

HEALTH RECORDS MANAGEMENT PRACTICES AND ASSOCIATED CHALLENGES AT THE FEDERAL MEDICAL CENTRE, OWO, ONDO STATE

Omole, Michael Segun

School of Health Information Management, Osun State College of Health Technology, Ilesa, Nigeria

Olanrewaju, Saheed Adewale

(MPH), Osun-State Ministry of Health (Deputy Director of Pharmaceutical Service)

Dr. Abdullahi Lawal Iyanda

Federal Ministry of Health, Department of Public Health, Port Health Services division

Ayinde Abayomi Oluwasegun

University of Ibadan (Public Health Epidemiology)

Jayeoba Olufunke Felicia

University of Adeleke (Health Information Department)

Abstract: Introduction: Effective health records management practices are fundamental to enhancing healthcare service delivery, ensuring accurate documentation, patient confidentiality, and streamlined access to critical medical information. Challenges faced in this domain can significantly impact the quality of care provided. This study investigates health records management practices and associated challenges at the Federal Medical Centre, Owo, Ondo State, aiming to understand their interrelationships and implications for healthcare service delivery.

Objectives: The primary objective of this research is to assess the quality of health records management practices and identify the challenges faced at the Federal Medical Centre, Owo Ondo State. Specific objectives include evaluating the extent of agreement among healthcare professionals on key health records management practices and understanding the prevalent challenges affecting efficient record-keeping.

Methods: A descriptive cross-sectional study was conducted among health information managers and medical doctors at the Federal Medical Centre, Owo, Ondo State. Data were collected using structured questionnaires, and analysis was performed using the Statistical Package for Social Sciences (SPSS). Socio-demographic characteristics, quality of health records management practices, and challenges faced were explored.

Results: The study revealed a high level of agreement among respondents regarding essential health records management practices, including accurate patient information recording and adherence to confidentiality protocols. However, challenges such as technological changes, lack of interoperability among healthcare professionals, and manual handling of patient health records were prevalent. Statistical

analyses indicated a significant relationship between these challenges and the quality of healthcare service delivery.

Conclusion: The research underscores the crucial role of effective health records management practices in shaping healthcare service quality. Challenges identified highlight the need for targeted interventions to improve record-keeping efficiency, staff training, and technological integration. Addressing these challenges is essential for enhancing the overall patient care experience at the Federal Medical Centre, Owo Ondo State.

Recommendations: The Federal Medical Centre, Owo Ondo State, should invest in comprehensive training programs and technological infrastructure to address challenges related to health records management, ensuring staff competence and efficient record-keeping. Implementing a robust quality improvement system is essential. Regular monitoring and evaluation of health records management practices can refine existing processes, ensuring high-quality and timely patient care while addressing challenges effectively.

Key words: Health Records Management, Healthcare Service Delivery, Challenges, Quality Improvement, Medical Information Systems.

Background

Health records play a critical role in healthcare service delivery by documenting diagnoses and prescribed treatments, serving as a valuable resource for healthcare providers and patients. They facilitate the assessment of diagnosis accuracy and treatment effectiveness. As such, effective health records management is essential for enhancing healthcare service delivery (Asinor and Leung, 2016). A well-functioning health records management system is fundamental to healthcare decision-making. It involves key functions such as data generation, compilation, analysis, interpretation, and utilization. This system is crucial for managing patient data and hospital equipment, enabling the capture, collection, analysis, and quality assurance of data from the health sector and related areas. It transforms data into actionable information for informed healthcare decisions (Nasiru et al., 2016). Health records are often referred to as the "foundation," "glue," or "oil" of the healthcare system, highlighting their integral role. Accurate health statistics are considered the bedrock of a robust healthcare system, guiding resource allocation and healthcare strategies (World Health Organization, 2010).

The proper collection, management, and use of health information within healthcare systems are essential for detecting health issues, setting priorities, identifying innovative solutions, and allocating resources effectively (Nasiru et al., 2016). Availability of timely and accurate patient health records is critical for accessibility and utilization of relevant information in patient care (Obimba et al., 2022). Effective management of hospital records contributes to efficiency, accountability, transparency, information security, and good governance (Kamal and Jabel, 2012). Comprehensive and accurate documentation of patients' records through effective health records management practices is crucial for ensuring healthcare quality and continuity of care. Timely access to reliable information is necessary to support patient care and informed management decisions (Mumcu et al., 2014). Healthcare quality, with a focus on safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity, is paramount in healthcare delivery (Adeleke et al., 2015).

