

## **EFFECT OF MISLAYING AND MISFILING OF PATIENTS HEALTH RECORDS IN TWO SELECTED HOSPITALS IN ABEOKUTA OGUN STATE, NIGERIA**

**Kayode Sunday Osundina and Olatunji Azeez**

Health Information Management Dept., Lead City University Ibadan, Nigeria.

*Corresponding Author's E-mail:* [kayodeosundina@yahoo.com](mailto:kayodeosundina@yahoo.com)

### **ABSTRACT**

The study focused on effect of mislaying and misfiling of patient health records in the health records department of Neuropsychiatric Hospital (NPH), Aro, Abeokuta and Federal Medical Centre (FMC), Idi-Aba, Abeokuta, Ogun State, Nigeria. The study population for this research work comprised of Health Information Managers, Health Records Technicians and Non-Health Records Professionals working in the health records department of the two selected health institutions.

The study adopted a descriptive survey design in order to deduce the effects of mislaying and misfiling of patients health records in these selected hospitals. The population comprised of eighty (80) respondents with the aid of self-designed structured questionnaire and was validated to establish its reliability.

Questionnaire was personally administered by the researcher. Data collected was analyzed using Epi-Info software (Epidemiology Information) version 3.5.1 and the results were presented in tabular form to reveal the respondents' view based on objectives. The study found out that mislaying and misfiling of patients health records have negative effects on the patients and the hospitals in general.

Moreover, all health institutions should be mandated to employ qualified and trained Health Information Managers to man the department of Health Information Management so that their knowledge in management of patients' health records will assist in reducing mislaying of patient health records. Also, the management of the hospitals should provide enough space, adequate filing equipment and suitable filing environment for health records department in order to reduce misfiling of records to establish a befitting and standard library.

**Keywords:** Mislaying and Misfiling, Patients Health Records, Effect of Mislaying and Misfiling, Selected Hospitals.

## **I. Introduction**

Huffman (1994) affirms that the health records of patients are an important primary tool in the practice of medicine. The whole idea behind it is to provide better care of the patient through careful recording of every detail having to do with the patient illness and care rendered. Therefore, health records of the patient should be made available to the health professionals whenever patient visits the hospital for continuity of their previous treatment. Failure to produce patient health record by the health information manager/officer in the hospital due to mislaying or misfiling of such health record will bring about untold hardship on the part of the hospital and the patient. That is, the health professionals such as the hospital management physician (doctors), nurses laboratory scientists etc. would not be able to review the previous treatment and diagnosis given to the patient and wrong treatment and diagnosis may be given to the patient at the end, which at times may lead to the patient's death, financial loss on the part of the hospital and the patient's relatives may sue the hospital for negligence and malpractice for damage done to the patient during the cause of the treatment.

Moreover, Yeo (1999) posits that hospitals deal with the life and health of their patients, good medical care relies on well-trained doctors and nurses and on high-quality facilities and equipment. Good medical care also relies on good record keeping, without accurate, comprehensive up-to-date and accessible patients' case notes, medical personnel may not offer the best treatment or in fact may diagnose condition which can have wrong consequences on the part of the hospitals and the patients. In addition, records also provide evidence of the hospital accountability for its action and form a key source of data for medical research, statistical report and health information systems.

According to Nandalal (2013), a patient health record communicates information about their progress to the physicians and other health professionals who are providing care to the patient. It is a communication link among the patient care-givers. For those health professionals that provide care on subsequent occasions, the medical records provide critical information such as the history of illnesses and the treatment given. Also, health records provide evidence that may assist in protecting the legal interest of the patient, the physician and the health institution.

Therefore, we keep health records for a number of reasons:

- For communication purposes while caring for the patient.
- For continuity of patient care over the course of the patient illness.
- For evaluation of patient outcome.
- For medico-legal purposes.
- For use as a source of health statistics.
- For research, education and planning.

Huffman (1994) affirms that the health records is an orderly written report of the patient complaints, the diagnosis findings, treatment and end result that in total form clinical picture

and when completed provides sufficient information to clearly identify the patient to justify the diagnosis and treatment, and to record result. Because “patient forgets but record remembers,” the health record is of the value to the patient, the hospital, the physician and for research and teaching. Sequel to the aforementioned, it could be deduced that health records keeping is the pivot of medicine. Failure to produce patient health records during his subsequent visits to the hospital by the health records officer due to mislaying and misfiling of patient health records in the health records department may inflict a lot of problem on the patient, the hospital and the physician. The continuity of the patient care would be hampered, wrong diagnosis may be given to the patient, patient may be delayed unnecessarily before being attended to by the physician, the hospital management will not be able to review the quality of care rendered to the patient during his stay in the hospital and the patient relatives may conclude that negligence and malpractice have been committed during the course of treatment and therefore sue the hospital management for damages. In order to avoid the above mentioned, the health records managers/officers should be up and doing in the hospital to make records of patient available whenever it is needed by the health professionals for continuity of the treatment.

