MANAGEMENT OF MEDICAL RECORDS IN PRIMARY HEALTH CARE CENTRES IN ZAMFARA STATE

BY

SULE SAYUDI
MLS/EDUC/45271/2012-2013

A THESIS SUBMITTED TO POSTGRADUATE SCHOOL, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF LIBRARY SCIENCE DEGREE (MLS)

FEBRUARY 2013

DECLARATION

I wish to declare that this thesis titled "Management of Medical Records in Primary Healthcare Centres in Zamfara State has been written by me and it serves as a record or product of my intellectual potentials. This study also meets the requirement for the award of Degree of Master of Library Science (MLS). Also, all quotations are indicated and the sources of information are specifically highlighted in the study.

_____ _____

Sule Sayudi **Date**

CERTIFICATION

This study was conducted based on the stipulated guidelines of Postgraduate School of Ahmadu Bello University, Zaria for the fulfillment of the requirements for the Award of Degree of Master of Library Science and is approved for its contribution to knowledge and literary presentation.

_____ _____

Prof. I. Ekoja **Date**
Chairman, Supervisory Committee

_____ _____

Mrs. Adikwu, C.C.A. **Date**
Member, Supervisory Committee

_____ _____

Prof. Tijjani Abubakar **Date**
Head of Department

_____ _____

Prof. A.A. Joshua **Date**
Dean, Postgraduate School

DEDICATION

This research work is dedicated to the following:

Father: Late Malam Sayudi Labaran Kaura

Mother: Hajiya Hauwa'u Sayudi Kaura

Aunt: Hajiya Rahamu Sani Kaura.

ACKNOWLEDGEMENT

I am delighted to express my gratitude to Almighty Allah who gave me the opportunity and courage to undertake this study despite obstacles and hurdles observed during the work.

First and foremost, I wish to thank and express my appreciation to my supervisors Prof. I. Ekoja and Mrs. Adikwu, C.C.A. who sacrificed their time and energy to offer necessary suggestions without which the work will not be a successful one. Other special thanks to Prof. I. Ekoja who despite his usual official engagement as University Librarian was able to go through my work.

I am greatly indebted to my family members for exercising patience restraints and contributed meaningfully during the study. Moreover, I wish to express once again my warm thanks to members of my family whose names are: Yusuf Sayudi, Abdullahi Sayudi, Rukaya Abubakar, a wife, and my children Mustapha Suleman, Asma'u S. Kaura, Maryam Suleman, Zainab Suleman and Ummu Suleman, Sayudi Kaura.

I also wish to express my appreciation to my lecturers in the Department of Library and Information Science among whom are Prof. Zakari Moh'd, Dr. Ezra Gbaje, the Postgraduate Co-ordinator, Baba Shuaibu Aduku, Prof. Tijjani Abubakar, Prof. Umar Abubakar, Mal. Lemu, Lawal Umar, and Babangida Umar Dangani. My thanks and appreciation to all other members of staff not mentioned in the Department.

Lastly, I wish to acknowledge the contribution of my colleagues in the College of Agriculture Bakura, Zamfara State among whom are Umar Moh'd Barmo, Provost, Labbo S. Anka, Registrar Umaru Aliyu Gayari and Isiaku Labbo Zallah and others too many to be mentioned.

My appreciation to Zamfara State Primary Healthcare Department for intimating all primary healthcare centres in the state to co-operate with me from the beginning to the end of this research work. Lastly, I wish to thank the research assistants for their contribution to the success of this study.

ABSTRACT

The study discusses management of medical records both in traditional system and in modern age in primary health care centres in Zamfara state. Their effective management contributed in providing healthcare services to majority of the populace in the state. Other issues discussed include creation, maintenance, storage, use and preservation of medical records as viewed by scholars, researchers on record management as revealed in review of related literature, survey methods of research was adopted and questionnaire was used as instrument of data collection. The population sampled stands at 354 and the number of retrieved questionnaire were 340. The data was presented, analyzed and discussed which resulted in coming out with some findings among which include immunization records, antenatal records and referral records were mostly utilized. Alphabetical arrangement and numerical filing arrangement are the systems of record arrangement predominantly in practice. Also shelves and cupboards were storage facilities used in (PHCs) in the state, the study concludes that the medical records as integral instrument of patient treatment were not properly managed in PHCs due to lack of knowledge and skilled of the records managers. Several recommendations have been proposed. These include training on medical record management which should be organized periodically, modern storage media such as hard drive, flash drive, CD-ROMs and sound recording should be used to store medical records in primary healthcare centres in Zamfara State.

TABLE OF CONTENTS

Title Page - - - - - - - - - i

Declaration - - - - - - - - - ii

Certification - - - - - - - - - iii

Dedication - - - - - - - - - iv

Acknowledgement - - - - - - - - v

Abstract - - - - - - - - - vi

Table of Contents - - - - - - - - viii

List of Tables - - - - - - - - xi

List of Figures - - - - - - - - xii

List of Abbreviation - - - - - - - - xiii

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study - - - - - - 1

1.2 Statement of the Problem - - - - - - 3

1.3 Research Questions - - - - - - - 5

1.4 Objective of the Study - - - - - - 6

1.5 Significance of the Study - - - - - - 5

1.6 Scope and Limitations - - - - - - 7

1.7 Operational Definition of Terms - - - - - 8

References - - - - - - - - 8

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Introduction - - - - - - - - 9

2.2 Records Lifestyle - - - - - - - 10

2.3 Records and Records Management - - - - 12

2.4 Creating Medical Records - - - - - - 15

2.5 Types of Medical Records - - - - - - 18

2.6 Purpose of Medical Records - - - - - 19

2.7 Utilization of Medical Records - - - - - 20

2.8 Users of Medical Records - - - - - - 21

2.9 Factors affecting Medical Records Use and Non Use - - 22

2.10 Preservation of Medical Records - - - - - 23

2.11 Staffing - - - - - - - - 25

2.12 Impact of ICTs Application in Medical Records Management - 26

2.13 Summary of the Reviews - - - - - - 29

References - - - - - - - - 31

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction - - - - - - - - 33

3.2 Research Method adopted for the Study - - - - 33

3.3 Population of the Study - - - - - - 34

3.4 Sample and Sampling Procedure - - - - - 35

3.5 Instruments for Data Collection - - - - - 39

3.6 Reliability and Validity of the Instruments - - - 40

3.7 Procedure for Data Collection - - - - - 40

3.8 Procedure for Data Analysis - - - - - 40

References - - - - - - - - 42

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction - - - - - - - - 43

4.2 Response Rate - - - - - - - 43

4.3 Data Analysis and Discussion - - - - - 45

References - - - - - - - - 63

CHAPTER FIVE

5.1 Introduction - - - - - - - - 64

5.2 Summary of the Study - - - - - - 64

5.3 Summary of Findings - - - - - - 65

5.4 Conclusion - - - - - - - - 66

5.5 Recommendations - - - - - - - 67

5.6 Suggestions for Further Studies - - - - - 68

Bibliography - - - - - - - - 69

Questionnaire - - - - - - - 72

LIST OF TABLES

Table 3.1: Population of Primary Health Centres in Zamfara State

Table 3.2. The Sample Size of the PHCs Drawn from Three Senatorial Zones of Zamfara State.

Table 3.3: Categories of Health Records Managers in Primary Health Centres in Zamfara State

Table 4.1 Response Rate of the PHC Staff According to Local Government Areas in Zamfara State

Table 4.2: Types of Medical Records Generated in PHCs in Zamfara State

Table 4.3: Frequency of Medical Records Generated in PHC in Zamfara State

Table 4.4 Ways in Generating Medical Records in PHCs in Zamfara State

Table 4.5: Types of ICTs Used in PHCs in Zamfara State

Table 4.6 Storage Facilities Used in PHCs in Zamfara State

Table 4.7 Method of Organizing Medical Records in PHCs in Zamfara State

Table 4.8 Extent of Use of Medical Records in PHCs in Zamfara State.

LIST OF FIGURES

Fig. 2.1 Life cycle of Records

Fig. 4.1: Response Rate PHC Staff According to Local Government Areas

Fig. 4.4: Ways in Generating Medical Records in PHCs in Zamfara State

Fig. 4.5: Types of ICTs used in PHCs in Zamfara State

Fig. 4.6: Storage Facilities Used in PHCs in Zamfara State

Fig. 4.7: Method of Organizing Medical Records in PHCs in Zamfara State.

LIST OF ABBREVIATIONS

PHC	- Primary Healthcare Centre
PHCs	- Primary Healthcare Centres
MRC	- Medical Record
ICT	- Information and Communication Technology
MLS	- Masters in Library Science
RAM	- Random Access Memory
CD-ROM	- Compact Disk – Random Online Memory
CHEW	- Community Health Extension Worker
Lab. Tech.	- Laboratory Technician
MRS	- Medical Record Staff
ISO	- International Standard Organization
MDGs	- Millennium Development Goals
DBI	- Digital Bridge Institute
OPD	- Out patient Department
RRA	- Registered Record Administrators

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Primary Healthcare Centres were established as essential part of healthcare agencies and its main principles are equity, health promotion and disease prevention, community participation, appropriate health technology and multisectoral approach. This is why WHO (1980) initiated the "Health Promotion" program considered as an essential strategy in achieving the general objective "Health for all" health promotion for the population. Promotional and preventive measures require support from the community, health politics and multisectoral approach. These primary healthcare centres generate records daily and these records must be properly managed, maintained and stored to ensure their effective utilization by patients, researchers, scholars and other medical records experts.

Some of the values of medical records according to Akandji (2006) are to assess the performance of health care rendered to the patients. Provide data for statistical evaluation of cases to determine the strength and weaknesses of treatment processes. Provide information for training and educating health care providers through seminars or workshops, to protect the legal interest of patient, hospital and health professionals against litigation. Serve as reference sources where physicians can refer to previous cases to treat current and future ailments and finally provide information for research. No organization can achieve its goals

without maintaining its records and these records are the backbone of the entire operation of our primary health care centres. These records can be created either as tangible object or digital information. This view was supported by ISO (2001) as it noted that records stand as information created, received and maintained as evidence or an information by an organization or person in pursuance of legal obligations or in the transaction of business. All organizations and individuals alike generate records to serve as a guide to their activities. The success or failure of organization is determined by appropriate record keeping.

Records management according to ISO (2001) is a field of management responsible for the efficient and systematic control of creation, receipt, maintenance, use and disposition of resources about business activities and transactions in the form of records.

As a result of the dawn of new era in information and communication technology, computers and ICT tools are very crucial in managing bulks of records that was why Ogunfemi (2005) highlighted the role of digital bridge institute in promoting the compliance to ICT use in all facets of our endeavours. The DBI has the mandate to formulate and implement pilot projects demonstrating the application of ICT in the relevant fields of importance in Nigeria and Africa.

The medical records profession began following the effect of devastation of Second World War in 1945 motivated the government to introduce National Health Care Services and established “Medical Records Services” principally to

collect, collate, and analyze statistic of the victims of Second World War as it affects Great Britain and its colonies (Akanyi, 2006).

Proper records Management leads to actual realization of the objectives of an individual or organization. To buttress this point Ogundele (2006) noted that bad management practice is the inability to obtain and use resources efficiently to realize stated objectives.

Primary health care centres in Zamfara state are constantly creating medical records in their bid to render health care services to the people in the state. The researcher conducted this study because primary healthcare centres provided largest percentage of healthcare services to the people of Zamfara State. The state has about 543 healthcare institutions out of which 522 were Primary Healthcare Centres.

History is the logical starting point in the investigation of any field. Prince (2002) stated that Zamfara state covers an area of about 38,418 square kilometres with 4% of Nigeria's landmass. The state has a population 3.5 million people according to 2006 National population census figure. The state shares borders with Katsina, Sokoto and Kebbi States in Nigeria and the Republic of Niger. It has 14 local government areas and fall in the North-West Geo-political zone of Nigeria.