Health records professionals play a critical role in collecting, analyzing, and maintaining patient data, supporting physicians and healthcare providers in delivering quality healthcare (Adeleke et al., 2015). The health information management department is responsible for creating, maintaining, and disposing of patient records. They also ensure prompt access to patient records, coding and indexing, and patient-centric

services such as registration, appointment scheduling, and monitoring (Ojo and Owolabi, 2017), The quality of health records management practices has a direct impact on the effectiveness of healthcare service delivery. Proper documentation, retrieval, and management of health records are essential for informed decision-making, patient care, and overall healthcare service quality. The effective management of health records is crucial for providing quality and efficient healthcare services. This study aims to investigate the health records management practices and the challenges faced at the Federal Medical Centre, Owo, Ondo State.

Research Hypothesis

The following hypothesis will be tested at a 0.05 level of significance:

- **H₀:** There is no significant relationship between health records management practices and the challenges faced at Federal Medical Centre, Owo Ondo State, impacting healthcare service delivery.
- **H₁:** There is a significant relationship between health records management practices and the challenges faced at Federal Medical Centre, Owo Ondo State, impacting healthcare service delivery.

This research is vital for the Federal Medical Centre, Owo, shedding light on existing challenges in health records management. By understanding and addressing these challenges, the healthcare facility can improve its record management systems, ultimately enhancing the quality and efficiency of healthcare service delivery. Additionally, the findings contribute valuable insights and serve as a basis for further research in related areas, identifying key areas for improvement.

Materials and Methods

Study Area: The Federal Medical Centre, Owo, located in Ondo State, Nigeria, serves as the focal point of healthcare delivery in the region. Established to provide comprehensive medical services, this center stands as a pivotal institution in the local healthcare landscape. Situated in a strategic location, it caters to the healthcare needs of the diverse population residing in and around Owo. One of the significant features of the Federal Medical Centre, Owo, is its Health Information Management Department. This department plays a crucial role in managing and maintaining health records for all patients. It is here that the intricacies of health records management practices, as well as their associated challenges, can be studied in depth. The professionals working in this department are dedicated to ensuring the accuracy, accessibility, and confidentiality of patient information. Moreover, the hospital serves as a training ground for medical professionals, including doctors, nurses, and administrative staff. Its role in medical education and training further emphasizes the importance of understanding the intricacies of its health records management practices.

Study Design: A descriptive cross-sectional study was carried out among information management personnel at the Federal medical Centre, Owo, Nigeria. The study utilized adapted and semi-structured questionnaires administered through interviews to gather detailed information about the existing practices and challenges faced by the Health Information Management Department.

Study population: The population for this study are members of staff of Federal Medical Center, Owo, Ondo State, which will be limited to health information managers and Medical Doctors. For ease of sampling, the study made use of only staff in this profession, The total population of this category of healthcare workers was 200.

Sampling technique and Sample size: Total enumeration technique was used to select respondents from the health records department of the hospital. This technique was adopted due to minimum size of the population.

Data Collection and management: Data were gathered from primary sources using a self-structured questionnaire comprising four sections (A-D). Section A captured socio-demographic details, including age, sex, and ethnicity. Section B assessed the quality health records management practices at Federal Medical Centre, Owo. Section C focused on identifying challenges in records management practices at Federal Medical Centre, Owo. Section D explored the relationship between health records management practices and the challenges in records management practices at Federal Medical Centre, Owo. The questionnaire exclusively included close-ended questions to ensure respondents provided relevant and focused information

Data Management and presentation: The data collected in this study were input, coded, and analyzed utilizing Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics were applied to generate frequency counts and percentage distributions for the questionnaire items. SPSS was chosen due to its user-friendly interface, alongside other analysis tools like Ep Info, Stata, SAS, Win bugs, facilitating the analysis of responses received from the respondents.

Ethical considerations: Prior to administering the questionnaires to the staff, verbal consent was obtained from the head of the department at the hospital. Respondents were explicitly assured that all information shared would be used exclusively for academic purposes, maintaining strict confidentiality. Therefore, no personal names or any form of identification from the respondents were necessary.