### **Statement of Problem**

Mislaying and misfiling of patient health records have been a great problem to all health institutions in Nigeria. To review and evaluate the care rendered to the patients by the hospital management will be a great problem if the patient health records cannot be located.

Moreover, managerial decision will not be easy without the patient case note. A lot of delay and loss of valuable cost would be experienced by the hospital and the patient. Therefore, this study wants to investigate the causes, consequence and available solution to the problems of mislaying and misfiling of patient health records in the health records department.

### **Objective of the Study**

1. To examine the available filing and numbering system in health records department.
2. To assess the available filing equipment in the health records department.
3. To assess the types of health records personnel involved in filing and retrieval of patient health records and suitability or records filing environment.
4. To evaluate the effect of mislaying and misfiling of patient health records in health institution.
5. To find solution to the problems of mislaying and misfiling of patient health records in the health records department.

### **Research Questions**

1. What are available filing and numbering systems in the health record department of Neuropsychiatric Hospital (NPH), Aro, Abeokuta and Federal Medical Centre (FMC), Idi-Abeokuta?
2. What are the various available filing equipments in the health records department?

3. What are the types of health records personnel and suitable filing environment in the health records department?
4. What are the effects of mislaying and misfiling of patient health records in the health institution?
5. What are the solution to the problems of misfiling and mislaying of patient health records?

## **II. REVIEW OF LITERATURE**

### **Availability of Patients' Case notes in the Clinic**

Ayilegbe (2008) posits that Health Information Managers are the initiator of patients' documentation in any hospital. A patient cannot be attended to in abstract, and therefore, there must be initial documented fact about him which would serve as a baseline for the commencement of other health care services by other members of health professionals. Health Information Managers engage in documentation in every segment of Health Records Department such as General Outpatient Department (GOPD), Accident and Emergency (A&E) Records Unit, NHIS Records Unit, Cancer Registry Records Unit, ANC Records Unit, and other specialty clinics. The role of Health Information Managers in patient documentation and care cannot be overstressed as it provides necessary "oil" for smooth running of multifarious hospital services. This is noticeable in the effective utilization of numbering system which helps greatly in the identification of every patient regardless of their numerical strength and number of visit at any time. The role of Health Information Managers in patients' documentation facilitates follow-up care which in turn brings smiles on the faces of patients during their visit to the hospital for continuity of the care.

The accurate and complete documentation by Health Information Managers assures easy location and availability of patients' case notes through effective utilization of tracer cards. The Health Information Managers are also expected to prepare in advance before the clinic's day, all the patients' records that have being booked on appointment with the respective consultant and making the case notes of patients ready and available at the clinic for easy access by the consultant in order to facilitate effective treatment of the patients. Without the professional documentation of Health Information Managers in various specialty clinics vis-à-vis appointment system, general outpatient clinic (GOPD), consultant outpatient clinic (COPD), accident and emergency clinic (A&E), NHIS clinic, etc, congestion and chaos would have been the order of the day. Above all, numerous clinical research activities being carried out for improved health care services can easily be stoned-walled when Health Information Managers refuse to make patients' case notes available to the researchers. More so, what has been documented according World Health Organization (WHO), standard makes it possible for related cases to be stored and retrieved for research, teaching, treatment and statistical purposes among others. Hence, Health Records Department can be termed as "the life wire, life blood and backbone" towards a result oriented health care services in the nation.

Ayilegbe (2008) affirms that it would be ridiculous to see some patient's health records flying about without adequate measures in place for their proper custody. Painstaking efforts must have been employed to generate health documentation for patients by various members of health care team. Putting into cognizance the confidential and legal matters among other issues that may arise from the usage and management of patients' health document, it behooves the management of a health institution to ensure proper care and custody of these health information documents. There is statutory requirement for the proper custody of patients' health records in every health facility to facilitate availability of these records whenever they are requested for by the physicians and other health providers in the health institutions for continuity of patients care. Hence, Health Information Managers are the chief custodian of all patients' health records in every organized health institution. Health Information Managers are recognized by law to ensure professional custody, safety, and proper management of patients' health records.

In some health institutions, it would be absurd to entrust the custody of patients' health records in the hands of staff who are not Health Records Practitioners. This situation is unhealthy both legally and ethically. Professional standards should be upheld in every health institution in order to conform to the statutory requirement custody of the patients' health information. Health Information Managers are qualified, well-trained and skilful in all functions that pertain to records management. Thus, for qualitative and professional custody of health records, proper professional placement should be adhered to in order to achieve the desired health service delivery. Since Health Information Managers are the custodian of patient's health records and recognized by law in any health institution to create, store, retrieve and even destroy unwanted patient health records, therefore, availability of the patient's health records in the clinic is the responsibility of the Health Records Department in any health facility.

