

# Comparative Analyses Of Nursing Documentations In The Clinical Settings

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## Abstract

The study focused on comparative analyses Nursing documentations in the clinical settings. Judgmental and simple random sampling methods were used to select documented nursing actions for 264 clients from tertiary, secondary and primary health care institutions all in Anambra State of Nigeria. One research question and three null hypotheses guided the study. The instrument used for data collection was checklist titled “Checklist on Nursing Documentation in the clinical setting”. Descriptive statistics of frequency, mean score and standard deviation (SD) were used to summarize the variables, and Pearson product moment correlation were used to answer the research question. Analyses of variance (ANOVA) was adopted in testing the null hypotheses at 0.05 level of significance. Nursing documentation was observed to have significant legal implications. In addition, nursing documentations in the medical, surgical and maternity units of the health facilities significantly differed with regard to timeliness, promotion of interdisciplinary communication and in the core principles of documentation.

**Keywords:** Nursing documentation, Clinical specialty, 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 (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 therefore focused on comparative analyses of nursing documentations in the Clinical settings.

### **Research Question.**

- To what extent does the documented nursing actions relate with the legal implications of the documentation?

### **Hypotheses.**

- Significance difference does not exist across the medical, surgical and maternity units of Health Institutions with regard to timeliness of documentation of Nursing actions.
- There is no significant difference in nursing documentations across the medical, surgical and maternity units with regard to promotion of interdisciplinary communication.
- The core principles of nursing documentation do not significantly differ across the medical, surgical and maternity units of the Primary, Secondary and tertiary Health Institutions.

## **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 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. Generally, records of nursing documentations from July – September 2015 were used 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 implications (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 4 points 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 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				

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 documented nursing actions and the legal implications of the documentation.**

Variables	N	$\bar{X}$	SD	r	Critical value	Level of significance
Nursing Action Documentation	264	54.6402	9.86811	** 0.615	0.000	0.01
Legal implications	264	19.6439	2.47153			

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 legal implications was 0.615, and it was significant at 0.01 level.

**Table 4. ANOVA showing comparison of documented nursing actions in the medical, surgical and maternity units with regard to the timeliness, promotion of interdisciplinary communication and core principles of nursing documentation.**

Variable	Units in the Health Institution	N	$\bar{X}$	SD	Source	Sum of squares	df	Mean squares	F-cal	F-crit (sig)
Timeliness of Documentation	Medical	97	9.3299	1.43412	Between Groups	7.963	2	3.981	2.283	0.104
	Surgical	63	9.7143	1.36108						
	Maternity	104	9.6731	1.17781	Within Groups	455.185	261	1.744		
	Total	264	9.5568	1.32703		463.148	263			
promotion of interdisciplinary communication	Medical	97	29.4433	6.64262	Between Groups	339.342	2	169.671	5.570	0.004
	Surgical	63	31.0635	6.02113						
	Maternity	104	32.0288	3.77384	Within Groups	7950.598	261	30.462		
	Total	264	30.8485	5.61433		8289.939	263			
Core Principles of Nursing documentation	Medical	97	18.6701	2.50301	Between Groups	61.703	2	30.851	5.634	0.004
	Surgical	63	19.2540	2.33465						
	Maternity	104	19.7788	2.18093	Within Groups	1429.293	261	5.476		
	Total	264	19.2462	2.38101		1490.996	263			

Probability: 0.05 level of significance.

In table 4, the calculated F-ratio for timeliness of documented nursing action was 2.283, for promotion of interdisciplinary communication, the F-ratio was 5.570, and for the core principles of nursing documentation, the F-ratio was 5.634. These results were more than the critical values. Therefore the null hypotheses are rejected. Scheffe (Akuezulo and Agu, 2004) test of multiple comparison of means was used to determine the order of significant differences across the medical, surgical and maternity units of the Health Institutions.

**Table 5. Scheffe (Post Hoc) test of multiple comparison of the means of the timeliness, promotion of interdisciplinary communication and the core principles of nursing documentation.**

Dependent variable	(I) Units in the Health institutions	(J) Units in the Health Institutions	Mean Difference (I – J)	Standard Error	Sig (F – Crit)
Timeliness of Nursing Documentation	Medical unit	Surgical unit	-0.38439	0.21369	0.073
		Maternity unit	-0.34318	0.18641	0.067
	Surgical unit	Medical unit	0.38439	0.21369	0.074
		Maternity unit	0.04121	0.21084	0.845
	Maternity unit	Medical unit	0.34318	0.18641	0.067
		Surgical unit	-0.04121	0.21084	0.845
Promotion of Interdisciplinary communication	Medical unit	Surgical unit	-1.62019	0.89307	0.071
		Maternity unit	-2.58555*	0.77907	0.001
	Surgical unit	Medical unit	1.62019	0.89307	0.071
		Maternity unit	-0.96535	0.88115	0.274
	Maternity unit	Medical unit	2.58555*	0.77907	0.001
		Surgical unit	0.96535	0.88115	0.274
Core principles of Nursing Documentation	Medical unit	Surgical unit	-0.58387	0.37866	0.124
		Maternity unit	-1.10874*	0.33032	0.001
	Surgical unit	Medical unit	0.58387	0.37866	0.124
		Maternity unit	-0.52488	0.37360	0.161
	Maternity unit	Medical unit	1.10874*	0.33032	0.001
		Surgical unit	0.52488	0.37360	0.161

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

Table 5 shows that mean difference of 2.58555 existed between maternity and medical unit, and it was in favour of the maternity unit with regard to promotion of interdisciplinary communication. For core principles of nursing documentation, the mean difference of 1.10874 between maternity and medical units was in favour of the maternity unit.

