

*Full Length Research*

# **Comparative Study of Medical Records Documentation at University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital, Port Harcourt, Nigeria.**

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Medical records have been adjudged as an important primary tool in the practices of medicine, and literature has also revealed medical records as a storehouse of knowledge concerning patients' care and medical history. The aim of this study is to assess the documentation of medical records in Rivers State University Teaching Hospital (RSUTH) and University of Port Harcourt Teaching Hospital (UPTH) Port Harcourt, Nigeria. The study focuses on the assessment of documentation of medical records. The research study design of this study is a comparative design method. The population of 838 comprising of 482 healthcare providers at University of Port Harcourt Teaching Hospital (UPTH), and 356 healthcare providers at Rivers State University Teaching Hospital, Port Harcourt will be used for this study. The data collected or gathered from the administration of the instrument were analysed using the IBM Statistical Package for Social Science (SPSS) version 25. The study also revealed that there is no significant difference on the methods of documentation of medical records and on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital. Therefore, the study concluded that, there is no difference between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital on the assessment of documentation of medical records.

**Keywords:** Healthcare, Medical records, Documentation, Healthcare providers

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## INTRODUCTION

Medical records documentation has always been affected by a series of challenges that hinder prompt and proper documentation both morally and socially, for instance, some cultures forbid a woman to address her husband by name thereby making it difficult to mention his name during medical records documentation.

Kamil, et al (2018) averred that the major challenges troubling proper documentation are (i) lack of supervision and proper auditing of medical stationery during and after use, hence putting the end users in a tight corner because there are no policies and rules guiding them to ensure proper documentation thereby hindering continuity and follow-up within the health industry. Since there is no proper monitoring by the senior healthcare providers who may see such a job as a job of the junior staff without proper on-the-site training and without a willingness to do the job or who see such assignment as a compulsion may give the job minimal attention, especially on how to conduct effective yet efficient documentation.

Kamil et al (2018) opined that incompetency in documentation can also hinder proper medical records documentation because the staff of the facility has different levels of competency because of the nature of training and activities within the facility, furthermore maybe because of variations in the level of education on ability to cope especially when there are much workload depending and the level of clientele and understanding the work and induction because every unit in the facility performs specific task such that during periodic internal posting and redeployment, much job should be done on training and retraining of the newly redeployed staff.

(iii) lack of confidence and motivation: according to Kamil et al (2019), lack of motivation and confidence has contributed to one of the cardinal factors that hinder proper documentation which has been affirmed in some literature that confidence and motivation including laziness, lack of will and zeal hinder proper documentation. Furthermore, staff has confidence in themselves, and their job performance has always been a problem among them including in records documentation practices. Even though documentation is a routine thing some staff is incompetent in their affairs, and some lazy staff sees records documentation as a waste of time and energy undermining how important it is in the health industry. The inadequacy of confidence and motivation in understanding the documentation process seems to be a prominent feeling of insecurity about staff documentation, therefore staff lacks the motivation to perform documentation considering the burden of the job they need to perform every day.

Furthermore, research has proved that knowledge of documentation by some healthcare providers is really very poor that is to say that some of them are yet unaware of the importance of documentation not mind that there are grave consequences that await health professionals as a result of lack of adequate documentation because it could lead to wrong treatment decision, unnecessary expensive diagnostic studies, unclear communication amongst consultants and referring physicians that may trigger lack of follow-up, evaluation, and treatment plan.

Hagos, et al (2019) posited the following lack of adequate manpower, and workload which may also be caused by lack of manpower high level of patronage, lack of on-the-site training, and lack of support from the leadership factors to be major challenges of documentation. However, these outlined factors could be redeemed by ensuring proper policy, increasing the staff strength, and proper support, and motivation from facility leaders. Kahee, Sadoghi, and Askarmaj (2007) observed that one of the most challenging problems of documentation is that the doctors and surgeons feel that surgical procedures do not require documentation but rather perform the procedure and save a life so that aspect of data might be missing when requested.

The delivery of quality healthcare lies in the way medical records are been managed by healthcare providers in the healthcare facilities which also involves documentation of all services rendered. Documentation is any communicable material that is used to describe, explain or instruct regarding some attributes of an object, system or procedure, such as its parts, assembly, installation, maintenance and use (Ada, 2019). Examples are user guides, white papers, online help, and quick-reference guides. Medical records are a chronological written account of the examination of the patient, medical history and complaint, caregivers' findings, and the result of the tests, procedures, and medications therapeutic services. (UK Data Archive, 2009).