Numbering system is critical to ensure proper filing of health records in the hospital environment.

### **Numbering System**

Aremu (1999) affirms that numbering system is basically an identifying factor used to label the record and facilitate its being filed in a systematic manner for easy retention and retrieval. In most Health Care Institutions, Health Records are filed numerically according to patient admission numbers. In the past, some Health Care Institutions have filed records according to names of patients, discharged numbers or diagnostic code number. Alphabetical filing by patient names is subjected to error than its numerical filing. Filing by discharge numbers and diagnostic code numbers generally prove to be unsatisfactory because the importance that records registers generated in the facility are concerned exclusively with the admission number.

However, filing in numerical sequence involves the additional choice of maintaining a separate Alphabetical Name Index. This numbering of Health Record offers several advantages:

1. It facilitates the identification of document pertaining to individual patient, feature which is important where names are identical or similar.
2. Filing is more efficient.
3. Confidentiality is enhanced.

There are three types of numbering systems that are currently in use in Health Care Facilities, they are: 1. Serial numbering system, 2. Serial-unit numbering system, and 3. Unit numbering system.

**Serial Numbering System:** In this method, the patient receives a new number each time he or she is admitted to or visited the hospital for treatment. If he or she is registered five times, he or she acquires five different hospital or registration numbers.

**Serial-Unit Number:** This numbering system is a synthesis of the serial and unit numbering systems. Although, each time the patient is registered he receives a new hospital number, his previous records are continually brought forward and filed under the latest issued number.

### **Unit Numbering System**

Osundina (2005) asserts that unit numbering system involves the allocation of one number to one individual patient in the hospital which he/she will be using throughout his/her life time in the hospital. Which means all hospital documentation experiences, notes relating to a patient are contained in one case folder; the unit should be the patient, the principle of unit system is that "One Patient, One Record, and One Number". The number is quoted as his reference number in all clinical departments of the hospital, no matter how often he attends. Therefore, the unit system is one in which all notes on an individual patient, however widely separated in time, and however many departments (in-patient or out-patient) have rendered service to him, are kept in one folder. The patient is the unit and is allocated a single number which is quoted as his or her reference in all clinical departments of the hospital and however often he attends.

The following procedures contribute to making of a comprehensive Medical Records Service based on the unit principles helpful in checkmating misfiling and mislaying of patient health records:

1. **The Central Index:** Each patient is issued a central (or master) index the first day he or she is registered as either an out-patient or in-patient. The following are the information to be recorded on the central index: Patient's surname and first name, Patient's unit number, Patient's address (with provision for changes in address), Patient's date of birth, Unit number, Date of registration, Patient's sex etc. The central index should be completed very neatly and filed alphabetically according to the surname of the patient. It should never accompany the case note to the clinics or wards. In cases of identical names; it may be necessary to file cards according to the age of the patients and date of registration e.g. SULE KAREEM, Age 19, Registered on 1/2/2016 and SULE KAREEM, Age 32, Registered on 3/3/2016 etc. the patient's

master index card is the key for locating patient records, and therefore it must be considered the most important tool in the medical record department.

2. **Tracer System:** In Health Records keeping, a Filing System is very important. In order that a filing system may perform the function of an information service, certain controls are necessary to ensure the where-about of the issued documents or patient case notes. Health Professionals who have knowledge of the intricacies involved in the movement of case records within the hospital will appreciate that the problems associate with effective controls are formidable. For this reason; a tracer system is absolutely necessary in any large filing system of the hospital which has multiple users and the tracing procedure must be followed every time a file is retrieved.

In deciding upon a suitable tracer system, due account must be taken of withdrawal rate of documents and the time span during which they are required. To deal with emergency patient; Health Records are required at all hours of day or night and maintained 24 hours services. Therefore, a tracer system is a system which is introduced into the unit system when a unit health record is initiated so that the where-about or the movement of patients' case notes can be easily ascertained. A tracer card is issued at the same time the unit Health Record is initiated while the patient is still physically present in the hospital for health care; the tracer card is sent to the record and is filed away in the space on the shelf for that case folder. When the case folder is returned, it is the duty of the Health Record Library staff to ensure that the tracer card is put inside the case folder and to record the date of return on the tracer card. Whatever actual tracer procedures that are used, it is necessary to record the same basic minimal information concerning the recipient of the documents: (1) Date issued (2) Hospital number (3) The name of the borrower or department (4) Purpose.

### **Health Records Library**

Aremu (1999) posits that one of the important functions of the Health Records Department is the custody and retrieval of Health Record for legitimate users. Health Records Library is where these records are kept. Bulky records requested for research are released in batches. Health Records completion cubicle is located in this section to enable the medical officer sit down comfortably and carry out their studies without going away with patients records. Tracer card must be marked for every case note leaving records library. The tracer card will show the destination of the patient's health records.

