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INFORMATION MANAGEMENT AND ITS COMMUNICATION: A HEALTH PERSPECTIVE

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ABSTRACT

This research work examined how health officers manage patient records and communicate with them. The Ahmadu Bello University (ABU), Zaria Medical Center served as the case study for the research. Six (6) research questions were developed based on the research subject to direct the investigation. The research questions are: What kinds of patient data are gathered by records officers at ABU Medical Center? What kind of patient data is kept at the ABU Medical Center so that records officers can communicate with them? What kind of patient data are records officers at ABU Medical Center retrieving? What kind of patient information does ABU Medical Center disseminate? What kind of information is spread around the ABU Medical Center? A questionnaire that was provided to the staff of the record office of the ABU medical Center for Analysis was used to gather responses to the objective questions.

Keywords: Record communication, information management, information retrieval

INTRODUCTION

Databases, the data in commercial and medical systems, photos, research data, and letters are just a few examples of records. Record communication management is the supervision, management, and transmission of these records. Documents of vital historical, financial, and legal importance are identified, communicated, and preserved through record communication management. Non-essential records are promptly disposed of in accordance with set policies and relevant laws. Typically, a program created to methodically control or monitor records during their entire life cycle is involved (Makata, 2015). The five steps of record communication management are production (which deals with how records are produced in an organization), storage (which maintains information), use (which demonstrates how records are used), communication (which deals with how the records are exchanged between health officers) and disposal (which archives or destroys old data). All businesses and

organizations that manage records, like those in the health sector, go through these stages (Omole, 2016). The preservation of documents, operational efficiency, assistance with decision-making, comparison ease, guaranteeing compliance with all policies are only a few advantages of record communication management.

The management and proper communication of health records could, however, make the difference between life and death in some circumstances due to the differences between records in health and other institutions. This is due to the fact that a health record is a thorough account and documentation of a single patient's medical care provided over time by a specific health care practitioner (Adebayo et al., 2014). Therefore, it becomes crucial to manage and communicate health records effectively. As early as 300 BC, the Egyptians and the Greeks, who ran conventional medical houses, preserved the first health records. Only symptoms and treatments were recorded by Egyptian and Greek physicians (Marini, 2015). However, scientific and technological advancements in the 19th and 20th centuries increased the accuracy of health records by enabling medical professionals like nurses, pharmacists, and doctors to view, examine and communicate health information. Because health records gather information about a specific patient, his or her sickness, and the events that occurred during professional care, these medical professionals needed to access, analyze and communicate health records in order to give the patient the best medical care possible. This is also helpful for research, teaching, evaluating medical practice, and meeting legal obligations. The typical patient's records include the patient's medical history, results of examinations, diagnoses, and treatments. The availability of health data from the patient's record, which acts as a record of how the patient has responded to their health conditions and as a roadmap for future therapy, aids in the planning process. Records should be handled in order to fulfill the purpose for which they were created. The goal of the medical record is to fulfill the individual's right to information at the lowest possible cost, in the appropriate sequence, and at the proper location or time via communication efficiency. Essentially, it is vital to maintain health records correctly since medical facilities are increasingly depending on the gathered health data to aid in the diagnosis process, treatment, and management, for enhanced services and practices.

Medical information and records might be acquired manually or digitally. However, due to a lack of retrieval tools, inadequate information structure, disorganized maintenance of health data, among other factors. thus, access, communication and exploitation of the acquired information can occasionally be challenging. This results in inefficiencies in routine medical tasks. One of the identified issues affecting the ABU Medical Center, according to preliminary research by the researcher, is health record keeping. Some of which are apparent in medical referral (for instance, a referral from the ABU medical center to a hospital outside the university), coordination between the doctors and the pharmacy, and coordination between the doctors and the laboratory specialist. Based on further study, this issue is known to be universal to general health sectors. What is the root of these issues? Could a reliable health record database help to tackle these issues? What types of communication and information retrieval techniques are available? Based on this, the study seeks to understand how records officers at the ABU Medical Center

maintain and communicate health records.