Good documentation is crucial to a data collection's long-term vitality; without it, the resource will not be suitable for future use and its provenance will be lost. Proper documentation contributes substantially to a data collection's scholarly value. At a minimum, documentation should provide information about a data collection's contents, provenance and structure, and the terms and conditions that apply to its use. It needs to be sufficiently detailed to allow the data creator to use the resource in the future, when the data creation process has started to fade from memory. It also needs to be comprehensive enough to enable others to explore the resource fully, and detailed enough to allow someone who has not been involved in the data creation process to understand the data collection and the process by which it was created.

Similarly, Huffman (2021) stated that medical records are linked to the term who, what, why, where, when, and how of the patient care during an episode of care rendered. She further opined that the idea behind the terms is to provide care to the beneficiaries through careful documentation of every detail of healthcare activities that have with the patient/client.

Medical records which are also called hospital records according to McGibony (1952) in Aqyeman, et al (2018) are a chronicle of both medical and scientific processes found in the hospital. Medical records have been adjudged as an important primary tool in the practices of medicine, and literature has also revealed medical records as a storehouse of knowledge concerning patients' care and medical history. Sahile, et al., (2020) averred medical records as a collection of data on patients including but not limited to history, statement of the current problem, diagnosis, and treatment procedures. Furthermore, medical records contain details of patients' medical care and demographic data like name, address, gender, and date of birth among others (Natrayan, 2010).

Medical records compiled timely in a manner should also contain sufficient data to identify the patient, support the diagnosis or reason for health care episode to justify treatment, and accurately document the results to have visible evidence, of hospital clinical activities and accomplishments. Globally, proper management of medical records in health facilities has been a challenge ranging from loss of patients' case notes, improper filing, lack of records retention and disposal policy, and engagement of non-professionals in medical records management practices (Danso, 2015; Ondieki, 2017).

Often times, medical records are either in the format of paper-based or electronic-based. But, the management of individual health facilities adopts and implements the format that it feels best suits its activities. According to Adeleke (2014), a paper-based medical record is seen as a systematic collection of patients' personal information which includes health history that is documented or written on a paper form. In contrast, Berg (2001) observed electronic medical records format as a computerized medium that accommodates clinical information recorded based on healthcare providers' interaction with patients/clients in the course of healthcare service delivery. However, Torray (2011) opined that electronic medical records (EMR) as an e-version of patients' health information that has been created, used, and stored in a paper chart for future usage by authorized persons.

Medical records can be viewed through the following indicators, accessibility, filing, retrieval, dissemination, and usage. Accessibility of medical records can be beneficial to both, the patients, clients, the caregivers as it enhances prompt communication between the two-party as well as helps the patients to better understand their health condition, and this is usually achieved through proper documentation. Filing of medical records involves a systematic way of arranging patients' case notes in the hospital using a defined criterion. Furthermore, the management of medical records in the hospital which involves proper filing, enhances prompt retrieval, dissemination, usage, and proper continuation of care not to be aligned with appropriate documentation.

Documentation according to Isaruk (2021), is the act of capturing/creating or entering data elements or information on treatments rendered to patients or organizational business transactions within or outside its environment using approved formats and methods. He further maintained that documentation of health or medical records must comply with a stipulated standard like clear and accurate capturing or recording of things or activities in a legible manner with the use of signs, symbols, and abbreviations that were appropriate for readability, sharing, and reproducibility when future demands occur.

Wang, Yu, and Halley (2013) opined that the documentation process, format, and structure, focus mainly on the completeness and accuracy of detained medical records. According to Hasanain and Cooper (2014), documentation of medical records is an integral part of good health professional practices in the delivery of quality care, whether it is in paper-based or electronic base records management. This helps in communication amongst professionals, eases continuity of care, and also helps to guarantee good quality healthcare to patrons. To ascertain effective and efficient health service delivery to people, medical records documentation is required to record, facts, results, and investigations as well as an observation about an individual's health history, as well as past and present illnesses, and plan of alternatives for future care management. Hence, the quest for a Comparative Study of Medical Records Documentation at University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital, Port Harcourt, Nigeria, is to use the findings in contributing to knowledge and solving certain challenges in the management of healthcare in hospitals.