The Health Records Library should be well ventilated, lightening and well spacious to prevent unnecessary misfiling of patients' case folders. The bulky case folders should be separated into volumes to prevent space problem. The filing shelves should be well labeled to aid filing and retrieval of patients' health records. Dividers must be in-between the shelves or cabinets to prevent fall-over of the case folders which can lead to terrible misfiling of patients' health records. Health records library is the pivot of the Health Information Department because records of the high values are stored in this library such as: health records of patient that are needed for litigation in the court of law, records of evidential

information, research, administrative and historical values. The following activities take place in the Health Records Library: sorting of patients' health records, filing of patients' records, numbering of patients' case folders, classification of patients' records, collation of patients' statistical information, retrieval of patients' case notes for continuity of treatment, budgetary provision, accommodation, space planning, records storage equipment, research and study, etc.

### **Health Records Filing System**

Osundina (2014) affirms that for Health Records Department to function efficiently, it is necessary to have an organized method for storing of the health records. Therefore, filing system can be described as a set of documents arranged in prescribed order for convenience of reference and preservation. The purpose of filing records is to facilitate complete and quick retrieval of patient information from them when the needs arise.

The prime responsibility of the Health Records Department is to undertake the custody, classification and confidential of the patient case history. The department is also concerned with the custody of index of diseases and operations. However, an effective filing system should contain a number of fundamental features, they are:

- Compactness: To take account of storage space and also need to reduce physical effort in working the system.
- Accessibility: For speed of location and positive means of identification for the items contained in the system.
- Simplicity of operation to ensure that the method is understood by those who normally control it but also by those who require occasional access.
- Economy: Economy, both in cost of installation and operation.
- Elasticity: The system should expand and contract according to future requirement.
- Cross Reference: This facility must be considered so that a folder can be found under different heading.
- Tracer System: A tracer card must be placed in position of a removed folder to indicate the destination of the folder.
- A Method of Classification e.g. Terminal digit or middle digit etc.
- The equipment in use must be effective and efficient of the system.
- The personnel operating the system must be well trained i.e. health records practitioners.

### **Filing Methods**

There are three basic methods of filing, namely; alphabetical, chronological and numerical. These methods can be used singly or in combination according to the requirement design and the particular circumstance of the institution. No method or system should be adopted without considering the environment in which to function.

**Alphabetical Filing:** Health record can be filed according to the use of names or letters. In case of person bearing the same name, placing surname first, middle name and other name



and the card are arranged according to date of birth or date of registration e.g. master index card. This system is ideal for small hospital or hospital with low patronage.

This method is unsatisfactory in large hospital because it lacks elasticity. The growth is in middle thereby making continuous expansion within the system difficult for advanced planning. Human errors are greater here, when filing case notes it does not require master index card as back up for the system.

**Chronological Filing:** In this system case folder are arranged and filed in prescribed order. It is a method of filing according to the date and time of event. This is more applicable when considered in relation to the content of a folder in relation to waiting list and follow up system. However, an alphabetical index is introduced where the number are considerably large. Chronological filing and numerical filing are not capable of standing alone and required an index to allow access to the material contained in the system. Chorological filing therefore is not a filing means of dealing with case folders.

**Numerical Filings:** This is the system of filings according to numbers. This filing system overcomes the problems associated to the lack of elasticity as in alphabetical filing. It allows continuous expansion. Growth is at the end. It's totally compatible with the unit system of record keeping.

### **Filing Equipment in Health Records Department**

Osundina (2014) posits that adequate filing equipment, lightening, and temperature contribute to the productivity of filing personnel in the records library. The following are some types of filing equipment, they are: (1) filing cabinet (2) Elevator cabinet (3) Fixed shelves (open or closed) (4) Mobile shelves (manual/mechanical) (5) Four drawer steel cabinet (6) Ladder.

Whichever equipment chosen, the aim is to provide largest number possible in the space available at most reasonable cost. The closed shelves are becoming popular because of its added advantages, security and keeping dust or dirt away from records. Shelves are recommended over cabinet for the following reasons:

- (1) It is less expensive than cabinet.
- (2) Filing and pulling are faster because there is no opening and closing of the drawers.
- (3) Shelves are space safer.

While it is true that cabinet provides a somewhat neater filing area, it also protects records from dust and dirt, good housekeep in an open shelve filing area can make up for this advantage. Moreover, the door that shelves have now, are taking advantages over the cabinet.

### **Aids to Accurate Filing in Filing Environment**

Aremu (1999) affirms that the following will aid the Qualified Health Records Personnel in solving the problems of mislaying of patients' health records in the Health Records Library, they are:

Introduction of colour coding to Health Records Library.