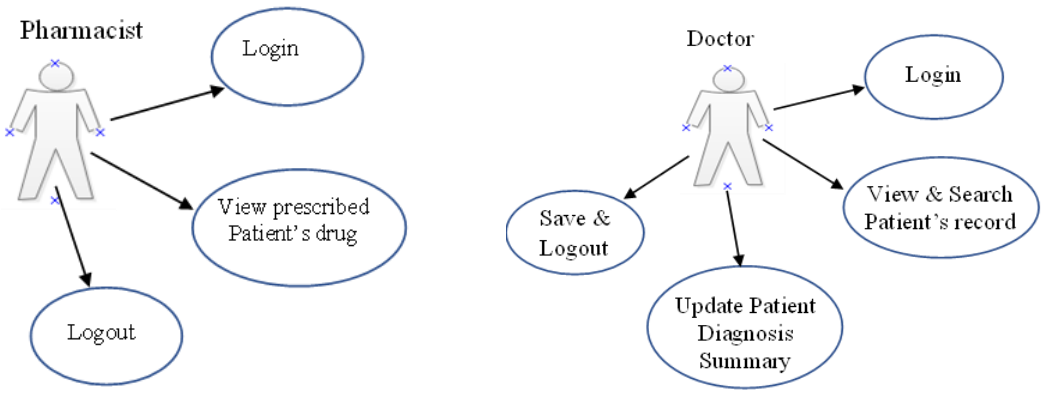
Research Questions

This work addresses the underlisted research questions:

1. What type of patient information is collected by records officers in ABU Medical Centre?
2. What type of information of patients is stored by records officers ABU Medical Centre or communication?
3. What type of information of patients is retrieved by records officers ABU Medical Centre?
4. What type of information of patients is distributed by ABU Medical Centre?
5. What type of information is disseminated within the ABU Medical Center?
6. What challenges do records officers face in managing patient's information in ABU Medical Centre?
7.

A Brief History of Abu Medical Centre

The University Health Services (UHS), which was founded in 1962, has the responsibility of offering medical, wellness, and preventive health services to students, employees, and some NHIS participants as well as to immediate family members. Nigeria's largest enrollment at the moment is University Health Service (UHS), a primary and secondary care facility provider accredited by the NHIS. It is a user-friendly organization, and its headquarters are located next to the university's community market. Through a number of sections and departments, the health institution provides both medical and preventive/sanitary services. The ABU medical center has the following units that communicates information with each other; the medical unit, the pharmacy unit, the laboratory unit, the dental unit, the nursing unit, the accounting unit, the store unit and medical record unit amongst others. A conceptualized diagram for the interaction between the various unit of the medical center is presented in Figure 1.



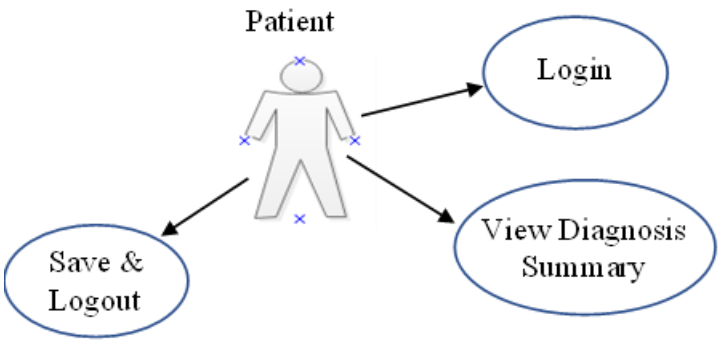


Figure 1: A Conceptualized Diagram for The Interaction Between the Various Unit

EMPIRICAL REVIEW

The management of information resources, the management of information technology (IT), or the management of information rules or standards are frequently used interchangeably with Choo's (2002) definition of information management. Information management, as recommended by Maceviciute & Wilson (2002), incorporates concepts from both information science and librarianship. According to Dorothy (2006), information management is a way of life that involves a cycle of activities that support the organization's learning initiatives, the identification of information needs, the acquisition of the information, the organization and storage of the information, and the use of the information. According to a survey done by Wali (1998), a lot of people, organizations, and agencies including medical centers are currently engaged in producing a lot of information. Consequently, information sources are being created in a range of formats, including: Print includes books, encyclopedias, magazines, Images, charts, maps, and illustrations are non-print electronic sources such databases, CD-ROMs, and the internet. Similarly, sources of information for companies, regardless of format, include letters, memoranda, reports, manuals, financial statements, plans, maps, computer files, and audiovisual materials, according to a book authored by Frisharman (2002). Additional company resources include premises, equipment, and databases.