RESULTS

Table 1 Socio-demographic characteristics

Variable	Classification	Frequency (250)	Percentage (100)
Age	21-30yrs	50	20.0
	31-40yrs	75	30.0
	41-50yrs	60	24.0
	51yrs and above	65	26.0
Gender	Male	120	48.0
	Female	130	52.0
Marital status	Single	60	24.0
	Married	180	72.0
	Divorced	10	4.0
Ethnicity	Yoruba	180	72.0
	Igbo	40	16.0
	Hausa	30	12.0
Religion	Christianity	210	84.0
	Islam	30	12.0
	Traditional	10	4.0
Highest educational qualifications	OND	50	17.3
	HND/B.Sc	100	49.3
	MBBS	70	33.3
	Master Degree	30	12.0

Years of working experience	Below 5 years	60	24.0
	5-15yrs	90	36.0
	16-25yrs	70	28.0
	26yrs and above	30	12.0

Table 1 above shows that the majority of respondents were in the 31-40 age group (30%), with a near-even distribution of male (48%) and female (52%) participants. Most respondents were married (72%), with a smaller percentage divorced (4%). Regarding ethnicity, the majority identified as Yoruba (72%), while the highest percentage indicated Christianity as their religion (84%). In terms of educational qualifications, HND/B.Sc holders made up the largest group (49.3%), followed by MBBS (33.3%). The distribution of years of working experience varied, with a substantial proportion having 5-15 years of experience (36%).

Table 2 Quality of health records management practices

Parameters	SA	A	SD	D
Do you ensure that patient information is accurately recorded	90(36.0%)	120(60.0%)	0(0.0%)	4(0.4%)
Is there strict confidentiality protocols to protect patients records from Unauthorized access	140(56.0%)	100(40.0%)	4(1.6%)	2(0.7%)
Do you adhere to standardized coding system to ensure uniformity in medical coding	150(60.0%)	90(36.0%)	1(0.7%)	9(3.6%)
Does the facility adhere to local, national and international regulations to ensure legal compliance in handling patients records	130(52.0%)	115(44.0%)	0(0.0%)	5(4.0%)
Does it facilitate and ease Research activities in the hospital?	150(60.0%)	100(40.0%)	0(0.0%)	0(0.0%)
Do you allow patients access their own health records securely, promoting transparency and empowering patients to be actively involved in their healthcare management	170(68.0%)	72(28.8%)	4(1.6%)	4(1.6%)
Does the facility provide training and education to staff on proper record keeping practices, data entry standards and legal obligations related to patient information	180(72.0%)	69(27.6%)	0(0.0%)	1(0.4%)

The table above presents responses indicating the quality of health records management practices within Federal Medical Centre Owo. It shows that a significant majority strongly agrees (SA) or agrees (A) with practices such as accurate patient information recording (96%), strict confidentiality protocols (96%), adherence to standardized coding systems (96%), and facilitating research activities (100%). Additionally, a substantial portion strongly agrees (SA) with allowing patients access to their records securely (68%), and the facility providing training and education to staff (72%) in proper record keeping practices. Only a

small percentage disagrees (D) or strongly disagrees (SD) with these practices, reflecting a high level of agreement with the quality of health records management in the facility.

Table 3 The challenges of records management practices at Federal Medical Centre, Owo.

Parameters	S A	A	S D	D	Mean	Std Dev
Lack of adequate funding of the health record management system.	150(60.0%)	95(38%)	5(2.0%)	0	1.4733	0.5986
Technological changes	200(80.0%)	45(18.0%)	0	5(2.0%)	1.3933	0.6335
Inadequate competent health record management personnel	125(50.0%)	120(48.0%)	5(2.0%)	0	1.4933	0.5148
Lack of interoperability among the healthcare professionals	188(75.2%)	53(21.2%)	0	3(2.0%)	1.4067	0.5804
Inadequate materials and equipments for record management	118(47.2%)	83(55.3%)	8(5.4%)	0	1.6867	0.6568
Lack of proper backup and recovery system	204(81.6%)	46(18.4%)	0	0	1.5933	0.5804
Attitude of healthcare practitioners in handling patient health record manually	98(39.2%)	150(60.0%)	0	2(0.8%)	1.7400	0.6178
Illegible handwriting by healthcare professionals	174(69.6%)	50(20.0%)	26(10.4%)	0	1.7067	0.6710
Incomplete documentation by healthcare professionals (e.g. physicians, nurses, health record managers)	49(19.6%)	95(38.0%)	90(36.0%)	16(6.4%)	1.7400	0.6178
Poor numbering and filing system	68(27.2%)	75(30.0%)	54(21.6%)	53(21.2%)	1.5933	0.5804

Table 3 illustrates the challenges of records management practices at the Federal Medical Centre in Owo. It shows that a significant percentage of respondents strongly agree (SA) or agree (A) with several challenges, including technological changes (80%), the lack of interoperability among healthcare professionals (75.2%), and the attitude of healthcare practitioners in handling patient health records manually (60%). Other challenges that received notable agreement include illegible handwriting by healthcare professionals (69.6%), incomplete documentation (90) by healthcare professionals, and poor numbering and filing systems (54). These challenges are reflected in the mean scores and standard deviations, indicating varying levels of agreement among respondents. Overall, the data highlights multiple challenges faced by the center in health records management, with technology-related issues, workforce competence, and documentation quality being prominent concerns.