- Introduction of efficient tracer system to Health Records Library.
- Legibility in numbering case folders.
- Introduction of terminal digit filing system.
- Adequate ventilation and lightening in the filing areas.
- Introduction of centralized filing system.
- Largest storage of health records library.
- Good spacing between filing shelves as well as good dividers.
- Length and height of shelves should be minimized.
- Adequate security measures in the filing area.
- Constant supervision of the filing clerks working in the library.
- Division of labour in the health records library to prevent unnecessary burden on staff.
- Provision of auxiliary equipment, for example, sorting shelf, ladder, stool guide cards etc.
- Prompt collection of patients Health Records after patient is discharged from the ward.
- Prompt collection of patients Health Records in the clinic after consultation.

### **Problems of Mislaying and Misfiling of Patients' Case notes in Health Records Department**

Huffman (1994) opines that regardless of the number of record control system used in the health records department file area, occasionally, a patient's record will be placed in the wrong location (misfiling) or will not be signed out correctly (mislaying). Various techniques are available to assist a person in locating a medical record that has been misfiled. Among these techniques are:

1. Look for transpositions of the last two digits of number, or of the hundreds or thousands digits. The number 46-37-82 may be filed as 46-37-28 or 46-73-82.
2. Look for misfiles of "3" under "5" or "8" and vice versa; and "7" or "8" under "9". The number "9" may be taken as a "7" if it is worn.
3. Look for misplacement or mislaying of health records on the floor, tables, racks, cabinets and shelves
4. Check for a certain number in the hundred group just preceding or following the number as 485 under 385 or 585, or under other similar combinations.
5. Check for transpositions of first and last numbers.
6. Check the folder just before and just after the one needed. It sometimes happens that a folder is put into another folder rather than between two folders.

### **Colour Coding of Record Folders**

Huffman (1994) posits that colour coding refers to the use of colour on folders to aid in the prevention of misfile and in the location of misfiled records. Colour bars in various positions around the edges of folders (known as blocking) create distinct patterns of colour in various sections of the file. A break in the colour pattern in a file section signals a misfiled record.

Colour coding is most effective when used in conjunction with terminal digit and middle digit filing, although it is said that workable colour-coding systems can be used for straight numerical filing.

One approach to colour coding in a terminal digit file utilizes ten different colours to signify the first primary digits 0 through 9. Two colour bars or blocks appearing in the same position can be used to signify each of the two primary digits. In this case the top colour bar represents the left-hand digit of the primary digits. In this case the top colour bar represents the left-hand digit of the primary set, and the bottom colour bar represents the right-hand digit of the primary set. If brown is the colour assigned to the digit 8 and green is the colour assigned to the digit 4, a chart numbered 169484 in a terminal digit file is colour coded with a brown band on top, with a green band directly beneath it.

Additional colour bars may be added to indicate secondary digits and there are many combinations which can be used. In setting up a colour-coding system, it is generally advisable to limit coding with colour to two or three digits. This ensures a simple, easy-to-learn system. Folders already colour coded may be purchased from commercial firms or employees of the medical records department may apply colour tape to folders.

### **Other filing rules and procedures**

Osundina (2005) affirms that following are some basic rules to aid in efficient handling of the medical records:

1. When records are returned to health records department, they should be sorted before being filed. This facilitates the finding of needed, but unfiled records, and makes the refiling easier.
2. Except for hospital personnel who have been instructed to use the file area during evening and night hours, only health record department personnel should be authorized to handle records. Physicians, hospital staff members, and personnel from other departments of the hospital should not be allowed to pull records from the permanent filing area. During the evening hours, emergency room personnel and supervising nurses should leave returned records at a designated place in the record area or in one specified location if the health records department is closed.
3. Records with torn covers and those with loose papers should be repaired promptly to prevent further damage or loss of valuable information.
4. An audit of the files should be made periodically to locate misfiled records and check requisitions which indicate records that have not been returned. Such an audit might promptly indicate that certain clinics or departments are holding records beyond the prescribed time limit. In such cases the medical record director will then investigate the situation and take any corrective measures indicated.
5. Health records of medical record department personnel, and records involving legal actions, should not be stored in the general files; these can be filed in a locked file cabinet in the medical record director's office. However, out-guides should be placed in the permanent file to indicate that these records are in a "special" file.

6. Filing-area personnel should be responsible for keeping the shelves neat and orderly. Disorderly files increase the likelihood of misfiles.
7. Medical records being processed or used by employees within the department should remain on desk tops or in specified files so they can be available at any time.
8. Written procedures for filing-area personnel are of assistance in their training and in their maintaining control over the files.
9. Records which are voluminous should be separated into two or more volumes.
10. The person supervising the file area should keep a report of activities in the area. Item include: number of requisitioned charts pulled each day, number of emergency calls, number of misfiles or records which could not be found. Count such as these provides useful information for planning work and for control over the files.