1.2 Statement of the Problem

Primary health care centres in Zamfara state are currently receiving patients daily leading to the accumulation of patients records. These centres provide about

large percentage of the health care services to the inhabitants. It is in line with the above that the researcher carried out the research into management of medical records in primary health care centres in the state as integral part of complimenting government efforts of ensuring effective health services delivery. The research revealed that Non-compliance to medical records retention policies, lack of adequate knowledge and skills of record managers, absence of some modern ICT tools to store records. The facilities used in records generation were inadequate. There was poor organization of records which hinders quick accessibility to records and duplication of patient numbers where different people were given same PHC numbers. The study also investigated the problems affecting the management of patients' health information and recommended solutions to the identified problems.

However, observation revealed that the medical records in most primary health care centres in Zamfara state are not adequately managed due to aforementioned problems and these can jeopardize success in the patient treatment. Medical records can be conceptualized as an extension of doctor's memories. If details of the examinations, findings and prescriptions on patient are accurate and readily accessible, they help to provide effective health care service delivery. It helps health personnel to evaluate the previous treatment administered for an appropriate follow – up.

It is in this context that proper management of those recorded information remains an integral part of smooth running of day-to-day affairs of all the primary

health centres of Zamfara state. This therefore informed the decision to carry out this study.

1.3 Research Questions

The study seeks to provide answers to the following research questions:

1. What types of medical records are generated in primary health care centres in Zamfara state?
2. How are medical records generated in primary health care centres in Zamfara state?
3. How are medical records organized in primary health care centres in Zamfara state?
4. How are medical records being utilized in primary health care centres in Zamfara state?
5. How are medical records being stored in primary health care centres in Zamfara state?
6. What type of ICT facilities are used in the management of medical records in primary health care centres in Zamfara State?
7. What are the qualifications of medical records staff working in PHCs in Zamfara State?
8. Are the primary healthcare centres following records retention policy in Zamfara State?

1.4 Objectives of the Study

The objectives of the study are:

1. Identify the types of medical records generated in primary health care centers in Zamfara state.
2. Find out how medical records are generated in primary health care centres in Zamfara state.
3. Establish how often medical records are organized in primary health care centres in Zamfara State.
4. To examine how medical records are utilized in Primary Health Care centres in Zamfara State.
5. Ascertain how medical records are being stored in primary health care centres in Zamfara state.
6. Examine what type of ICT facilities are used in the management of medical records in primary health care centres in Zamfara State.
7. Determine the qualifications of medical records staff in PHCs in Zamfara State.
8. Investigate whether PHCs are following record retention policy schedule in Zamfara State.

1.5 Significance of Study

The researcher conducted the study on the management of medical records in primary health care centres in Zamfara state because of their importance in

providing health care services to the majority of communities in the state. The statistics showed that primary health care centres provided large percentage of the health care services to the people in Zamfara State.

The study investigated problems and shortcomings observed in the day-to-day management of patient health information records. and how medical records in PHC should be managed in Zamfara state and Nigeria at large. This research benefited all stakeholders in records management including, scholars, students, records managers, and researchers in various areas of records management.

The study came out with appropriate recommendations to adopt in achieving the objectives of creating of medical records by PHC in Zamfara state.

1.6 Scope and Limitation

The research covers the management of medical records in primary health care centres in Zamfara State. It discusses records lifecycle, creation of medical records, types of medical records, purpose of medical records, organization of records, utilization of medical records, users of medical records, factors affecting medical records and non-use, storage of medical records, staffing and ICT facilities application in medical record management and medical record retention policy. Some of the limitations of the study include the population size, the landmass of the state which covers about 38418 square kilometres coupled with difficulty involved in reaching other primary health centres due to topographical obstacles. These formed the limitations of the study.

1.8 Operational Definitions of Terms

Management: Is a process of getting things done through people by making efficient use of resources. It requires the manager to identify problems with the community.

Record: Record is documented information in print or non print format. The record can be manual or digitized.

Medical Record: Is a record containing patient health information. It indicates doctor's diagnostic statement and the prescribed treatment.

Primary Health Care Centre: This is a centre in which the first level of health care, which is close to the people is offered at the community level. These centres are constitutionally governed by local government areas.

Medical Records Management: Is a series of activities performed from medical records creation or receipt to the final disposal stage by medical records managers. These activities include maintenance, updating records, filling them, storing and preserving them because of their education, information and research values.

REFERENCES

Akanji, D.O. (2006). Development Medical Records in Nigeria 3rd ed. "The Journey so Far". Nigeria: Onudin; pp. 1-2.

ISO (2001). "General Information on Record Management, Retrieved from http://en.wikipediaorg/wikirecordmanagment".

Ogundele, A.L. (2006). International Journal of Labour and Organization, Vol. 3, Number 1 & 2 pp. 32 – 34.

Ogunfemi, O. (2005). An inauguration of the train – the trainer programme on ICT capacity building for tertiary institutions in Nigeria (Unpublished paper). Abuja: Digital Bridge Institute. Pp. 5 – 6.

Prince, T. (2002). New Dawn in Zamfara State: Ahmad Sani Story. Pp. 202 - 225

WHO (1980). Role of primary health care in health promotion retrieved on 25-02-2013 at www.ncb.nim.nih.govpubmed.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews the literature of scholarly works related to the subject of the study. The chapter is arranged as follows:

2.1 Introduction

2.2 Records Lifecycle

2.3 Records and Records Management

2.4 Creation of Medical Records

2.5 Types of Medical Records

2.6 Purpose of Medical Records

2.7 Utilization of Medical Records

2.8 Users of Medical Records

2.9 Factors Affecting Medical Records Use and Non-Use.

2.10 Preservation of Medical Records

2.11 Medical Records Retention Policy

2.12 Staffing

2.13 Impact of ICT Application in Medical Records Management.

2.14 Summary of the Reviews

2.2 Records Lifecycle

Records of whatever type must undergo different stages in their life just like any other living creature. They have pre-conception stage, creation, use, transfer and disposal stages, which must have an active semi-active and even inactive phases. This is why Afolabi (1991) stated that records undergo the stages of lifecycle that human beings also go through. They are born (created or received), live an active life (frequently used), retire (transfer) and die (disposed). The first stage in the lifecycle of records is the creation or receipt of it. This occurs when records are created or received by organizations in the course of conducting their businesses or operation. Each day several records such as letters, correspondences, minutes of meetings etc, are created while at the same time several records are also received. The second stage in the lifecycle is that they are used. This use may be for references administrative informational and research purpose. Therefore usage is the main purpose of records creations. On their part, only those records that would be needed for later reference need to be stored and protected.

The third stage in the records lifecycle is storage or protection. Records that are found to be useful and would be consulted at a later time are stored and properly protected. Records that are considered to be highly useful are put in insulated cabinets that are capable of withstanding extreme heat in the event of fire. The third stage is the transfer. It is in this stage that records that are no longer actively used or referred to infrequently are removed to create space for actively

used records. The final stage is disposal of records which must be agreed by management in accordance with disposal policy.

Judith et al (2002) identified five stages of the lifecycle of records. These include creation or receipt distribution, use, maintenance and disposition. The record lifecycle is the lifespan of a record as expressed in the five phases. Accordingly, whether a letter is produced a form completed or a cassette tape dictated or pamphlet printed, a record is created. This record is then distributed (sent) to the person responsible for its use. Records maintenance is characterized by three key steps thus; storage, filed, and updating records, then request is made to retrieve (find and remove) it from storage for use. When the retrieved record is no longer needed for active use, it may be re-stored and protected using appropriate equipment and environmental and human controls to ensure record security. Also involved in the maintenance phase are activities such as updating stored information purging or throwing away obsolete records that are not useful or that have been replaced by more current ones.

The last phase in lifecycle is disposition. After a predetermined period of time, records kept are transferred to less expensive storage sites within the firm or to an external records storage facilities. At the end of the number of years indicated in the retention schedule, the resources are disposed off, either by destruction or by transfer to a permanent storage place. When records of an organization are preserved because of their continuing historical, research and reference value, they are called the archives. This study of records lifecycle

formed the background information of the entire management cycle of records i.e. medical records, legal records, academic records, administrative records, and research records etc.

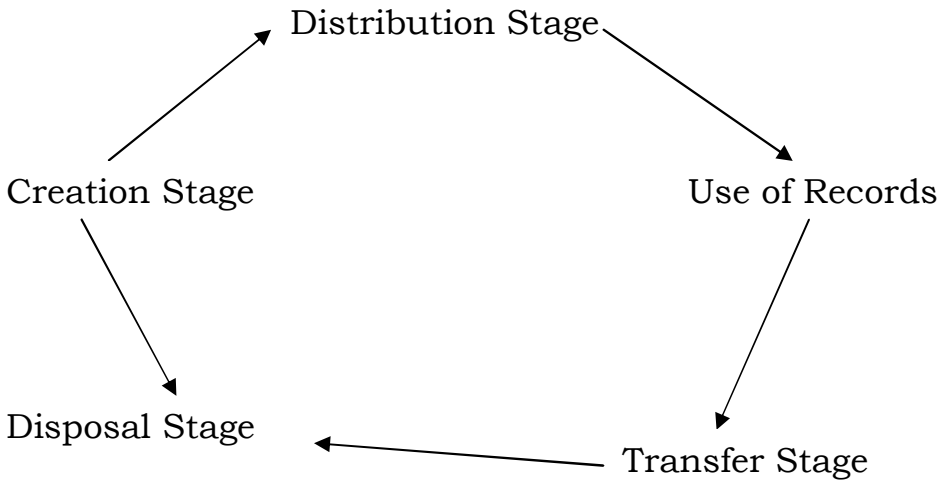


Fig. 2.1 Lifecycle of Record

2.3 Records and Records Management

Information documentation serves as a backbone upon which all our daily activities are conducted. They give the account of transactions taking place in both formal and traditional institutions. The individual's transaction also requires keeping a record to give the present, past and future activities of the creator. These records exist in print and non-print formats, and they are created to achieve desired goals. Smith (2002) highlighted that a record is recorded information regardless of media or characteristics created or received and used in the operation of an organization. The most common records such as correspondences, letters and

memoranda, reports, forms and books, usually appear on paper. An organization may receive records through regular mail, facsimile machines, special couriers, or electronically by computers networks. Other types of records to consider are oral records stored in cassettes and other magnetic media. Records also are stored on films such as movies, videotapes, photographs and microfilm.

Medical records on their part contain information about patients ill health conditions, diagnostic notes, treatment given to a patient and result of the treatment. These records are created or received at every stage of a patient's treatment process. They also exist in manual or print and non-print e.g. x-ray films. These records are created during patient and doctor relationship where a patient presents complaint to the physician to enable him to receive appropriate prescription and treatment. Other medical records are also received externally from sister health care institutions as referral. Osundia (2005) opined that medical records are created in the first instance with documentation of patient health information and further observed that documentation is the act of gathering together or recording down in written an information about a patient on a prescribed form or sheet after he/she might have been properly interviewed on arrival at the admission centre of the hospital.

When records are created or received for use, we have to manage them in order to ensure their availability, accessibility, patronage and use. The management of records is indispensable for the realization of goals for which these records are created or received. Kent (1978) viewed records management as "the

planning, controlling, directing, organizing, training, promotion and other management activities involved with respect to records creation, maintenance use and disposal: Cook (1986) cited by Elisha (2000) declared the records management is a field of management whose materials are data, media and system used in the record making and record-storing process in any organization. Its aim is to achieve the best retrieval and exploitation of data held in the media systems. It is meant to reduce the cost and improve efficiency of record-making and record keeping process. Newman (1959) observed that medical records are different from other records because they are concerned with patient health care needs. Therefore, they must be treated differently. He said further that, they are not to be destroyed because they are created to serve current and historical purposes. National Health Service (2005) opined that records management has increased interest in corporations due to new compliance regulations and statutes. Government, legal and health care entities have a strong, historical records management discipline.