Table 4 Relationship between health records management practices and the challenges faced at Federal Medical Centre, Owo, and impacting healthcare service delivery.

Challenges of Health Records Management Practices	Value	Df	Asymp. Sig. (2-sided)
Dependent Variable: Health Records Management Practices			
Pearson Chi-Square	21.347 ^a	8	.006
Likelihood Ratio	23.090	8	.003
Linear-by-Linear Association	4.094	1	.043
N of Valid Cases	250		

The table presents the relationship between health records management practices and the challenges faced at Federal Medical Centre, Owo, impacting healthcare service delivery. The chi-square test results show a statistically significant association between these variables, with a Pearson Chi-Square value of 21.347 (df = 8, p = 0.006), a Likelihood Ratio value of 23.090 (df = 8, p = 0.003), and a Linear-by-Linear Association value of 4.094 (df = 1, p = 0.043). The analysis is based on 250 valid cases, indicating the significance of the relationship in understanding how these factors impact healthcare services.

Discussion

The study findings underscore the pivotal role of effective health record management practices in enhancing the overall quality of healthcare service delivery at the Federal Medical Centre, Owo. Efficient record management positively influences various crucial aspects, including, patient care continuity, privacy, reduced waiting times, research capabilities, data analysis, and legal protection. This aligns with prior research by Danso (2015), Adebayo and Akinyosoye (2021), and Awogbami et al. (2020), all emphasizing the positive impact of streamlined records management on both financial and patient care aspects.

Demographically, the study revealed that a significant proportion of respondents fell within the 31-40 age group (30%), and there was nearly equal representation of male (48%) and female (52%) participants. Most respondents were married (72%), with a smaller percentage being divorced (4%). The majority identified as Yoruba (72%), and Christianity was the predominant religion (84%). In terms of educational qualifications, HND/B.Sc holders constituted the largest group (49.3%), followed by MBBS graduates (33.3%). Experience-wise, a considerable portion had 5-15 years of expertise (36%).

The study participants overwhelmingly agreed on various health records management practices, such as accurate patient information recording, strict confidentiality protocols, adherence to standardized coding systems, facilitating research activities, allowing secure patient access to records, and providing staff training in proper record-keeping practices. This consensus echoes the research by Ikonne et al. (2021), highlighting the prevalent agreement on records documentation, retention, maintenance, and disposal as key practices in Nigerian public health facilities.

However, challenges were also apparent. A significant percentage of respondents acknowledged difficulties related to technological changes (80%), lack of interoperability among healthcare professionals (75.2%), and healthcare practitioners' manual handling of patient health records (60%). Other challenges included illegible handwriting by healthcare professionals (69.6%), incomplete documentation (90), and poor numbering and filing systems (54%). These challenges were in line with Records Life Cycle Theory by Theodora Schellenberg (1995) and Ondieki's (2017) findings, emphasizing the crucial phases of records management from creation to disposal and the lack of standard practices affecting timely patient record management.

Moreover, the study established a significant relationship between health records management practices and the challenges faced ($\chi^2 = 21.347$, $df = 8$, $p = 0.006$), confirming the impact of challenges on the quality of healthcare service delivery. These findings align with prior research, including Danso (2015), Marutha (2018), Marutha and Ngoepe (2017), emphasizing the adverse effects of poor records management practices, leading to patient distrust, inefficiencies, and compromised healthcare delivery. In essence, the study emphasizes the critical need for addressing challenges and promoting effective health records management practices to ensure high-quality healthcare services at the Federal Medical Centre, Owo. The insights provided by this research contribute significantly to the ongoing discourse in the field, shedding light on the interconnectedness of challenges and management practices in shaping healthcare service delivery.

Conclusion

The findings of this study has provided valuable insights into the integral role that effective health records management practices play in shaping the quality of healthcare service delivery at the Federal Medical Centre, Owo. It is evident that the interconnection between these management practices and the challenges faced has a profound impact on the overall patient care experience. These findings underscore the pressing need for strategic interventions and comprehensive reforms in health records management to optimize the delivery of healthcare services in the facility.

Recommendations

1. The Federal Medical Centre, Owo, should invest in robust training programs and infrastructure to address challenges related to technological changes, interoperability among healthcare professionals, and legible record-keeping. This will help bridge the existing gaps and enhance the quality of health records management practices.
2. To optimize healthcare service delivery, the center should establish a continuous quality improvement system that monitors, evaluates, and refines health records management practices, thus ensuring timely and high-quality patient care while addressing potential challenges.

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