### **Computerization of Patients Health Information**

Ayilegbe (2008) posits that computerization of patients health information is the last stage of patients' health records in the health records department. Computerization of patients' health information is a means of capturing patients' health data and information through electronic application. This is achieved through the utilization of a computer system. The installed program facilitates easy data capturing, processing, storage and retrieval. For the achievement of a desired result, there is need for all Health Records Personnel to be Computer literate. They must be skilled and proficient in the utilization of a computer system to obtain needed health data from the patients, especially during new documentation and registration at General Outpatient Department (GOPD), Accident and Emergency (A&E) Records Unit, NIHS Records Unit etc.

When good software is obtained, ease of entry of data can be guaranteed among other benefits. The beauty of Electronic Health Records can easily be achieved when these computer systems are networked. Entries can be made simultaneously in various Health Records thematic areas. The module for Electronic Health Records should have a sub-section for modification or updating so that necessary amendment can be effected as at when necessary. When documentation of patient is completed and captured, it can be accessed in any of the units, provided they are on network. Some of the bio-data needed for new and follow-up patients' documentation and registration are as follows:

Patient's surname, middle name, first name, unit number, gender, data of birth, age address, GSM no, occupation, state or origin, tribe, marital status, religion, name of next-of-kin etc.

Whenever a patient comes to health facility without his unit or hospital number, his records can easily be tracked through a module called **“patient porto”**

This can be achieved within a few seconds. This has great advantage over the manual system where the patients' master index is consulted before the patient's health records can be located. Mislaying and misfiling syndrome in records management is also overcome among other benefits.

### **Some constraints to management of Electronic Health Records are:**

- Lack of uniform standard rule for Health Information Management Practice.
- Issue of confidentiality of patient information.
- Electronic fraud e.g. hackers.
- Lack of uniform legal framework.
- In Nigeria, there is no consistent electricity supply to maintain the system.
- Lack of government interest and political will to establish, maintain and sustain the system.

### **III. METHODOLOGY**

The study design used for the study was a descriptive research design. The study population for this research work covered two selected health institutions, viz: Neuropsychiatric Hospital (NPH), Aro, Abeokuta and Federal Medical centre (FMC), Idi-Aba, Abeokuta. The subject comprises of Health Information Managers, Health Records Technicians and Non-Health Records professionals in these selected Hospitals. The target population for this study was (100) One hundred while the population of the study is eighty (80).

The eighty (80) retrieved questionnaires from the respondents were used as sample size by the researcher. The researcher was also convinced that the chosen samples were truly representative of the population. The instruments adopted for this study was a structured questionnaire.

#### **Ethical Consideration**

Permission to proceed with administration of the questionnaires was obtained from the two selected health facilities. This was done through discussion with the heads of department of these facilities, and the participants were assured of the confidentiality of all the information supplied in the course of this study.

### **IV DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS**

The data collection for the study was analyzed, results were presented in a tabular form to reveal the respondents' view based on the objectives.

## SECTION B. Research Questions

**Table 4.1: Available Filing and Numbering System in Health Records Department**

S/NO	Filing and numbering system in health records department	Yes	No
1	Do you operate alphabetical filing system for patient health records in your department?	28 (35.4%)	52 (65%)
2	Do you operate numbering system for patient health records in your department?	77 (97.3%)	3 (3.7%)
3	Do you operate straight numerical filing system in your department?	71 (88.75%)	9 (11.25%)
4	Have you ever operated terminal digit filing system before?	28 (35.0%)	52 (65.0%)
5	Are patients' records properly sorted before filing?	75 (93.8%)	5 (6.2%)
6	Are you satisfied by the filing method adopted by your department?	68 (85.0%)	12 (15.0%)

Table 4.1 shows that majority of the respondents 77(97.3%), 71(88.75%) and 75(93.8%) agreed that health records department operates numbering system, straight numerical filing system and also ensure that health records are sorted properly before filing, while 52(65%) respondents disagree on the use of alphabetical filing system and terminal digit filing system in health records department of the two hospitals.

**Table 4.2: Available Filing Equipment in Health Records Department**

S/NO	Filing Equipment	Yes	No
7	Do you have steel filing shelves in your department?	72 (90.0%)	8 (10.0%)
8	Are the numbers of filing shelves adequate?	46 (57.5%)	34(42.5.0%)
9	Do you have filing ladders in your health records library?	55 (68.8%)	25 (31.2%)
10	Do you have dividers in each filing shelf?	73 (91.3%)	7 (8.7%)
11	Are the spaces between each filing shelf adequate?	58 (72.5%)	22 (27.5%)
12	Do you have sorting shelves in your department?	57 (71.3%)	23 (28.7%)
13	Do you have enough steel filing cabinets in your department?	32 (40.0%)	48 (60.0%)

Table 4.2 shows that 72 (90%), 73 (91.0%) and 58 (72.5%) accepted that the health records department have steel filing shelves, dividers in each filing shelf and adequate spaces between each filing shelf while 34 (42.5%, and 48 (60%) confirmed that the number of shelves are not enough and the steel filing shelves available in both hospitals were not enough.