## **Statement of the Problem**

Medical records are scientific data that support and serve as evidence of services provided by healthcare practitioners in hospitals to patients/clients irrespective of their diverse health situations. However, studies have shown that medical records in the majority of hospitals in developing nations are often not well carried out in tandem in meeting up its primary (patient care) and secondary (administrative) purposes thereby leading to poor quality of healthcare services delivery (Danso, 2015; Luthuli & Kalusope, 2017). In Nigerian hospitals, Ajayi (2010) posited that the continuous long waiting time for patients to get their medical records before being seen, treated, or referred by healthcare providers in public hospitals has been a challenge over time. Similarly, Omang, et al., (2020) averred that the issue of the long waiting times of patients at public healthcare facilities is becoming a major challenge to Nigerians across the different

regions of the country. In addition, long waiting time also presents challenges for healthcare providers and managers because it denies them the opportunity of connecting with the patients due to a loss of confidence in the healthcare service delivery system (Omang et al., 2020). Therefore, this study is to investigate the Comparative Study of Medical Records Documentation at University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital, Port Harcourt, Nigeria

### Objectives of the Study

The objective of this study is to investigate the Comparative Study of Medical Records Documentation at University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital, Port Harcourt, Nigeria. The specific objective of this study is to:

1. Assess the challenges of documentation of medical records in the University of Port Harcourt Teaching Hospitals and Rivers State University Teaching Hospital.

### Research Questions

The following research question is formulated to guide the study:

1. What are the challenges of documentation of medical records at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital?

### Hypotheses

Three null hypothesis is formulated by the researcher to guide this study.

$H_{01}$ : There is no significant difference on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

### METHODOLOGY

The research study design used in this study is a comparative design method. The population of 838 comprising of 482 healthcare providers at University of Port Harcourt Teaching Hospital (UPTH), and 356 healthcare providers at Rivers State University Teaching Hospital, Port Harcourt will be used for this study. The sample size of the study is being estimated using statistical formula to calculate the participants; and it is estimated using Cochran's formula, (Naing & Ruslias cited in Biruk & Abetu, 2018). The formula is expressed as shown below;

$$n = \frac{Z^2 Pq}{d^2}$$

Where;

n = sample size with finite population correction

Z = standard normal deviate corresponding to a 5% level of significance (1.96)

P = the prevalence or proportion of the attribute interest that is present in the population

q = 1-p (48%), complementary probability of patient confidentiality.

d = Is the desired level of precision (i.e. the margin of error) that is absolute error or precision limit (proportion of acceptable sample error or margin error) which is usually 5% (0.05)

$$n = \frac{Z^2 Pq}{d^2}$$

$$n = \frac{(1.96)^2(0.715)(0.285)}{(0.05)^2}$$

$$n = \frac{(3.8416)(0.203775)}{0.0025}$$

$$n = \frac{0.7828}{0.0025}$$

n = 313.13 or 313

Round 10% non-response = 31.4; therefore,  $n = 314 + 32 = 346$

The sample size of 346 via sample size calculation from the above formula, the respondents was selected from the two health facilities (UPTH and RSUTH). The proportion sampling technique was adopted with the aid of the sample size of 346 calculated from the above Cochran's formula. The nature/sources of data for this study is questionnaire. Data for this study were collected through the primary sources of data. The primary source of data collection was generated through a self-administered and closed ended questionnaire. The data collected or gathered from the administration of the instrument were analysed using the IBM Statistical Package for Social Science (SPSS) version 25.

## RESULTS AND DISCUSSION OF FINDINGS

This section presented the results from the analysis of data administered to the representative sample and discussion. The results section was the analysis.

**Research Question One:** What are the challenges of documentation of medical records at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital?