Generally, keeping of corporate records had been poor, but later became standardized and implemented in line with extant laws and regulations. In addition, scandals such as the record related mishaps at Morgan Stanley, have renewed interest in corporate records compliance, retention period requirements, litigation preparedness, and related issues. Consequently, ISO (2001) stated that records management includes the following:

- Setting Policies and Standards

- Assigning Responsibilities and Authorities
- Establishing and Promulgating Procedures and Guidelines.
- Providing a Range of Services relating to the Management and use of Record.
- Designing, implementing and administering specialized systems for managing records; and
- Integrating records management into business systems and processes. This study will provide technicalities involved in records management right from their creation to the disposal period in order to prevent premature destruction of useful records. The knowledge of records and their management will aid both individual and organization to achieve their objectives.

2.4 Creation of Medical Records

Medical records can be created or received in manual or print media, electronic form, image and in magnetic format. These records are created daily because of the influx of patients visiting primary health care centres to receive treatment. Following the current technological advancement in the medical field, coupled with daily enlightenment campaigns, records creation and systematic control as an aspect of managing them has been given the desired attention. Other medical records are also received externally from sister health care institutions as referrals. Osundia (2005) observed that medical records are created in the first

instance with documentations of patient health information. documentation is the act of gathering together or recording down in written form the social/personal identification of information about a patient on prescribed form or sheet after he/she might have been properly interviewed on arrival at the admission centre of the hospital. It is also the system of collecting patients identity on their subsequently visits to the primary health care centres. The registered patients are issued with a primary health care number or code and date on a small reference card, which will be used as a guide to the subsequent patient visitation to PHC in the state.

Benjamin (1980) noted that the Outpatient Department places responsibility clearly in the hands of the patient to supply the hospital with his/her personal details. The correct spelling of names and other details is thus, before registration commences. However majority of registration takes place in Out-Patient Department (OPD) in case of General Hospital by direct enquiry from the patient. The Out-Patient Department is divided into three sections.

- General Out-Patient Department
- Accident and Emergency Department
- Consultative Out-Patient Department

The creation or receipt of medical records involves almost all the stakeholders in health care institution. These include records clerks, record technician, records professionals and physicians. American Patient Application

Service (2001) observed that medical records are created when you receive treatment from health professionals such as physicians, nurse, dentists, chiropractors, psychiatrists etc.

Medical record contains the information on patient medical history, details about his/her lifestyle (such as smoking or involvement in high – risk sports) and finally medial history. In addition the medical results, medication and reports that indicate the result of operations and other medical procedures. The records should also include the result of genetic testing which can be used to predict one's future status.

The value of documentation or registration have been identified by Osundia (2005) thus:

- To identify patients properly as well as other patient with identical names and addresses.
- The statistical data collected reveals the catchment area of epidemic and endemic out-break. It also helps the health team to know the category of people affected by disease whether infants, children or adult. This will enhance immediate intervention in the area.
- Age determines the types of drugs to be given in the hospital. There are specified drugs for certain number of years one has attained for example, a child will be given syrup or drug in fluid form while adult will be given drug in tablet form.

- To identify the next-of-kin in case of emergency or death. Death occurring during hospitalization will be difficulty to handle, if name and address of next-of-kin was not taken. This study will contribute the growth of medical records profession both in traditional system and in modern age.

2.5 Types of Medical Records

Health records contain different cases of patients ailments regardless of sex, age, status and race. It is against this background Kukah (2005) listed types of medical records as identification records, clinical records, treatment notes, laboratory records, obstetric records, new born records, ambullary records, radiology, physiotherapy records, doctors orders and family planning records. Each of the above record is created or received to achieve a particular objective. Apart from the above other types of medical records are Antenatal records, Birth records, death record, immunization record, eye and ear records and general outpatient records.

Moreover, Delano (1990) viewed that family planning in the past was considered as taboo in Nigeria and indeed in many African countries. Children were seen as gift from God and any attempt at birth control was considered sinful. He further added that as a result of change in the climate of opinion family planning is widely accepted in many states in Nigeria and having regard to public ignorance on the various methods of fertility regulation. This study will create

awareness to patients and primary health care centres of the objectives of creating different types of medical records and the role played by each category of record.

2.6 Purpose of Medical Records

Every medical record is created or received to achieve a predetermined goal of health care institutions in handling patents ailments at the same time to provide accurate data to achieve successful treatment and otherwise. Akanji (2006) opined that medical records are created or received to:

- Assess the performance of health care rendered to the patients
- Provide data for statistical evaluation of cases to determine the strength and weaknesses of treatment processes.
- To provide information for training and educating health care provider through seminars or workshops.
- To protect legal interest of patient hospital and health professionals against litigation.
- Serve as reference source: in this respect physician can refer to previous cases to treat current and future ailments.
- Provide information for research: moreover other purposes of medical records are expressed by Lund (1980) as records that are an aid to the treatment of patients. They are often regarded as an "aide memorie" for the clinician. A scientifically formulated and maintained record is a positive aid

to the treatment of patient. Details of previous or current disease along with current findings can help to confirm or rule out certain diagnosis. They are instrument of teaching and research. Medical records contain important medical facts of interest to those involved in clinical research. The results of research into the incidence prevention and treatment of disease are published in medical journals or textbooks which in turn are used as educational instrument. The medical research workers must have adequate documentation to form the basis of their reports. The research on purpose of medical records spelt out the role and the relevance of medical records as it affects the patients, physician and the health care centres.

2.7 Utilization of Medical Records

Records are created or received by organizations or individuals to be used in the conduct of daily affairs. Usage is the central aim of the entire records management process. All records are meant to be utilized in achieving an objective. Moreover, utilization of records is governed by their availability, identification and through proper arrangement and retrieving them for use on request via a suitable classification scheme adopted by primary health care centres. The retrieval devices, i.e., indexing, classification and abstracting are chosen in accordance with the need of a particular primary health care centre. In medical records filing of patient card serves as instrument for locating such records with ease.

Osundia (2005) observed that filing system can be described as a set of document arranged in a prescribed order for convenience of reference and preservation. The purpose of filing record is to facilitate quick retrieval of patient information when the need arises. There are three basic methods of filing records, and these are alphabetical, chronological and numerical systems. Each health care institution can adopt a particular filing arrangement that will suit its operation. Also the retention period of records and their storage contribute immensely towards effective records use. On the other hand electronic records are accessed and used as stated by Akanji (2006) who is of the view that, accessibility is the ability to locate, gain entry into by use of directory, file or any device in automated system or other network. Accessibility to a storage media is the time interval between the moment the command is given to transfer data from disk to main storage. Ordi (2006) observed that retrieval of information is dependent upon its having been organized.

Information is needed in all aspects of life. If information is not organized it is difficult if not impossible to find. So we have all kinds of tools that aid in the process of finding information that we need through, classification, catalogues, indexes and abstracts. organization of information also allows us to keep a usable record of human endeavors for prosperity. This study on utilization of medical records serves as a corner stone or hub upon which medical records are used through appropriate organization and storage.

2.8 Users of Medical Records

Patients information records are vital document used to identify the patient demographic data and nature of the ailment coupled with treatment or medication. The records also spelt out the physician diagnostic statement and recommendation for medication. The records also serve as information source to researchers in medical field. Health records have internal and external users. Internal users include, the patient, physician and the hospital, while the external users can be scholars, researchers, and the law enforcement agencies like such as NAFDAC, Court, Police and International organizations. Millennium Development Goals (2000) specifically address health as set forth by the United Nations include reducing child mortality, improving maternal health, combating HIV and AIDS, malaria and other diseases, and increasing access to safe drinking water.

A progress report published by MDGs in (2006) indicates that childhood immunization and deliveries by skilled birth attendants are on the rise, while many regions continue to struggle to achieve reductions in the prevalence of the disease of poverty including malaria, HIV/AIDS and tubercolosis. This research seeks to clearly point out the legal users of medical records both internal and external users of the health care services at all levels.

2.9 Factors Affecting Records Use and Non-Use

Kirch (1998) identified factors affecting records use and non-use. They are connectivity, reliability, failure handling, security, speed, sophistication, ease of

use, maintenance, administration, disabled access and release date. These factors determine the maximum, minimum utilization or abandonment of records.

2.10 Preservation of Medical Records

Inadequate files accommodation occasioned by daily creation and receipt of medical records posed a major challenge in medical records management. Addressing the problems of preservation of both physical and electronic records has become indispensable. Also due to the importance of medical records each health care institution is mandated by law or statute to employ retention policy of their records, so that all patient records can be carefully, and systematically, managed to avoid their damage or loss before completing patient treatment.

It is therefore the responsibility of health records department to advance ways of providing adequate and safe storage medium for the current or active records or inactive records during the retention period this is supported by Hufman (1921) cited by Elisha (2000) noted that, in order to keep medical records intact, and to protect the sheet from tearing and from the effect of repeated handling they should be kept in files or folders. There should also be adequate air condition and cross-ventilation in the record offices. In addition Schellenberg (1965) viewed that among the preservation of records, space has to be provided, there should be enough space to preserve them. He further explained that if archivists lack space to accommodate records it will be difficult to prevent their destruction from insects sunlight and humidity.

Afolabi (1991) observed that preservation is the measure taken by records managers to protect their recorded information from deterioration. Records are created to be preserved for future use and to enable users to know the past and compare with the present.

Information can be lost if the medium which carries it is not preserved in a form and format that can be used. Recorded knowledge generally must be preserved and made available for use. Preservation was set out mainly to ensure the survival of information and the use of same when the need arose. Moreover restoration is part of preservation technique in which the damaged records can be brought back to life. Maedike et al (1974) opined that despite the measures taken to prevent fire and water damages these mishap still occur from time to time, it is therefore essential for every organization to have a standard restoration and salvaging programmes for fire and water damages on records. To buttress this view Judith (2002) observed that records storage is the actual placement of records according to plan, into folder on a shelf or in a file drawer. Storage can be electronically done on a record to medium involves careful planning survey of records, such as record appraisal, description, arrangement, storage, maintenance, control, security, retrieval and use of records. This study on preservation of medical records will enlighten the record managers, on how to preserve, conserve and store the records from their creation to their final disposal after treatment as agreed upon by the record retention policy programme.

2.11 Record Retention Policy

Every organization primary healthcare centres inclusive used to create and receive hundred if not thousands of records every year. We all recognize the importance of retaining these documents until we can be sure they are no longer required, but what of the other information resources we use both in public and private sectors of the economy? Because if you have not retained documentary evidence, how will you defend your cases in case of litigation or attack? The policy needs to identify the types of information that may need to be retained and then specify exactly how it should be retained. As it is important to retain these documents it is also important to set a limit on how long they are retained for. This not only prevents the unnecessary build up files, but also helps to reduce the likelihood of someone deleting a document because they don't think it is needed any more. Also, try to keep retention period as simple as possible, again to avoid inadvertent deletion of required files. This can be achieved by specifying the period following a specific date i.e. 5 years, 7 years, 10 years, etc.

Once your retention policy is in place, ensure you protect the data carefully. Take steps to prevent unauthorized access to sensitive data, including encryption. Regularly back the data up as neither a court nor tribunal is likely to see "our hard drive failed" as anything more than a convenient excuse as to why you can't disprove an opposing party's claims.

2.12 Staffing

The success or failure of the entire records management lies on the quality and quantity of staff handling the management and maintenance of patient records. It is against this background Hufmann (1963) observed that, hospitals have increased in number, size and complexity. Therefore, the medical record manager has far greater responsibilities than ever before. This brings about a great demand for the administrative record manager possessing not only expertness in the necessary technical skills but also in the qualities of leadership.