**Table 4.3: Types of Health Record Personnel and Filing Environment**

S/NO	Health Records Personnel and Filing Environment	SA	A	N	D	SD
14	The number of health records officers in your department are adequate	19 (23.75%)	13 (16.25%)	11 (13.75)	21 (26.25)	16 (20.0%)
15	The number of Health records technician in your department are adequate?	15 (18.75%)	14 (17.5%)	8 (10.0%)	23 (28.75%)	20 (25.0%)
16	Non-Health records personnel should be in health record department	12 (15.0%)	20 (25.0%)	12 (15.0%)	21 (26.25)	15 (18.75%)
17	Non – Health record personnel should be involved in filing and retrieval of patients’ record	8 (10.0%)	10 (12.5%)	12 (15.0)	23 (28.75)	27 (33.75)
18	Health records personnel should fully concentrate when filing patient health records	60 (75.0%)	16 (20.0%)	1 (1.25)	2 (2.5%)	1 (1.25%)
19	There should be air conditioners in the filing areas	58 (72.5%)	16 (20.0%)	5 (6.25%)	1 (1.25%)	0 (0%)
20	There should be adequate lightning system in the filing areas	67 (83.75%)	10 (12.5%)	1 (1.25)	0 (0%)	2 (2.5%)
21	Lightning system in the filing areas would reduce mislaying and misfiling of patient health records	56 (70.0%)	17 (21.25%)	1 (1.25%)	5 (6.25%)	1 (1.25%)
22	There should be a designated room for clinical research in the records library	51 (63.75%)	21 (26.25%)	3 (3.75%)	1(1.25%)	4 (5.0%)
23	There should the effective tracer cards in the filing areas	59 (73.75%)	19 (23.75%)	1 (1.25%)	0 (0%)	1 (1.25%)
24	There should be adequate space in the filing areas	59 (73.75%)	20 (25.0%)	1 (1.25%)	0 (0%)	0 (0%)
25	Filing environment are conducive for filing and retrieval of patients’ records in your hospital	22 (27.5%)	17 (21.25%)	14 (17.5%)	16 (20.0)	11 (13.75%)

Table 4.3 shows that majority of the respondents, 36 (46.25%), 43(53.75%), 36(45%) and 50 (62.5%) disagreed that the number of health records officer, and health records technicians in health records department are adequate, and that non-health records personnel should be

involved in health records activities. While 77 (96.25%) and 73(91.25%) agreed that there should be adequate lightning system in the filing areas as lightning system reduces mislaying and misfiling of patient health records.

**Table 4.4: Effect of mislaying and misfiling of patient Records**

S/NO	Effects of mislaying and misfiling of patient health records	Yes	No
26	Have you ever experienced mislaying and misfiling of patient health records in your department?	75 (93.8%)	5 (6.2%)
27	Do you think that clinical research activities may be hampered if patients' case files are missing?	71 (92.2%)	6 (7.8%)
28	Do you think that wrong treatment/diagnosis can be given to a patient's if is original case notes cannot be found?	72 (90.0%)	8 (10.0%)
29	Do you think that mislaying and misfiling of patient records may lead to patient death?	66 (82.5%)	14 (17.5%)
30	Do you think that mislaying and misfiling of patient health records can lead to patient delay in the hospital?	75 (93.8%)	5 (6.2%)
31	Do you think that hospital can lose valuables cost if the patient health records cannot be found?	65 (81.3%)	15 (18.7%)

Table 4.4 shows that majority of the respondents, 65 and above (81.3% and above) agreed that mislaying and misfiling of patient health records occurred and that clinical research activities may be hampered if patients' case files are missing, that wrong treatment/diagnosis can be given if patient original case notes cannot be found.