## Discussion

Findings from the study indicate significant correlation ( $r=0.615$ ) between nursing documentation and the impact on legal implication (table 3). Kozier et al (2004) stated that client's record is a legal document and is usually admissible in court as evidence. According to American Nurses Association code of ethics (2001), the nurse has a duty to maintain confidentiality of all patient information. Lyre and Camp (1999) cautioned that accurate, complete documentation should give legal protection to the nurse, the client's other care givers, the health care facility and the client. Admissible in court as a legal document, the clinical record provides proof of the quality of care given to a client. Documentation is usually viewed by juries and attorneys as the best evidence of what really happened to the client (Lyre and Camp, 1999).

Findings from the study indicate significant differences across the clinical specialty units of the health institutions with regard to timeliness of the documentations, promotion of interdisciplinary communication and in ensuring core principles of documentation (table 4). DeLaune and Ladner (2002) state that documentation will differ depending on the health care facility (eg hospital, nursing home, home health agency, etc) and the setting within the facility (eg emergency room, perioperative, medical-surgical unit) and with specific client populations (eg obstetrics, paediatrics, geriatrics). Estes (2002) advised that the care giver should follow institutional guidelines on frequency of Charting. Kozier et al (2004) added that the care provider should adjust the frequency as a client's condition indicates, for example, a client whose blood pressure is changing requires more frequent documentation than a client whose blood pressure is constant.

Harper (2007) asserts that in creating interdisciplinary communication, documentation is critical in developing a strong interdisciplinary practice. According to DeLaune and Ladner (2002), health care services are delivered by a multidisciplinary team (eg physicians, nurses, pharmacists, social worker, physical therapists, Radiologists, etc); nurses coordinate the care provided by other personnel, and because nurses work with these other care providers on an

ongoing basis, it is necessary to understand the role of each provider which will be reflected in the peculiarities in nursing action documentations of their roles in client care.

For the mean differences across the units (table 5), superiority of maternity unit over the medical and surgical units in ensuring core principles and promotion of inter-disciplinary communication in their nursing documentations could be related to the busy nature of the unit and to the multiple health care providers in maternity care for example obstetrician, physician, paediatrician, etc.

### **Conclusion.**

This study indicates that nursing documentations have significant legal implications, and that timeliness of documentation, promotion of interdisciplinary communication and ensuring the core principles of documentation differ with clinical specialties in health care facilities.

### **References.**

- Akuezulo EO, Agu N. (2004). Research and statistics in Education & Social Science: Methods and Applications. Awka: Nuel Centi Publishers and Academic Press Ltd.
- American Nurses Association. (2001). Code of ethics for nurses with interpretive statements. Washington DC: Author.
- Association of Registered Nurses of Newfoundland and Labrador (ARNNL). (2010). Documentation Standards for registered nurses. St. John's NL: Author.
- Castledine G. (1998). The blunders found in nursing documentation. *British Journal of Nursing*, 7, 1218.
- DeLaune SC, Ladner PK. (2002). *Fundamentals of Nursing: Standards & Practice* (2<sup>nd</sup> ed.). New York: Delmar Thomson Learning.
- Dimond B. (2005). Exploring the legal status of healthcare documentation in UK. *British Journal of Nursing*, 14, 517 – 518.
- Estes MEZ. (2002). *Health assessment and physical examination* (2<sup>nd</sup> ed.). Albany, NY: Delmar Publishers.
- Harper C. (2007). How interdisciplinary documentation improves the bottom line. *Rehabilitation Nursing*, 32 (3), 91-92; III.
- Huffman M. (2004). Redefine care delivery and documentation. *Nursing Management*, 35(2), 34 – 38.

- Kozier B, Erb G, Berman A, Snyder SJ. (2004). *Fundamentals of Nursing: Concepts, Process and Practice* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Lindsay PM, Kelloway L, McConnel H. (2005). Research to practice nursing Stroke assessment guideline link to clinical performance indicators. *AXON*, 26 (4) 22-27.
- Johnson K, Hallsey D, Meredith RL, et al. (2006). A nurse-driven system for improving patient quality outcomes. *Journal of Nursing Care Quality*, 21(2), 168 – 175.
- Joint Commission on the Accreditation of Healthcare Organisation. (2005). *Hospital accreditation Standards*, Oakbrook Terrace II: Joint Commission Resources.
- Lyer PW, Camp N H. (1990). *Nursing documentation: A nursing process approach* (3<sup>rd</sup> ed.). St. Louis, MO: Mosby.
- Nworgu BG. (1991). *Educational Research: Basic Issues and Methodology*. Owerri: Wisdom Publisher Limited.
- Pearson A. (2003). The role of documentation in making nursing work visible. *International Journal of Nursing Practice*, 9, 271.
- Potter PA, Perry AG. (2010). *Canadian Fundamentals of nursing*. Toronto, ON: Elsevier Canada.
- Sprague A, Trepanier MJ. (1999). Charting in record time. *AWHONN Lifeline*. 3(5), 25 – 30.
- Yocum R. (2002). Documenting for quality patient care. *Nursing*, 32, 8, 58 – 63.