He must have high degree of knowledge and skill in the effective organization and management of medical record department. Planning and Controlling are two basic elements of records management and administration. Therefore medical records manager must first determine, a proposed course of action, review and appraise past results and use. These serve as a guide to future plans and actions. Also three category of staff are identified as records managers thus; record clerks, record technicians and record professionals.

Observation reveals that medical records departments in primary health care centres in Zamfara state are mostly ran by untrained and inexperience staff in Records management this situation create another challenges in achieving the goal of creating those records. That was why American Medical Association (1972) set up qualification standard to establish recognition of highly qualified medical records practitioners as professionals. These qualifications were raised as prerequisite for all allied health professional in the field to advance. Upon a

successful completion of examination, the individual receive a certificate of registration and is entitled to use letters (RRA) Registered Records Administrators after his/her name.

Federal Ministry of Health (1996) stated that the principles and processes of effective community health education also apply to the training of health workers towards ensuring that the community health workers acquire the appropriate skills, attitudes and knowledge that will enable them to effectively provide integrated primary health care services. The ministry also identified simply training needs assessment methods, as thus; observation of work, interview of worker, and community development committee, annual assessment report, testing skills and meeting with staff.

2.13 Impact of ICT Application in Medical Records Management

Following the advent of information and communication technology (ICT) and its tools like computers in our present day society, computers are widely used in handling the affairs of national life which covers the entire activities in our national development. Computers are used as live wire in solving problems in medicine, engineering, agriculture, business activities, production, sport, teaching, research and so on. Therefore medical records management will not be in exception.

Akanji (2006) noted that manual system of our past operation can no longer take care of managing bulk of records created daily from new and old patients. We

have to embrace the computer application so that problems in delaying service delivery and inconsistencies can be tackled. Even though communication is highly vital in patient record management. We have local area network where the patient information records are managed within the vicinity of the health care institution. Whereas Wider Area Network (WAN) facilitate the communication of patient information at a long distance. In this case a patient case can be referred to another destination/hospital via computer network.

Amaxx (2008) viewed that, the starting point of our health care programme is the improvement of healthcare service using ICT. Improving information channel in rural communities can have an enormous impact on disease such as HIV/AIDS, malaria, diarrhea and water-related illnesses. These are continuing to have a devastating effect upon the health of rural population in developing countries. In addition, by improving information flows.

The projects we are supporting are helping to provide a contribution to knowledge and expand diagnosis. This opinion was barked by Douglas (2003) who viewed that due to incorporation of computer services in our national life our society is changing its philosophy to stand the taste of time and to meet up with future challenges concerning the use of ICT tools in the management of health records in health care centres. However, the use of computers, internet facilities, X-ray machines are crucial in handling patient information. Computerization brings about easy access to stored records, quick service delivery and consistency

in the patient data management. Computers are more suitable in managing electronic records.

Government has embarked upon a pilot project inorder to inculcate the philosophy and ideology in minds of Nigerians to embrace the use of computers and other ICT tools as benchmark of our national development in view of that Ogunfemi (2005) highlighted the role of Digital bridge institute in promoting the compliance of ICT use in all facets of our endeavours. The DBI, has the mandate to formulate and implement pilot projects demonstrating the application of ICT in the relevant fields of importance in Nigeria and Africa.

The DBI has observed a need to realize maximum benefits of ICT in human resource development and create skilled professionals in the diversity of streams related to information and communication technology. Despite the proliferation of computer literacy amongst Nigeria lack of constant power supply coupled with poor environmental condition posed another challenge in an effort to realize MDG initiatives of year 2000. This challenge if not properly addressed could compound the global marginalization of Nigeria in the emerging digital economy. The ICT to be used by medical records department include – computers, printers, servers, radiographic machine, microfilm, CD-ROM, digital camera, video camera, photocopy machines, television and videotape.

Gallway (2002) opined that, computer's main memory (RAM) is known as primary storage medium. In order to execute a program the data have to be loaded into main memory. Primary storage device is volatile, while CD-ROM, magnetic

tape, magnetic disc and microfilms are required by computer systems to save softwares and data files.

Not so long it was thought that the widespread use of these fantastic machines that could perform calculation and process data with lightening speed and complete accuracy will free up humans to work may be only two or three hours a day while the computer did the lion's share. In fact, people seem to be working harder than ever trying to keep up with the output of their computers. Human beings are the weak link in the chain, needing food, rest, a social life, prone to headaches, stress tired limbs and mistakes. Many people are afraid of computers and fear that they will not be able to learn the new skills required or that their positions can be occupied with high level of competence in ICT.

2.14 Summary of the Review

The literature review discusses both the management of records and medical records in particular. The management of the medical records was focused on traditional system of operation as well as in ICT era. The theoretical framework and conceptual approach in managing medical records were highlighted by authors, scholars and researchers in Medical records management in the following area record creation lifecycle of record types of medical records purpose of medical records factors affecting use and non-use of records, impact of ICT application to reduce unauthorized access to patient records by use of relevant

software and qualification and skills expected of records managers as noted by United State Health Care Service Department.

The standard qualification for every category of records managers was emphasized and these formed the basis of achieving the objectives of creating and maintaining those records. The chapter also revealed the goals of managing medical records as to improve efficiency in record making and record keeping process reduce cost and enhance exploitation of data as contained in the patient health information record.

REFERENCES

Afolabi, M. (1991) Records and Archives Management (Unpublished Paper), Ahmadu Bello University, Zaria. Pp.5-6.

Amaxx, R. (2008). International Copyright Law. Contact infor@workerscompkit.com.

Akanji S.O. (2006). Development of Medical Records in Nigeria. The Journey so Far. Onodin Press. Pp.120-123.

American Hospital Association (1972). Hospital Medical Records Guidelines for their use and Release for Medical Information. Chicago, Lakes Hore. Pp.72-73.

American Patient Application Service (2001). Electronic Medical Records System. US: USPC, pp.27-29.

Benjamin, B. (1980). *Medical Records*. Britain: Heineman. Pp. 48-49.

Cook, M. (1986). The Management of Information from Achieves, England. Gover pp.45-51.

Delano, E. (1990). *Guide to Family Planning.* New ed. Ibadan Spectrum Books Limited, p. 4.

Douglas et al. (2003). The Value of Computerize Provider Order Entry in Ambullary settings. Executive Preview Wellesly; Centre for Information Technology leadership. Pp.32-34.

Federal Ministry of Health (1999). Curriculum for Community Health Extension Workers. Nigeria. P.72.

Heathcote, P.M. (2002). *A Level ICT*, 2nd Ed. Britain. Pyne-Gallway Publishers Ltd. pp. 59-141.

Huffman, K. (1963). Manual for Medical Records Librarian, Illinous Medical Records Company, pp.143-146.

Hufman, E.K. (1981). Medical Records Management. Illinois, Medical Records Company. Pp.131-140.

Iso, (2001). Wikipedia, the Free encyclopedia retrieved from http://en.wikipedia.org/wiki/recordsmanagement.retrieved on 4th December 2009.

Kukah, Y. (2005). Medical Records Management. Usmanu Danfodiyo University Teaching Hospital, Sokoto. Pp.5-7.

Lund, B. (1980). Medical Records. 2nd ed. Britain, William Heinemann. P.160-172.

Maedike, W.O. et al. (1974). Information and Records Management, London: Glencoe Press. P.82-85.

Mark, D. William A. (2001). Electronic Medical Records System, Washington, Google. Retrieved 3/06/2009.

MDGs (2000). United Nations Millenium Declaration, retrieved from http://books.google.com.books?vid=oc/c13821145aid+septto345emwc.

Newman, C. (1959). Medical Records in Archives: The Journal of British Records Association. Vol. iv. (21-24).

Ordi, T.O. (2009). Principles and Management of Library Science, Kaduna. Pp.33-37.

Osundia, S. (1965). Principles and Practice of Health Records Management. Nigeria, Royal Class Printing. Pp.120-123.

Schellenberg, (1965). Modern Archives. Principles and Techniques, Chicago, University. Chicago Press, p.96. Smith, J. et al (2002). Records Management, 7th ed. American South Western. Pp.320-325.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology and techniques adopted in the conduct of the research. It is arranged under the following subheadings:

3.1 Introduction

3.2 Research Method Adopted for the Study

3.3 Population of the Study

3.4 Sample and Sampling Procedures

3.5 Instruments for Data Collection

3.6 Reliability and Validity of the Instruments

3.7 Procedure for Data Collection

3.8 Procedures for Data Analysis

3.2 Research Method Adopted for the Study

The research design adopted for the study was the survey method. It was adopted in conducting the study because it is appropriate in allowing the researcher to collect and analyze data by studying the interrelation among the variables under investigation.

The choice of this method is informed by Osuala's (2005) observation that survey research studies both large and small populations by selecting and studying

samples from the population in order to discover the relative incidence, distribution and interrelations of sociological and psychological variables.

In addition Ijaya (2000) viewed survey research as a method usually adopted when handling a large population especially on issues of the moment that involves systematic collection of data from the population of the study through the use of questionnaire, interview and observation. This is the appropriate method and technique of collecting data on the management of medical records in primary health centres in Zamfara state, which is why it will be adopted for this study.

3.3 Population of the Study

The population of the study consists of all the primary health care centres in the fourteen local government areas of Zamfara state. The total number of primary health care centres in Zamfara state stands at five hundred and twenty two (522). These health centres are spread in all the nooks and crannies of the state and constitute the highest number of health centres compared to secondary health centres such as general hospitals and tertiary health care institutions, such as the Federal Medical Centre, Gusau, Zamfara State.

The subjects of the study included all stakeholders in the health records management in the primary health care centres as infinite population, as thus; medical records staff, nurses, laboratory technicians and community health extension workers.

Table 3.1: Population size of Primary Health Centres in Zamfara state.

S/No.	Local Govt. Areas	No of PHC
1.	Anka	28
2.	Bakura	22
3	Bungudu	27
4.	Bukyum	34
5.	Birnin-Magaji	31
6.	Gummi	27
7.	Gusau	57
8.	Kaura-Namoda	58
9.	Maradum	33
10.	Maru	58
11.	Shinkafi	32
12.	Talata-Mafara	27
13.	Tsafe	49
14.	Zurmi	39
	Total	522

3.4 Sample and Sampling Procedure

The researcher adopted stratified random sampling because of its appropriateness in conducting this study so that no part of the population will be excluded. Also the researcher stratified the population of primary health care centres in Zamfara state into three senatorial zones in the state. They are Zamfara north, Zamfara central and Zamfara west so that none of the variable under investigation will be excluded.

It is against this background Osuala (2005) observed that stratification includes dividing the population into separate strata on characteristics assumed to

be closely associated with variables under study. He further highlighted that if random sampling were to be drawn by chance it is possible to exclude other variables. “In addition stratified sampling gives more comprehensive representation of the population than most of the research designs that was why Nwana (1992) indicated that the larger a sample becomes, the more representative of the population it becomes and consequent the more reliable and valid results based on it become.

Table 3.2. The Sample Size of the PHCs Drawn from Three Senatorial Zones of Zamfara State.

S/No.	Local govt. areas	Senatorial zones	No of PHC
1	Kaura – namoda	Zamfara North	58
2.	Shinkafi	North	32
3.	Bungudu	Zamfara Central	57
4.	Gusau	Central	27
5.	Tsafe	Central	49
6.	Talata Mafara	Zamfara West	22
7.	Bakura	Zamfara West	27
	Total		**272**

Table 3.3 shows a stratified sample size of the population comprising categories of health records managers working in primary health care centres in Zamfara state.