Asabe, (2013) presented a comprehensive study on health records and its communication. The authors justified that health record information retrieval is anticipated to be thorough and should be planned to handle patient information while upholding service procedures. The primary objective of the health record is to maximize and efficiently move information around the medical center in order to facilitate

effective decision-making for patient care (Omole, 2019). The usual participants in this information retrieval include patients, nurses, doctors, and pharmacists. Due to their sensitivity, medical records have faced a number of difficulties. The most frequent concern is with communication, safety, security, access, and storage. Storage and communication issues arise in hospitals using largely manual medical records management systems. Another difficulty that users and custodians encounter is getting access to medical records. Conflicts about who owns a patient record and who has access to it do arise occasionally. In an effort to ease this tension, the US Fair Health Information Practice Act of 1997 requires healthcare providers to provide patients to view their medical records in a secure manner and includes provisions for both civil and criminal penalties for noncompliance (Wager et. al, 2005). Nonetheless, the communication and security challenges faced in health record can be attributed to inadequate technology infrastructure and technology expert amongst others (Yaya et al, 2015; Kabiru, 2016).

The works under evaluation in this section examined and emphasized the idea of information. The review makes clear that information is defined as material that has been communicated to a message receiver and comprehended, processed, and applied by that recipient. This evaluation also discusses the value of health record information and communication as a resource. There were also problems with the health record information mentioned.

METHODOLOGY

The research method used for this study is the survey approach. A survey is a technique used to gauge people's experiences, attitudes, views, and beliefs. The technique is deemed suitable for this study project since it can collect data from both a small and a large population. According to Suleiman (2007), a survey approach enables the researcher to gather, examine, and interpret data from respondents, including facts, experiences, and views. The survey research approach aids in describing existing phenomena that support present practices and situations in order to create a better improvement strategy. It is suitable to employ a survey for this study since it is a distinctive technique to acquire data from a specific demographic that commonly utilizes a specific technology. The survey will be useful in describing the features of the ABU medical center's information use, storage, and retrieval. Staff from the ABU medical facility who are involved in the management of patient records make up the study's population. Twenty-five (25) members of the Ahmadu Bello University Medical Center's record personnel make up the study's population. The staff of the ABU medical center's records office served as the sample population for this study. The prepared

questionnaire, with which responses were obtained from the respondents, was distributed to twenty-five (25) respondents. The researcher personally distributed the questionnaire to the various personnel in their respective offices throughout various time shifts to ensure effective and efficient feedback.

RESULTS AND DISCUSSION

Table 1: Information Collected in ABU Medical Centre

Information Collected	Frequency	Percentage
General operation record	20	80%
Patient data information	16	64%
Financial Record	6	24%
Staff record (time management)	10	40%
Laboratory record	9	36%
Medicine stock records.	6	24%
Revenue generation	3	12%
Referral record	9	36%
Others, please specify	0	0%

Source: 2022 Field Work

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Table 1: shows that twenty (20) respondent with 80% of the total staff of record office in the ABU medical center chooses general operations record as information that is collected, while sixteen (16) respondent with 64% choose patients data information as information collected, six (six) with 24% selected the financial record as information collected, ten (10) with 40% selected Staff record (time management) as information collected, nine (9) with 36% selected laboratory record as information collected, six (6) with 24% selected medicine stock record as information collected. The remaining three (3) on a percentage of 12% and nine (9) on 36% selected revenue generation and referral record as information collected respectively.

So, the findings were that the type of information collected by records officer in ABU medical center are the general patient record, patient data information, and staff records. Also, laboratory records and referral record are collected. This implies that

patient's medical history will easily be tracked within the medical center and from one medical center to another.

Table 2: Patient's Information stored in ABU Medical Centre

Information Storage	Frequency	Percentage
File cabinet	18	72%
Computer databases	25	100%
DVD/CD/Hard disks	4	16%
Others, please specify	0	0%

Source: 2022 Field Work

Table 2 shows that eighteen (18) respondents with 72% of the total staff of record office in the ABU medical center choose to store patient's information in ABU Medical Centre using the file cabinet, while twenty-five (25) respondents with 100% used the computer database to store patient's information in ABU Medical Centre. The remaining four (4) on a percentage of 16% stored information of patients using DVD/CD/Hard disks.

So, the findings were that information stored by records officer in ABU medical center are done using the computer databases and file cabinet. This ensured safety of information. However, there is a need to regularly backup collected information on external storage systems to prevent total loss.

Table 3: Patient's Information retrieved in ABU Medical Centre

Information Retrieval	Frequency	Percentage
File cabinet	18	72%
Computer databases	25	100%
DVD/CD/Hard disks	3	12%
Others, please specify	0	0%

Source: 2022 Field Work

Table 3 shows that eighteen (18) respondents with 72% of the total staff of record office in the ABU medical center choose to retrieve patient's information in ABU Medical Centre using the file cabinet, while twenty-five (25) respondents with 100% used the computer database to retrieve patient's information in ABU Medical Centre. The remaining three (3) on a percentage of 12% retrieved information of patients using DVD/CD/Hard disks.