**Table 4.5: Solution to the problems of mislaying and misfiling of patients' health records**

S/NO	Solution to the problems of mislaying and misfiling of patient health records	SA	A	N	D	SD
32	Sorting of case notes before being filed can reduce mislaying and misfiling of patient health records	54 (67.5%)	20 (25.0%)	5 (6.25%)	0 (0%)	1 (1.25)
33	Access to the filing area should be restricted to only health records professional to reduce mislaying and misfiling of records?	50 (62.5%)	22 (27.5%)	2 (2.5%)	5 (6.25%)	1 (1.25%)
34	Transposition of number should be checked when searching for missed records	36 (45.0%)	38 (47.5%)	3 (3.75%)	2 (2.5%)	1 (1.25%)
35	Introduction of shelves dividers will reduce misfiling of health records	38 (47.5%)	32 (40.0%)	5 (6.25%)	5 (6.25%)	0 (0%)
36	Color coding of case notes can reduce mislaying & misfiling of patient health records.	41 (51.25%)	26 (32.5%)	5 (6.25%)	4 (5.0%)	4 (5.0%)
37	Regular training of staff will reduce misfiling of records	46 (57.5%)	32 (40.0%)	0 (0%)	1 (1.25%)	1 (1.25)
38	Good tracer system will reduce mislaying and misfiling of patients' health records	56 (70.0%)	21 (26.25%)	0 (0%)	1 (1.25%)	2 (2.5%)
39	Computerization of patients' health records is a lasting solution to missing patients' case files	54 (67.5%)	18 (22.5%)	4 (5.0%)	1 (1.25%)	3 (3.75)

Table 4.5 shows that majority of the respondents, 74 and above (92.5% and above) agreed that sorting of case notes before being filed, access to the filing area should be restricted to only health records professional, that transposition of number should be checked when searching for missed records, and that adequate use of tracer system, regular training of staff and lastly, computerization of patients' health records is a lasting solution to mislaying, misfiling and missing of patients' health records in the health care institutions.

### Conclusion

The result of the study revealed that mislaying and misfiling of patient health records will have negative effects on patients and hospitals as majority of respondents in the hospitals selected (NPH, Aro, Abeokuta and FMC, Idi-Aba, Abeokuta) attested to this fact and this has

clearly shown that the hospital can only be rated high in performance when there is prompt availability of patients health records in the clinic for continuity of patient care.

Moreover, high quality service delivery of any health institution can only be measured with prompt availability of patients' health records to the authorized and legitimate users.

The study has clearly shown that there was solution to the problems of mislaying and misfiling of patient health records in the health records' department of the two hospitals under review (NPH, Aro, Abeokuta and FMC, Idi-Aba, Abk).

It was further revealed that if all necessary qualified personnel and functional working tools are provided, then misfiling and mislaying of patient records would be eliminated or greatly reduced.

### **Recommendations**

In view of the significant and negative effects that mislaying and misfiling of patients health records have on patient and hospitals, the following recommendations are hereby made:

1. All health institutions should be mandated to employ qualified and trained Health Information Managers to man the department of Health Information Management so that their knowledge in management of patients' health records will assist in reducing mislaying and misfiling of patient health records.
2. The management of the hospitals should be informed of their responsibilities in providing space, adequate filing equipment and suitable filing environment for health records department because the above mentioned factors contribute to mislaying and misfiling of patients health records in health institutions.
3. Health Information Managers should maintain high level of decorum and concentration when filing patients' record in the health records library.
4. Good tracer system should be put in place by Health Records Officers in order to track the movements of patients' case notes in the hospital.
5. Patients' health records should be computerized to aid quick and timely retrieval of patients' information.

### References

- Afuye, A.K. (1999); Human Health Infocracy in Democracy Doctrine. Ekiti: Pan-African Health Information Communications Ltd.
- Afuye, A.K. (2001). Strategies and Policies on Release of Patient Information (1<sup>st</sup> ed.). Ekiti: Pan-African Health Information Communications Ltd.
- AHIMA. (2003). Electronic document management as a component of the electronic health records. Practice brief. Available online at [www.ahima.org](http://www.ahima.org).
- AHIMA. (2003). The complete medical records in a hybrid disclosure. Practice brief. Available online at [www.ahima.org](http://www.ahima.org).
- Aremu, H.B. (1999). Health Records Management 1 & 11 Ilorin: Decency printers & sanitation LTD.
- Ayilegbe, B.K (2008). Essence of documentation in health care institution, Kano: Debisco printing press.
- Ayilegbe, B.K. (2015). The Dynamics of Patients' Discharge Summaries. Kano: Debisco printing press.
- Benjamin, B. (1980). Medical Records. Edinburgh: Churchill Livingstone.
- Federal Ministry of Health (1996). National Health Information Management Information System (Health Facility Summary Forms). Lagos: FMOH Publication.
- Geoffrey, Y. (1999). Managing Hospital Records. London : International Record Management Trust.
- Huffman, E.K. (1994). Health Information Management (10<sup>th</sup> Edition). Berwyn : physicians' Record Company.
- Lippincott, W and Wilkins. (2006). Steadman's Medical Dictionary. Baltimore: A Wolters Kluwer Health Company.
- Murphy, Gretchen, Mary Alice Hanken, and Kathleen Waters. (1999). Electronic Health Records: Changing the vision. W.B. Saunders Company.
- Osundina, K.S. (2004). Principles and Practice of Health Records Management. Ilesa: K.S. Osundina Publications.
- W.H.O. (1983). Guidelines for Medical Records Practice W.H.O. Publication