Table 3.3: Categories of Health Records Managers in Primary Health Centres in Zamfara State

Local govt. areas	MRS Staff	Nurses	Chew	Lab. Tech.	Total
Kaura – Namoda	25	-	40	4	69
Shinkafi	18	-	16	5	39
Gusau	19	1	23	13	56
Bungudu	11	-	15	2	28
Tsafe	17	8	31	16	72
Bakora	8	-	15	9	32
Talata Mafara	21	-	15	22	58
Total	**119**	**9**	**155**	**71**	**354**

Key:

MRC: Medical Records

CHEW: Community Health Extension Workers

Lab. Tech: Laboratory Technicians

The researcher distributed the total 354 number of questionnaire to the respondents in Table 3.3. The total number of respondents constitutes 68% of the entire population size of all the records managers in primary health care centres in Zamfara state. This opinion was supported by Nwana (1992) who viewed that the larger a sample becomes, the more representativeness of the population it becomes and so the more reliable and valid the results based on it will become.

3.4 Instrument for Data Collection

The research instruments used for the study included questionnaire; observation and interview. These instruments were designed essentially for collecting data on management of medical records in primary health care centres in the state. This informed the observation of Jen (2009) that research instrument is a device or tool used to collect, record or measure data which are required to provide answers to research questions or test hypotheses.

In addition, Bello and Ajayi (2000) stated that in executing studies, certain research tools need to be carefully selected in order to ensure the gathering of reliable and valid data. Some of the simple research tools commonly used to gather data in educational research are questionnaire, interview and observation.

The questionnaire for this study consist of six sections. Whereas section A deals with personal data of respondents and qualification of staff, section B, consist of types of Medial records. Section C cover organization and storage of Medical records; section D, consist of utilization of Medial records and their retention policy, Section E, consist of information Technology application in records management, Section F, consist of preservation method of medical records.

3.5 Test for Reliability and Validity of the Instruments

The questionnaire for this study was validated by supervisor(s), records managers and research experts and ascertain the construct of the questionnaire in order to allow for collection of usable data.

3.6 Reliability of the Instruments

The instruments used in the collection of data were questionnaire which was measured and consistently yielded same results. The research instrument cannot be valid if it is not reliable in research. The consistency of results following the use of two measuring instruments; questionnaire and observations of available records in custody of primary health care centers in the state gave same results every time.

3.7 Procedure for Data Collection

The researcher has solicited for the co-operation of the authorities of all the primary health care centres in Zamfara State for the administration of questionnaires to the population sampled for the study. The services of research assistants were employed in order to ease and quicken the distribution of questionnaire to respondents, the research assistants were the staff of PHCs in the state.

The respondents were given enough time to fill in the questionnaire. Two weeks were used in the distribution of questionnaires in the selected primary

health care centres and a third week was used for the retrieval of completed questionnaires.

In addition, unstructured interview were conducted among the other staff in different sections in primary health care centres of the target population sampled.

3.8 Procedure for Data Analysis

The data collected for this research was presented and analyzed in order to obtain answers to the research questions formulated and also to test hypotheses. The data was analyzed using histograms, bar-charts, pie-chart frequency distribution tables and simple percentages. These are the statistical tools used by researcher in analyzing the data.

REFERENCES

Bello, R and Ajayi, O.S. (2000). *Research Methods and Statistical Analysis Nigeria:* Haytee Press. P. 29.

Halilu B. (2010). The Role of Primary Health Care Centres in Zamfara State. (Unpublished Paper) in Gusau, pp.4-6.

Jen, S.U. (2002). *Fundamental of Research Methodology.* Yola: Paraclete Publishers P. 45.

Ndagi, J.O. (1999). *Essentials of Research Methodology for Educators.* Ibadan: University Press. P. 82.

Nwana, O.C. (1992). *Introduction to Educational Research.* Ibadan: Irepo Press. Pp. 67 – 71.

Osuala, E.C. (2005). *Introduction to Research Methodology. 3rd ed.* Anambra: Rex Charles and Patrick limited pp. 117 – 132.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the data collected for the study. Analysis and discussion of the data and findings are also presented. The chapter is presented in the following order:

4.1 Introduction

4.2 Response rate

4.3 Data Analysis and Discussion

4.2 Response Rate

Out of the 354 copies of the questionnaire distributed to the respondents, a total of 340 (96.0%) copies were returned duly completed and found usable for this study. The high response rate was realized due to the fact that the research assistants used were staff of the Primary Health Centres. It can also be attributed to the fact that the respondents were given up to three weeks within which to complete and return their copies of questionnaire. The response rate of respondents in Zamfara State is shown in Table 4.1.

Table 4.1 Response Rate of the PHC Staff in Zamfara State

Local Govt. Areas	No. of questionnaire distributed	No. of questionnaire returned	Percentage of questionnaire returned
Kaura Namoda	69	64	18.1
Shinkafi	39	39	11.0
Gusau	56	52	14.7
Bungudu	28	28	7.9
Tsafe	72	70	19.8
Bakura	32	32	9.0
Talata Mafara	58	55	15.5
Total	**354**	**340**	**96.0**

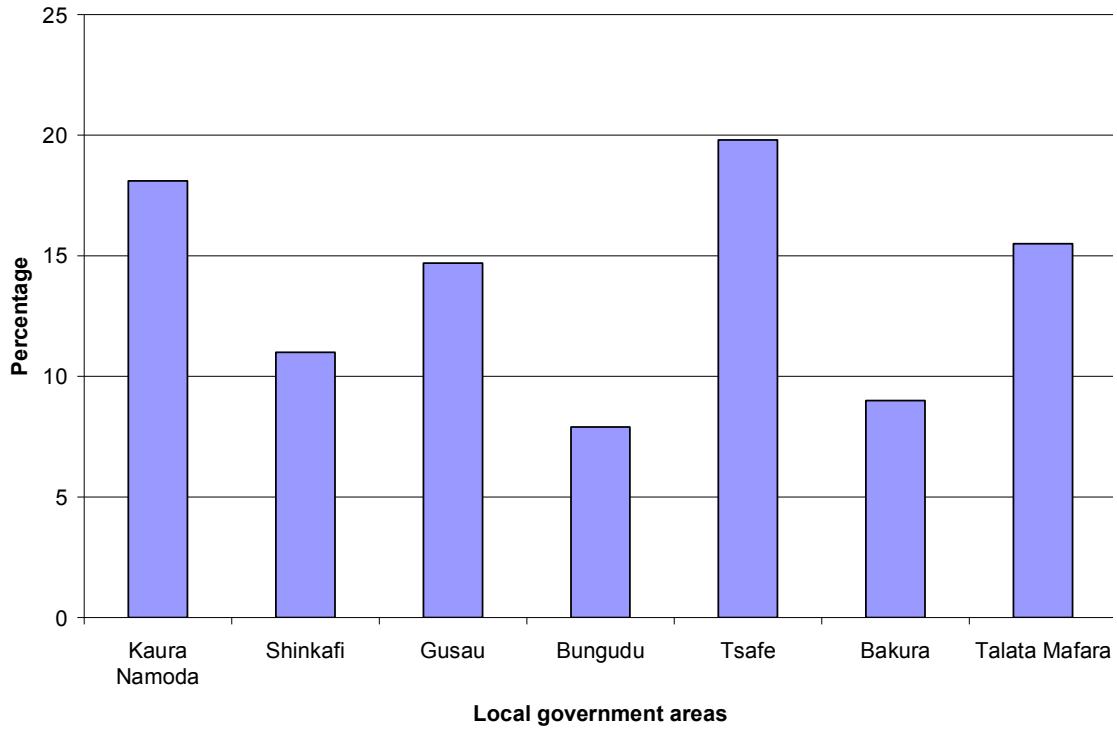


Fig. 4.1: Response Rate of PHC Staff in Zamfara State.

4.3 Data Analysis and Discussion

This section analyzes and discusses the data collected for the study with respect to the research questions raised.

4.3.1 Types of Medical Records Generated in PHCs in Zamfara State

The research question was aimed at identifying the types of medical records generated in the PHCs in Zamfara State. To do this, a list of medical records was outlined for the respondents to tick as many as possible. Table 4.2 and Figure 4.2 show the types of medical records generated in PHCs in Zamfara State.

Table 4.2: Types of Medical Records Generated in PHCs in Zamfara State

S/No	Types of medical records	Available
1	Immunization records	√
2	Antenatal records	√
3	Birth records	√
4	Death records	√
5	General patient records	√
6	Family planning records	√
7	Eye care records	√
8	Ear care records	√
9	Referral records	√

From table 4.2, it can be seen that all the types of medical records outlined for the respondents were generated in the PHCs in Zamfara State. These include

immunization records, antenatal records, birth records, death records, general patient medical records, eye and ear care records and referral records. This perhaps was due to the fact that PHCs were set up to provide basic primary health care services to the local community.

Records are daily generated or received in the conduct of the affairs of PHCs in Zamfara state. This is because of the arrival of patients to receive treatment. Such records are created in every stage of patient treatment process. This position supports ISO (2001), which observed that every organization uses systems that search, capture, manage and store information in form of record.

A follow up question was raised to determine the frequency of medical records generated in PHCs in Zamfara State. To do this a list of medical records was outlined and respondents were asked to tick the appropriate options. Table 4.3 and Figure 4.3 show the frequency of medical records generated in PHCs in Zamfara State.

Table 4.3: Frequency of Medical Records Generated in PHC in Zamfara State

S/No	Medical Records	Daily	Weekly	Monthly	Fortnightly	When the need arises
1	Immunization Records	-	-	30 (8.8%)	10 (2.9%)	300 (88.2%)
2	Antenatal Records	-	200 (58.8%)	50 (14.7%)	90 (26.5%)	-
3	Post Natal Records	0 (0.0%)	180 (52.9%)	40 (11.8%)	100 (29.4%)	20 (5.9%)
4	Birth Records	40 (11.8%)	-	50 (14.7%)	-	250 (73.5%)
5	Death Records	20 (5.9%)	20 (5.9%)	40 (11.8%)	-	260 (76.5%)
6	General Patient Records	270 (79.4%)	20 (5.9%)	20 (5.9%)	30 (8.8%)	0 (0.0%)
7	Family Planning Records	50 (14.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	290 (85.3%)
8	Ear Care Records	-	290 (85.3%)	50 (14.7%)	-	-
9	Eye Care Records	20 (5.9%)	260 (76.5%)	20 (5.9%)	40 (11.8%)	-
10.	Referral Records	120 (35.3%)	30 (8.8%)	20 (5.9%)	20 (5.9%)	150 (44.1%)

From Table 4.3, it can be clearly deduced that the frequency of medical records generation in PHCs in Zamfara State varies. It was revealed from the table that immunization records, 300 (88.2%); birth records, 250 (73.5%); death records, 260 (76.5%); family planning records, 290 (85.3%); and referral records, 150 (44.1%) were the types of records that were generated when the need for the records arose. In other words, these records were only generated when such events occurred. This could be attributed to the fact that most of these events such as immunization, death, birth, family planning and referral usually occur or take place occasionally. There might be no definite period/time for their occurrence.

On the other hand, antenatal records, post natal records, ear care records and eye records were the medical records generated weekly. This finding does not come as a surprise because these cases are mostly placed on appointment. Specialists in these cases usually attend to their patients on weekly basis. Also, it was found that only general patient treatment records, 270 (79.4%) were generated daily. This might be connected to the fact that out-patients usually visit the PHCs and are attended to by the health personnel on daily basis.

This finding supports Benjamin (1980) who noted that the outpatient department should have a welcoming and calm atmosphere. The décor should be cheerful and bright, the seating should be comfortable and adequate for the number of patients visiting primary healthcare centres daily for registration. If the patient is new then a unit number must be allotted and a new front sheet must be provided. Documentation of personal and medical data before the patient can be

accepted into medical care. The system places responsibility clearly in the hands of the patient to support the hospital with his/her personal details. The correct spelling of names and other details is thus, before registration commences.

Based on the above analysis, it can therefore be concluded that medical records in PHCs in Zamfara State were generated at different frequencies.