So, the findings were that information are retrieved by records officer in ABU medical center from the computer databases and file cabinet. This ensured that patient's information is easily updated and recorded as at when due.

Table 4: Patient's Information disseminated in ABU Medical Centre

Information Dissemination	Frequency	Percentage
Internal server	19	76%
Pamphlets, handbills, cards	10	40%
E. mails	7	28%
Telephone	9	36%
Other please specify	0	0%

Source: 2022 Field Work

Table 4 shows that nineteen (19) respondents with 76% of the total staff of record office in the ABU medical center choose to disseminate patient's information in ABU Medical Centre using the Centers Internal server, while ten (10) respondents with 40% used Pamphlets/handbills/cards as a tool to disseminate information within the ABU medical center. The remaining seven (7), and nine (9) respondents on a percentage of 28% and 36% used Emails and Telephones respectively to disseminate information.

So, the findings were that information are disseminated by records officer in ABU medical center using the internal server, and Pamphlets/handbills/cards. Nonetheless, the use of emails and telephone are used for external and emergency communication. The use of internal servers disseminated information's in ABU medical center faster.

Table 5: Challenges record officers face in ABU Medical Centre

Challenges	Frequency	Percentage
Inadequate skills or training in computing/ICT	11	44%
Inadequate funding for record equipment	19	76%
Inadequate technological infrastructure	8	32%
Phobia in using technological devices	3	12%
Inadequate technological expertise	2	8%

Source: 2022 Field Work

Table 5 shows that eleven (11) respondents with 44% of the total staff of record office in the ABU medical center are of the opinion that the challenges record officers face in managing patients record in ABU Medical Centre is as a result of inadequate skills or

training in computing/ICT, while nineteen (19) respondents with 76% attributed the challenges to inadequate funding of record equipment. The remaining eight (8), three (3) and two (2) respondents on a percentage of 32%, 12%, and 8% attributed the challenges to inadequate technological infrastructure, phobia in using technological devices, and inadequate technological expertise respectively.

So, the findings were that the challenges records officers face is inadequate funding for the record equipment and records officers have inadequate skills in computing/ICT. Also, the inadequate technological infrastructure is a challenge faced by the records officers. These challenges if not addressed will lead to inefficiency of record management in the ABU medical Centre. This is as justified in the work of Yaya et al, (2015) and Kabiru, (2016).

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

The Ahmadu Bello University Medical Center served as the case study for this study, which looked at the management and communication of records by records officers in the medical industry. Six objectives were set based on the six research questions that were used in the study. The Ahmadu Bello University Medical Center served as the case study for this study, which looked at the management and communication of records by records officers in the medical industry. Six objectives were set based on the six research questions that were used in the study. The finding of this study revealed the following:

1. The type of information collected and communicated by records officer in ABU medical center are the general patient record, patient data information, and staff records.
2. The information stored by records officer in ABU medical center are done using the computer databases and file cabinet.
3. The information retrieved by records officer in ABU medical center are from the computer databases and file cabinet.
4. The information disseminated by records officer in ABU medical center are done using the internal server, and Pamphlets/handbills/cards. Nonetheless, the use of emails and telephone are used for external and emergency communication.
5. The challenges records officers face is inadequate funding for the record equipment and records officers have inadequate skills in computing/ICT. Also, the inadequate technological infrastructure is a challenge faced by the records

officers. These challenges if not addressed will lead to inefficiency of record management in the ABU medical Centre.

Conclusion

According to the study's conclusions, the general patient record, patient data, and staff records are the three types of patient records that are kept in ABU medical facilities and communicated. These patient data are gathered, saved, and accessed from file cabinets and computer systems. After being retrieved, the data is mostly shared via the internal server, pamphlets, and cards. The difficulties faced by the records officers, however, are a shortage of funds for the record equipment, a lack of ICT/computing expertise, and a lack of technological infrastructure amongst others.

Recommendations

The recommendations are as follows:

1. It is advised that the patient's laboratory and referral records be retained with the usual patient data gathered.
2. Regular information backups are advised while using computer databases to prevent data loss. To achieve a seamless retrieval and dissemination procedure, this is being done.
3. To facilitate information dissemination, it is advised to equip advanced computers with ample storage.
4. To guarantee the effective usage of internal servers, it is advised that enough ICT infrastructure be supplied.
5. Along with the provision of suitable infrastructure, it is advised that workshops and ICT training be regularly arranged for the records officers to advance their ICT/computing skills.

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