action documentation and the Science of nursing was 0.635. There is significant correlation between impact on Quality

assurance and impact on Science of nursing with regard to documented nursing actions. The null hypothesis is rejected.

Table 5. Analysis of Variance to compare the means of documented nursing actions across the Primary, Secondary and Tertiary Health Institutions

Variable	Level of Health institution	N	$\overline{X}$	SD	Source	Sum of squares	df	Mean Squares	f-cal	f-crit (sig)
Nursing Action Documentation	Primary	96	46.5313	9.13058	Between Groups	11269.950	2	5634.975	102.555	0.000
	Secondary	72	56.0000	4.08018						
	Tertiary	96	61.7292	7.42610	Within Groups	14340.865	261	54.946		
	Total	264	54.6402	9.86811		25610.814	263			

Probability: 0.05 level of significance

Table 5 shows that statistically, significant difference existed in the documentation of nursing actions between the primary, secondary and tertiary levels of Health institutions. The calculated F-ratio of 102.555 was more than the critical value of 0.000 at 0.05 level of significance. So the null hypothesis is rejected. Scheffe test (Akuezuilo and Agu, 2004) of multiple comparison of the means was used to determine the order of significant difference across the three levels of Health Institutions.

Table 6. Scheffe test of multiple comparison of means of nursing documentations across the levels of Health Institutions.

Dependent variable	(1) level of Health Institution	(J) Level of Health Institution	Mean Difference (1 – J)	Standard Error	Sig (F – Crit)
Nursing Action Documentation	Primary	Secondary	-9.46875*	1.15563	0.000
		Tertiary	-15.19792*	1.06991	0.000
	Secondary	Primary	9.46875*	1.15563	0.000
		Tertiary	-5.72917*	1.15563	0.000
	Tertiary	Primary	15.19792*	1.06991	0.000
		Secondary	5.72917*	1.5563	0.000

Key: * The mean difference is significant at 0.05 level

Table 6 shows that significant differences existed in the nursing documentation between the three levels of health institutions. There was significant difference between Secondary and Primary levels of health institutions with the mean difference of 9.46875 in favour of secondary level. The significant difference between tertiary and Primary levels was in favour of the tertiary level with a mean difference of 15.19792. Mean difference of 5.72917 existing between tertiary and secondary levels was also in favour of tertiary health institution.

Table 7. Pearson Product moment (r) correlation between preciseness of nursing action documentations and the legal implications.

Variables	N	$\overline{X}$	SD	r	Critical value	Probability
Preciseness of Nursing documentation	264	31.9470	3.30299	0.661	0.000	P<0.01
Legal implications of the documentation	264	19.6439	2.47153			

Table 7 shows that the r correlation value between preciseness of nursing actions documentations and the legal implications was 0.661, and it was significant at 0.01 level. The null hypothesis is therefore rejected. There is significant relationship between the preciseness of nursing documentation and the legal implications of the documentations.

Discussion.

Findings from the study indicate significant correlation (r=0.650) between the core principles of documented nursing actions and the timeliness of the documentation (table 3). Potter and Perry (2010) stated that nursing documentation must provide an accurate and honest account of what and when events occurred. Completion of documentation as close as possible to the time of care enhances credibility and accuracy of health care records (Kozier, Erb, Berman and Snyder, 2004)

Findings from the study also indicate significant correlation (r=0.635) between impact on Quality assurance and impact on nursing science with regard to documented nursing actions (table 4). Tappen and George in Tappen (1989) opined that improving the efficiency and effectiveness of the services rendered are the fundamental purpose of quality assurance program and that quality assurance does not end with collection of data and the determination that standards either are or not being met, but that the information is used to identify and resolve problems. This implies that quality assurance program also stimulate research efforts to learn more about the relationship between interventions and expected outcomes.

The significant differences observed in nursing documentations across the primary, secondary and tertiary health institutions (table 5) are proofs that these levels of care differ in their management styles. According to Kozier et al (2004), nurses must be familiar with, and follow agencies' documentation policies, standards and protocols. However, Portter and Perry (2010) stressed that the core principles of nursing documentation must apply to every type of documentation in every practice setting.

The significant differences across the three levels of healthcare institutions indicate mean difference in nursing documentation in favour of tertiary and secondary health institutions respectively against the Primary level (table 6). These superiorities could be associated to the sophisticated nature of services rendered at secondary and tertiary levels compared with the preventive healthcare services mostly rendered at the primary level. Kamalan (2005) stated that Primary health care focuses on health promotion and specific protection, secondary level focuses on early detection, diagnosis and treatment, while tertiary level focuses on disability limitation and rehabilitation.

Findings from the study also indicate significant relationship (r=0.661) between preciseness of nursing documentation and the legal implications of the documentation (table 7). DeLaune and Ladner (2002) elaborated the features of precise nursing documentation to include unbiased, clear, concise, accurate, legible, factual and time-sequenced report. Invariably, these features constitute the

legal implications of nursing documentation. According to CNPS (2009), for legal reasons, documentation should provide a chronological record of events in client care and delivery of services.

Conclusions.

This study indicates significant relationship between the core principles of nursing documentation and timeliness of the documentation, significant relationship between preciseness of nursing documentation and the legal implications, and that nursing action documentations differ significantly across the three levels of healthcare institutions.

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