4.3.2 Various Ways in Generating Medical Records in PHCs in Zamfara State

This was intended to identify the ways through which medical records were generated in PHCs in Zamfara state. In doing this, a list of options was provided for the respondents to tick as many as were applicable as shown below in Table 4.4 and figure 4.4.

Table 4.4 Ways in Generating Medical Records in PHCs in Zamfara State

S/No	Ways	Frequency	%
1	When a patient presents his case to the PHC	120	35.3
2	By referring to information resources	103	30.3
3	During interaction between record professionals and PHC staff	117	34.4
4	**Total**	**340**	**100.0**

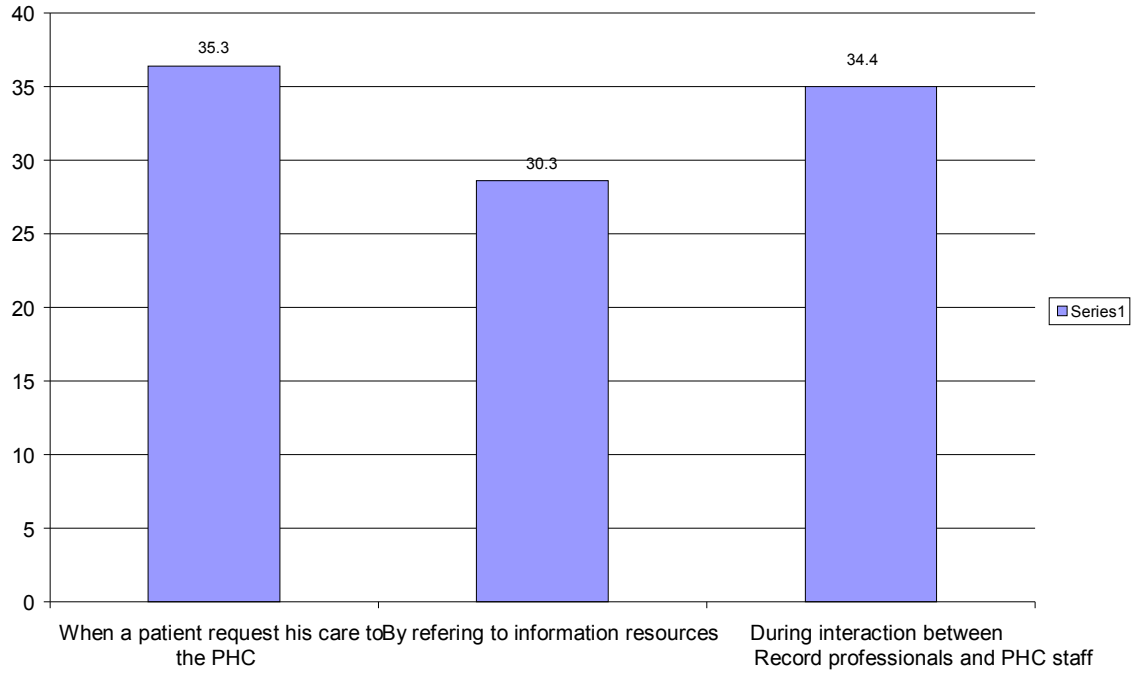


Fig. 4.4: Ways in Generating Medical Records in PHCs in Zamfara State

Table 4.4 and Figure 4.4 show the various ways in which medical records in PHCs in Zamfara State were generated. An observation of the table and figure reveal that 120 (35.3%); and 117 (34.4%) of the respondents indicated that medical records were generated mainly when a patient reported his/her case to the PHC and during interaction between the patients and the PHC staff respectively. The implication of this findings is that PHCs in Zamfara State relied mainly on the information given to them by their patients.

This finding supports Osundia (2005) who observed that medical records are created in the first instance with documentations of patient health information. He noted that documentation is the act of gathering social/personal identification

or information about a patient after he/she might have been interviewed on arrival at the hospital. This finding is obvious because PHC as a local community health institution is expected to generate its data and information from their community members who patronize them for health services.

On the other hand, 103 (30.3%) of the same respondents indicated that medical records were equally generated through consultation of information resources. It was discovered that a majority of the PHC staff relied heavily on textbooks/print information resources than the electronic information resources.

4.3.3 Types of ICTs Used in the Management of Medical Records in PHCs in Zamfara State

This is aimed at identifying the ICTs used in the management of medical records in Zamfara State. To achieve this, a list of ICTs was outlined for respondents to tick as many as were applicable. Table 4.5 and fig 4.5 show the ICTs used in management of medical records in PHCs in Zamfara State.

On the other hand both public and private sector record managers have an ever growing concern about the liabilities associated with the incorrect storage and disposal of corporate or public records. Records management software alleviates these concerns by automating the management of records in compliance with various national and international standards. Regrettably many organizations lack policies and procedures for the well organized control of information. The types of software used in the management of medical records are INFOROUTER,

ADOBE'S PDF SAR BANES, OXLEY LIVE SOFTWARE WEBINARS and ALTOGA software. These software are designed to cope with present challenges occasioned by rapid growing demands for information electronically. They can manage any type of information whether it is pictures, audio, video or scanned image. Moreover, these software can allow to take control of administration and monitoring of documents lifecycle stages (capture, create, classify, share and protect, retain, archive and destruction of critical documents and records. Some of its vital functions include tracking and storage of image and paper documents, multi-language interface for today's global economy, document retention, archival and disposition rules.

Table 4.5: Types of ICTs Used in PHCs in Zamfara State

S/No	Types of ICTs	Frequency	%
1	Computers	94	27.6
2	Digital cameras	5	1.4
3	Microscope	65	19.2
4	Scanner	72	21.1
5	X-ray machine	8	82.5
6	CD-Rom	91	26.7
7	Mobile phone	3	0.9
8	Telephone (Landline)	2	0.6
9	Intranet	-	-
10	Internet	-	-
11	Fax	-	-
12	**Total**	**340**	**100%**

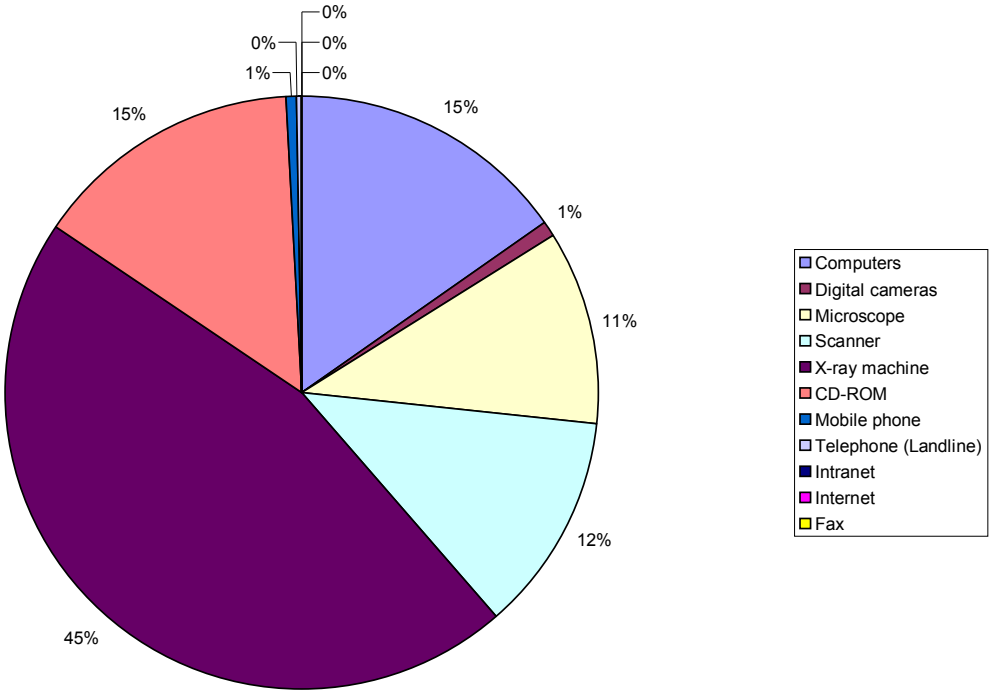


Fig. 4.5: Types of ICTs used in PHCs in Zamfara State

Table 4.5 and Figure 4.5 show the types of ICTs used in the management of medical records in PHCs in Zamfara State. It is revealed from the table that computers, 94(27.6%) and CD-ROMS, 91(26.7%) were the types of ICTs that were highly used as storage media of medical records/information in PHCs in Zamfara State. These findings are expected because of the preponderance of computers and CD-ROMS today in virtually all offices and homes of individual staff members. This is followed by microscope, 65(19.2%) due to its relevance in preliminary investigation of the mostly common endemic disease's parasites i.e. malaria, typhoid fever parasites.

However, it is surprising to find that Internet facilities, digital cameras, telephone (landline) and mobile phones recorded low frequencies despite their relevance in the preservation of information for a long period of time. Based on the analysis, it can therefore be concluded that computers, CD-ROMs and microscope were the types of ICTs used in the management of medical records in PHCs in Zamfara State.

4.3.4 Storage of medical records in PHC Centres

This section discusses and analyzes the storage facilities used to store medical records in primary health care centres in Zamfara State. The responses of the respondent are presented in Table 4.6 and fig. 4.6.

Table 4.6 Storage Facilities Used in PHCs in Zamfara State

S/No	Storage facilities	Frequency	%
1	Cupboards (open/closed sided)	140	41.2
2	Shelves	160	47.1
3	Tables	18	5.2
4	Computers	08	2.4
5	Off heart	10	2.9
6	Auxiliary storage device	04	1.2
7	**Total**	**340**	**100**

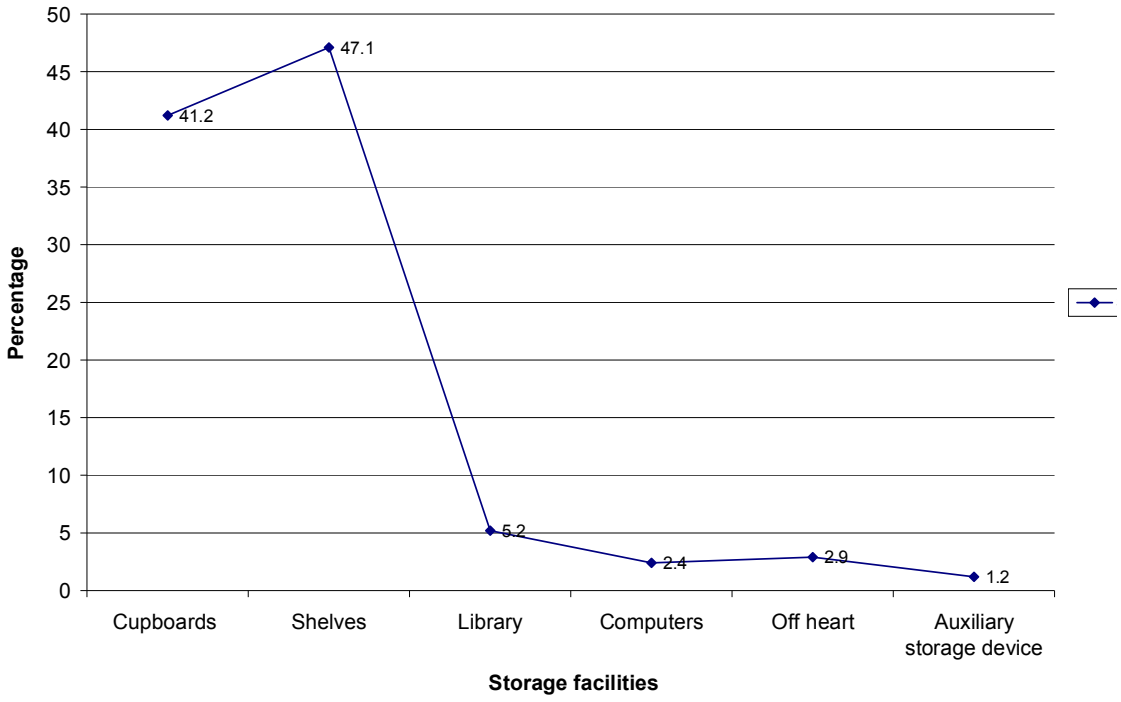


Fig. 4.6: Storage Facilities Used in PHCs in Zamfara State

From Table 4.6 and figure 4.6, it can be deduced that medical records were stored on shelves and inside cupboard with 130 (38.1%) and 120 (35.2%) responses respectively. These are closely followed by computers with 68 (20%) responses. This implies that the three media were the most popular storage devices for storing medical records in primary health care centres in Zamfara State.