**Table 1:** Challenges of Documentation of Medical Records in UPTH and RSUTH

Items	Hospital				χ <sup>2</sup>	P Value
	UPTH = 199		RSUTH = 147			
	Yes (%)	No (%)	Yes (%)	No (%)		
The lack of adequately trained professionals hinders proper documentation of patient information in this hospital.	164(82)	35(18)	119(81)	28(19)	.275	.600
The lack of a computer-based system for medical records documentation often results in poor patient waiting in this hospital.	159(80)	40(20)	103(70)	44(30)	021	.885
Epileptic power supply hinders proper documentation of records in this hospital	160(80)	39(20)	110(75)	37(25)	.893	.345
The lack of a universally acceptable documentation format causes poor records linkage in this hospital	137(69)	62(31)	99(67)	48(33)	020	.888
The lack of a records retention policy causes ineffective documentation of patient medical records in this hospital.	158(79)	41(21)	114(78)	33(22)	9.44 3	.102
Lack of cooperation among healthcare providers often results in poor documentation of medical records in this hospital.	166(83)	33(17)	119(81)	28(19)	.479	.489
The lack of basic infrastructure in the medical records department often results in poor documentation of records in hospitals.	158(79)	41(21)	110(75)	37(25)	.349	.555

In Table 1. above, majority of the respondents from both health facility (UPTH and RSUTH) accept most the items "The lack of adequately trained professionals hinders proper documentation of patient information in this hospital." UPTH = 164(82%); RSUTH = 119(81%), "The lack of a computer-based system for medical records documentation often results in poor patient waiting in this hospital" UPTH = 159(80%); RSUTH = 103(70%), "Epileptic power supply hinders proper documentation of records in this hospital" UPTH = 150(80%); RSUTH = 110(75%), "The lack of a universally acceptable documentation format causes poor records linkage in this hospital" UPTH = 137(69%); RSUTH = 99(67%), "The lack of a records retention policy causes ineffective documentation of patient medical records in this

hospital" UPTH = 158(79%); RSUTH = 114(78%), "Lack of cooperation among healthcare providers often results in poor documentation of medical records in this hospital" UPTH = 166(83%); RSUTH = 119(81%) and "The lack of basic infrastructure in the medical records department often results in poor documentation of records in hospitals" UPTH = 158(79%); RSUTH = 110(75%). From the analysis of the respondents responses when compare; it revealed that there is no differences on the challenges of documentation of medical records from both facility (UPTH and RSUTH).

Also in Table 4.1.2.3, all the p-value of the Pearson chi-square is above the significant alpha value of 0.05. It also revealed that there is no difference on each of the items on the challenges of documentation of medical records from both facility (UPTH and RSUTH).

## Test of Hypotheses

**Hypothesis One:** There is no significant difference on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

**Table 2:** Independent Samples Test on Challenges of Documentation of Medical Records between UPTH and RSUTH

Health Facilities	N	Mean	Std. Dev.	df	t-value	p-value	Decision
UPTH	199	5.548	1.024	344	2.421	.116	Not Significant
RSUTH	147	5.265	1.042				

In Table 2 above, UPTH ( $M = 5.55$ ,  $SD = 1.02$ ) and RSUTH ( $M = 5.27$ ,  $SD = 1.04$ ), when compare did not differ on the challenges of documentation of medical records. The table also showed that  $t(1) = 1.284$ ,  $p = .094$ ; the p-value is greater than the chosen alpha value of 0.05 ( $p > 0.05$ ). Therefore, the null hypothesis is not rejected, meaning that there is no significant difference on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

## Discussion of Findings

The results revealed that there is no difference on the challenges of documentation of medical records from both facility and also it revealed that there is no significant difference on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital. This finding is similar to the findings of Funmilayo (2020). Funmilayo (2020), investigated the factors militating against effective medical record documentation of Ekiti State University Teaching Hospital Ado Ekiti. Her aim of the study was to examine the effective medical record documentation is affected by prevailing factors militating against health institutions in Nigeria. Findings identified that the Ekiti State University Teaching Hospital has a track record of competent Health Information officers who utilize different documentation methods and that the major factor militating against effective medical records documentation in EKSUTH is inadequate resources, funding including non-legibility of physicians' handwriting, lack of skilled personnel among others.

## CONCLUSIONS

The study "Assessment of the Documentation of Medical Records: A Comparative Study of University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital, Port Harcourt". The results revealed that there is no difference on the challenges of documentation of medical records from both facility and also it revealed that there is no significant difference on the challenges of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital. Therefore, the study concluded that, there is no difference between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital on the assessment of documentation of medical records.

## RECOMMENDATIONS

Based on the significant of the findings, the study made the following recommendation that:

1. Government should endeavor to provide the basic infrastructure facilities for easy documentation process in hospitals in other to reduce the challenges of documentation of medical records.

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