The choice of these storage devices could be as a result of their ease of use, maintenance and less cost. Interestingly, other auxiliary storage devices like CDs, CD-Rom, Flash drive and the like were not popularly used as storage devices. This is despite their fragile nature and their being very expensive to procure. This implies that ICT gadgets were incorporated to some extent into the storage arena for storing medical records in primary health care centres in Zamfara State. This is not a healthy development since the world is moving towards total application of ICTs in all its operations.

This finding supports Judith (2002) who observed that records storage is the actual placement of records according to plan, into folders on shelf or in a file drawer or can be electronically done.

4.3.5 Organization of Medical Records in PHC Centres in Zamfara State

One of the objectives of the study was to identify how medical records were organized. A list of options was provided and respondents were asked to indicate methods of organizing medical record used in their hospitals. Table 4.7 and fig. 4.7 present the opinions of the respondents with regards to the question.

Table 4.7 Method of Organizing Medical Records in PHCs in Zamfara State

S/No.	Method used	Frequency	%
1	Horizontal box filing	34	10
2	Numerical arrangement	128	37.6
3	Physical arrangement system	18	5.4
4	Vertical box filing	12	3.5
5	Alphabetical arrangement of records by date	120	35.3
6	Grouping in order of preference	28	8.2
7	**Total**	**340**	**100**

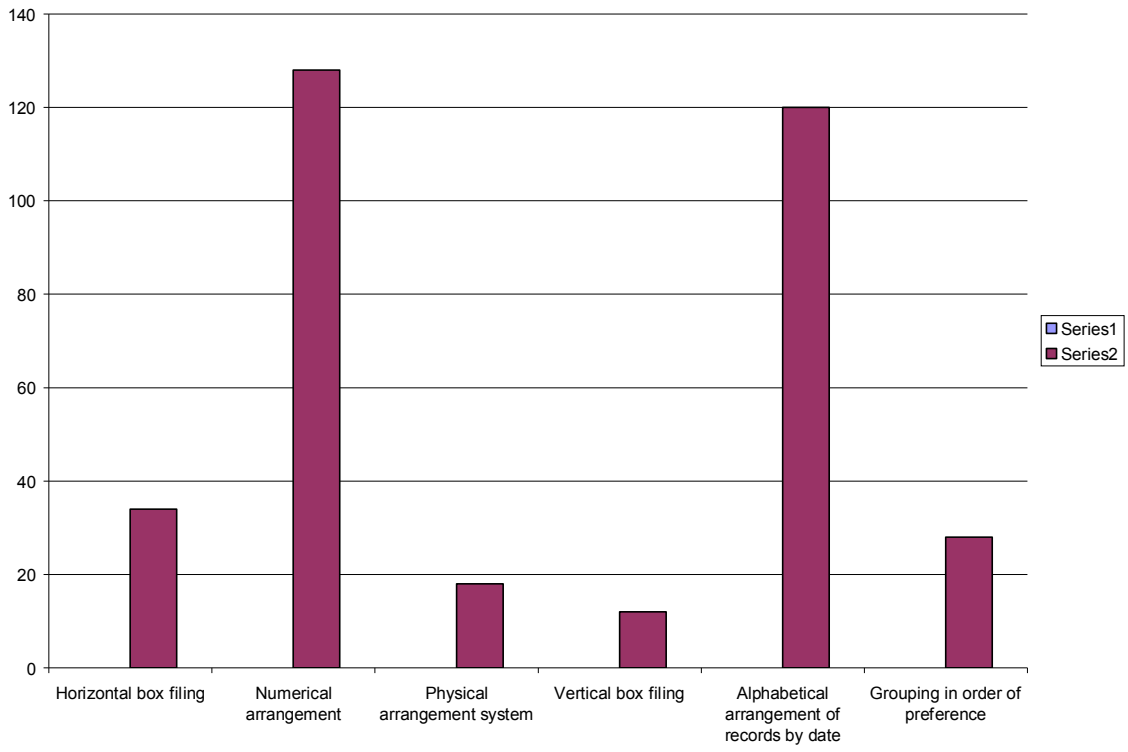


Fig. 4.7: Method of Organizing Medical Records in PHCs in Zamfara State.

Alphabetical arrangement by date and numerical arrangement constituted the major method of organizing medical records in primary health care centres in

Zamfara state with 120 (35.3%) and 128 (37.6) respectively. The finding of this study supports the positions of Hufmann (1981) and Osundia (2005) that numerical, alphabetical and chronological systems of arrangement were the most prevalent in medical records.

This finding is not a surprise since most of the record managers did not receive training in classifying information resources. By their nature classification schemes require intensive training, such as in logic and synthetic skills for their use. This implies that there is no standard in method or generally accepted method of organizing medical records in primary health care centers in Zamfara State.

4.3.6 Utilization of Medical Records in Primary Health Care Centres in Zamfara State

This study discusses and analyzes the extent of utilization of medical records in providing primary health care services in Zamfara State. Likert scale was used to determine the opinion of the respondents. However, in presenting the data the five level scale was collapsed to three for better comprehension, ease of analysis and interpretation. The respondents were asked to tick as many as were applicable. Table 4.8 and Figure 4.8 present the responses on the utilization of medical records in primary health care centres in Zamfara state.

Table 4.8 Extent of Use of Medical Records in PHCs in Zamfara State.

S/No	Medical Records	Utilized	Not utilized	Undecided
1	Immunization Records	280(82.4)	40 (11.7)	20 (5.9)
2	Antenatal Records	280(82.4)	38 (11.1)	22 (6.5)
3	Birth Records	20(5.9)	240 (70.6)	80 (23.5)
4	Death Records	18(5.3)	244 (71.2)	80 (23.5)
5	Patient Treatment Records	260(76.5)	60 (17.6)	20 (5.9)
6	Family Planning Records	40(11.8)	220 (64.7)	80 (23.5)
7	Primary Eye Care Records	42(12.4)	210 (61.7)	88 (25.9)
8	Referral Records	24.0(70.6)	80 (23.5)	20 (5.9)
9	Post Natal Records	20 (5.9)	200 (58.8)	120 (35.3)
10	Ear Care Records	13 (3.6)	200 (58.8)	122 (37.6)

The responses reveal that immunization records, antenatal records, patient treatment records and referral records were the most utilized medical records. Closely followed were birth and death records. In contrast, family planning records, post natal, eye and ear records, were under utilized. Less usage of family planning record could be attributed to the religious beliefs of the respondents, which prohibit, family planning without medical reason.

This finding disagrees with Delano's (1990) view which states that family planning in the past was considered as taboo in Nigeria and indeed in many African countries. Children were seen as gift from God and any attempt at birth control was considered sinful. He further added that as a result of change in the climate of opinion family planning is widely accepted in many states in Nigeria and having regard to public ignorance on the various methods of fertility regulation.

REFERENCES

Delano, E. (1990). *Guide to Family Planning*. New ed. Ibadan: Spectrum Books Ltd. P. 4.

Heathcote, P.M. (2002). *A Level ICT, 2nd ed.* Britain, Payne-Gallway Publishers Ltd. P. 59. 141.

Huffman, E.K. (1981). Medical Records Management. Illinois, Berwyn, pp.110-113.

Huffmann, K. (1963). Manual for Medical Records Managers. Illinois, Medical Records Company, pp.143-146.

ISO (2001). "General Information on Record Management". Retrieved 20th March 2012. http://en.wikipedia.org/wiki/ recordmanagement.

Osundia (2005). Principles and Practice of Health Records Management. Nigeria, Royal Printing, pp.120-123.

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATION AND SUGGESTION FOR FURTHER STUDIES

5.1 Introduction

This chapter provides the summary of the study, summary of findings, conclusion, recommendations and suggestion for further studies.

5.2 Summary of the Study

This study was carried out to investigate management of medical records in primary health care centres in Zamfara State. To do this, six research questions were formulated and answered. Review of relevant literature was also conducted in the areas of medical records, records life cycle, types of medical records, purpose of medical records and records management, utilization of medical records and impact of ICTs on records Management, records retention policy and staffing.

Survey research method was used in the conduct of this study. A total of 354 primary health care personnel were used as the sample of the study. The entire fourteen Local Government Areas were studied in Zamfara State. Questionnaires were used as instrument for data collection.

The data collected for the study were presented and analyzed using Histograms, pie charts, Bar charts, frequency distribution tables and simple percentages. These are the statistical tools used for data analysis and presentation.

5.3 Summary of Findings

Based on the data collected and analyzed for this study, the following are the major findings:

1. Immunization records, antenatal records, birth records, death records, general patient records, eye and ear care records and referral records were the types of medical records generated in PHCs in Zamfara State.
2. Immunization records, 300 (88.2%); birth records, 250 (73.5%); death records, 260 (76.5%); family planning records, 290 (85.3%); and referral records, 150 (44.1%) were the types of records that were generated when the need for the arose.
3. Antenatal records, post natal records, ear care records and eye records were the medical records generated weekly.
4. Medical records were generated mainly when patients reported their cases to the PHC and during interaction between them and the PHC staff respectively.
5. Computers scanning machines CD-ROMs and microscope were the types of ICTs that were highly used in the management of medical records in PHCs in Zamfara State.
6. Shelves and cupboards were the storage facilities used in the Primary health care centres in Zamfara State. Computers, and other auxiliary storage devices like Digital Cameras, Telephones, Internet facilities and Flash drive, etc. were not popularly used as storage devices.

7. Alphabetical arrangement of medical records by dates and numerical filing arrangement constituted the major methods of organizing medical records in primary health care centres in Zamfara state.
8. Immunization records, antenatal records, patient treatment records and referral records were the most utilized medical records.
9. Lack of adequate knowledge and skills to manage computer by some medical record managers coupled with inadequate power supply have posed another challenge in health information management.

5.4 Conclusion

The data gathered and analyzed for this study have revealed some findings on the basis of which this conclusion is drawn. The primary health care centres in Zamfara created so many records during patient treatment and these records determined the success or failure of the treatment because they provided the entire guidelines on the patients ill-health cases. Those records must be properly managed from their creation up to disposal stage; for any medical record to be judiciously utilized it has to be well organized and maintained to allow for ease of accessibility and use for efficient health services delivery.

Despite the foregoing these records are not properly organized and maintained due to inadequacies of records managers as most of them are not trained and they lacked skills in managing patients information. The recent inclusion of computer in managing records posed another challenge to records

managers in PHCS in Zamfara state who were not computer literate. As a result of these many patient records became damaged, lost and deteriorated. Until a serious action is taken to remedy these shortcomings the proper management of patient health records will continue to suffer a setback which will hamper an effective health care services delivery in primary healthcare centres in Zamfara state.

5.5 Recommendations

Arising from the findings of this study, the following recommendations were made:

1. That more ICTs devices and facilities should be procured and mounted for the management of medical records in Primary Health Care Centres in Zamfara State. Example computers, scanning machine, disks and flash drives.
2. Modern storage media such as hard drive, flash drive, CD-ROMs and sound recordings should be used to store medical records in Primary Health Care Centres in Zamfara State.
3. Training on medical record management should be organized periodically for the personnel of primary health care centres in Zamfara State. This will go a long way in equipping them with the requisite skills in records management.

4. Medical records utilization by external bodies such as MDGs, police, court, for protection of legal interest and against litigation should be encouraged as provided for by law or statutes.
5. The application of medical records retention policy should be enforced by the authorities so as to avoid frequent lost of patient records during or before completing the treatment.
6. There should be standard classification scheme for organization of medical records to ease their accessibility and retrieval for efficient patient treatment
7. Primary Health Care Centres in Zamfara State should as matter of policy digitize their medical records in order to preserve their reference value.

5.6 Suggestions for Further Studies

This study on management of medical records in primary healthcare centres in Zamfara state did not exhaust the entire medical records management in all its ramifications because it is limited in scope. This is because it covers management medical records in Primary Health care centres in Zamfara state. The study of this nature requires a periodic review so that management of patient health information will not be neglected. It is inline with the above that it becomes desirable to suggest other relevant areas for further investigations thus;

- The management of medical records in secondary health care centres in general and specialist hospitals located in Zamfara state.

- The management of medical records in Tertiary health care centres such as Federal Medical Centre situated in Gusau the state capital.
- The management of medical records in private clinics, dispensaries and maternity homes located within the state.

BIBLIOGRAPHY

Afolabi, M. (1991) Records and Archives Management (Unpublished Paper), Ahmadu Bello University, Zaria.

Amaxx, R. (2008). International Copyright Law. Contact infor@workerscompkit.com. Accessed on 3 – 06 - 2010

Akanji S.O. (2006). Development of Medical Records in Nigeria. The Journey so Far. Onodin Press.

Akanji, D.O. (2005). Development Medical Records in Nigeria 3rd ed. "The Journey so Far". Nigeria: Onudin;

American Hospital Association (1972). Hospital Medical Records Guidelines for their use and Release for Medical Information. Chicago, Lakes Hore.

American Patient Application Service (2001). Electronic Medical Records System. US: USPC,

Bello, R and Ajayi, O.S. (2000). *Research Methods and Statistical Analysis Nigeria:* Haytee Press.

Benjamin, B. (1980). *Medical Records*. Britain. Heinemann.

Cook, M. (1986). The Management of Information from Archives, England. Gover

Delano, E. (1990). *Guide to Family Planning*. New ed. Ibadan: Spectrum Books Limited,

Douglas et al. (2003). The Value of Computerize Provider Order Entry in Ambullary settings. Executive Preview Wellesly; Centre for Information Technology leadership.

Elisha, M. (2000). Management of Medical Records. (Unpublished MLS Thesis). Department of Library and Information Science. A.B.U. Zaria

Emery P. (2005). Why records management: Retrieved from http://en.wikipedia. Org/wiki/records management on 4th Dec. 2009

Federal Ministry of Health (1996). Curriculum for community Health Extension Workers. Nigeria. Abuja,

Federal Ministry of Health (1999). Curriculum for Community Health Extension Workers. Nigeria.

Halilu, B. (2010). Role of Primary Health Care Centres in Zamfara State. (Unpublished paper) Gusau,

Heathcote, P.M. (2002). *A Level ICT,* 2nd ed. Britain. Pyne-Gallway Publishers Ltd.

Huffman, K. (1963). Manual for Medical Records Librarian, Illinous Medical Records Company,

Hufman, E.K. (1981). Medical Records Management. Illinois, Medical Records Company.

Iso, (2001). "General Information on Record Management." Retrieved from http://en.wikipediaorg/wiki/record management". accessed on 3 – 5 - 2010

Iso, (2001). Wikipedia, the Free encyclopedia retrieved from http://en.wikipedia.org/wiki/recordsmanagement.retrieved on 4th December 2009.

Jen, S.U. (2002). *Fundamental of Research Methodology.* Yola: Paraclete Publishers

Kent, A. (1978). Encyclopedia of Library and Information Sciences, Vol. 25.

Kukah, Y. (2005). Medical Records Management. Usmanu Danfodiyo University Teaching Hospital, Sokoto.

Lund, B. (1980). Medical Records. 2nd ed. Britain, William Heinemann.

Maedike, W.O. et al. (1974). Information and Records Management, London: Glencoe Press.

Mark, D. William A. (2001). Electronic Medical Records System, Washington, http://en.wikipediaorg/wiki. Accessed on 3-06-2009

MDGs (2000). United Nations Millenium Declaration, retrieved from http://books.google.com.books?vid=oc/c13821145aid+septto345emwc. On 25-04-2010

Ndagi, J.O. (1999). *Essentials of Research Methodology for Educators.* Ibadan: University Press.

Newman, C. (1959). Medical Records in Archives: The Journal of British Records Association. Vol. iv. (21-24).

Nwana, O.C. (1992). *Introduction to Educational Research.* Ibadan: Irepo Press.

Ogundele, A.L. (2006). International Journal of Labour and Organization. Vol. 3, Number 1 & 2

Ogunfemi, O. (2005). An Inauguration of the Train-the-Trainer programme on ICT Capacity Building for Tertiary Institutions in Nigeria (Unpublished paper). Abuja: Digital Bridge Institute.

Ordi, T.O. (2009). Principles and Management of Library Science, Kaduna.

Osuala, E.C. (2005). *Introduction to Research Methodology. 3rd ed.* Anambra: Rex Charles and Patrick limited

Osundia, S. (1965). Principles and Practice of Health Records Management. Nigeria, Royal Class Printing.

Prince, T. (2002). New Dawa in Zamfara State: Ahmad Sani Story.

Schellenberg, (1965). Modern Archives. Principles and Techniques, Chicago, University. Chicago Press, p.96. Smith, J. et al (2002). Records Management, 7th ed. American South Western.

Yetunde M. A. (2006). "Preservation Conservation and Restoration of Archival Records in the National Archives of Nigeria. Ibadan and Kaduna. (Unpublished MLS Thesis). ABU Zaria

Zamfara State Ministry of Information (1997). Zamfara State Official Handbook. Gusau". Crack Communication.

Department of Library and Information Science
Ahmadu Bello University,
Zaria.

_____

_____

_____

Sir,

This is to introduce myself as a postgraduate student in the above named department. I am currently undertaking a research on the topic titled "*Management of Medical Records in Primary Health Care Centres in Zamfara State"* as a partial fulfillment of the requirement for the award of master of library science (MLS) by the Ahmadu Bello University Zaria.

I will be grateful if you could go through the questionnaire and provide answers therein.

The information provided will be treated confidentially and shall not be used for any purpose than that of research.

Yours faithfully,

Sule Sayudi.

QUESTIONNAIRE ON MANAGEMENT OF MEDIAL RECORDS IN PRIMARY HEALTH CARE CENTRES IN ZAMFARA STATE

SECTION A: Background Information.

1. Name of primary health care centre_____

   _____

2. Which category of respondent do you belong to? Please tick as applicable:
   a. Staff nurse [ ]
   b. Laboratory technician [ ]
   c. Medical Record Staff [ ]
   d. Community health extension [ ]
   e. Other (please specify)_____
3. Gender: a. Male [ ] b. Female [ ]
4. Qualifications
   a. Medical Doctor [ ]
   b. Staff Nurse [ ]
   c. Junior community health extension workers [ ]
   d. Senior community health extension workers [ ]
   e. Medical records i. Certificate [ ] ii. Diploma [ ] iii. HND [ ]

Section B. Types of medical records

5. Identify forms of medical records you create.
   a. Hand written [ ]
   b. Typed record [ ]
   c. Image [ ]
   d. Electronic [ ]
   e. All of the above [ ]
   f. Others, please specify _____

6. Please tick the types of medical records you generate?
    a. Home-based record [ ]
    b. Clinic Master record [ ]
    c. Radiology records [ ]
    d. Obstetrics and gynaecology records [ ]
    e. Ambullary records [ ]
    f. Others (please specify)_____
7. What are the steps involved in creation of medical records in your primary health care centre?
    a. When a patient reported his health condition in primary health care centre [ ]
    b. By going through textbooks [ ]
    c. During the relationship between patient and records managers [ ]
    d. Others please specify_____
8. Are the medical record staff adequate to provide efficient service delivery in your primary health care centres.
    a. Yes [ ] b. No [ ]
    b. If yes how many medical records staff do you have?

        _____

SECTION C

Organization and storage records

9. What are the advantages of proper organization of records?
    a. Difficulty in accessing the medical records [ ]
    b. Retrieval of records quickly [ ]
    c. Save time and energy [ ]
    d. All of the above [ ]

10. Please tick the system of file arrangement you adopt in your primary health care centre?

a. Numerical [ ]
b. Chronological [ ]
c. Alphabetical [ ]
d. Indexes [ ]
e. Others (please specify)_____

11. Do you have enough space to store your patient health records in your previous health care centre?

a. Yes [ ] b. No [ ]

12. What storage facilities are available in your primary health care centre? Please tick as many are applicable.

a. Drawer [ ]
b. Cabinet [ ]
c. Shelves [ ]
d. Boxes [ ]
e. Stack [ ]
f. Table [ ]
g. Others (please specify)_____

13. What are the perceived problems in medial records arrangement in your primary health care centre?

a. Lack of space [ ] b. Prescription card / file [ ]
c. Non-challant attitude of staff [ ]
d. Lack of knowledge and skill in record management [ ]
e. None of the above [ ] f. All of the above [ ]
g. Others, specify _____

14. Are the stored records arranged orderly? Please tick.

a. Yes [ ] b. No [ ]

15. Have you ever received reports as loss of patient record / files?

a. Yes [ ] b. No [ ]

16. If yes what are the problems leading to the loss of files / record in your primary health care centre?

a. Improper file arrangement [ ]
b. Files movement from one department to another [ ]
c. Lack of good storage facilities [ ]
d. Others (please specify)_____

SECTION D

17. Which of the patient information records are mostly utilized? Your PHC?

a. Home-based records [ ]
b. Clinic master card [ ]
c. Prescription note [ ]
d. Others (please specify) _____

18. Have you ever recorded any case in respect of the under listed? Please tick as are applicable.

a. Premature records destruction [ ]
b. Duplicating of patient PHC number [ ]
c. Spelling mistakes in registering patient information [ ]

19. Is your primary health care centre strictly adhering to record retention policy?

a. Yes [ ] b. No [ ]

SECTION E

INFORMATION TECHNOLOGY APPLICATION

20. Please tick where applicable the available ICT tools your PHC is currently using in managing patients records.

a. Computer [ ] b. Camera [ ] c. Tape recorder [ ] d. Scanning [ ] f. Others (please specify)_____. g. None of the above [ ]

21. Can you state the advantages using computer in managing patients records? Please tick as are applicable?

a. Recording patient data only [ ]

b. Massive storage and consistent in managing patients information [ ]

c. Quick and easy access to the stored information [ ]

d. Preservation of patients health information for a long period of time [ ]

e. Others (please specify) _____

22. What are the problems associated with the use of ICT? Please as are applied:

a. Lack of skilled and professionals in ICT application in managing records [ ]

b. Electricity supply [ ]

c. Cost implication in acquiring ICTS equipment [ ]

d. Non-availability of ICT tools in primary health care centres in Zamfara state [ ]

e. Others (please specify)_____

SECTION F

PRESERVATION METHODS

23. Is your PHC fumigating patients record routinely? a. Yes [ ] b. No [ ]

24. If yes what types of chemicals/fumigant are being used?

a. Pesticide [ ] Insecticide [ ] c. Fungicide [ ] d. Others (please specify)_____

25. If "No" what are the problems militating against routine fumigation of patient records?

a. Non-supply of chemicals by your PHC [ ]

b. Financial constraint [ ]

c. Ignorance on the importance of records preservation by your PHC [ ]

d. Others (please specify)_____

26. What are the problems associated with medical records generation?