# DETERMINANTS OF WOMEN'S ACCESS TO AND UTILIZATION OF HEALTH CARE SERVICES IN KADUNA METROPOLIS, NIGERIA.

**BY**

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**A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE IN GEOGRAPHY.**

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**NOVEMBER, 2012**

## Declaration

I hereby declare that this thesis titled **"Determinants of women's access to and utilization of health care services in Kaduna metropolis"** is the product of my research work. The information derived from relevant literature has been duly acknowledged.

_____ _____

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## Certification

This thesis titled "**Determinants of Women's Access to and Utilization of Health Care Services in Kaduna Metropolis"** by Itoe Mark Eric, meets the regulations governing the award of the degree of Master of Science in Geography of the Ahmadu Bello University and is therefore approved for its contributions to knowledge and literacy presentation.

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## Dedication

This thesis is dedicated to my sustainer, the Lord Almighty, my beloved parents, my family and wife who supported me throughout the course of the study.

## ACKNOWLEDGEMENTS

The completion of this work owes much to the inspiration, encouragement and cooperation of many individuals. I would like to express my thanks and sincere appreciation to my supervisors Prof M. Mamman and Dr J. G. Laah, for their constructive comments, critical instructions, suggestions and caring in this thesis. I believe that this thesis wouldn't have been successful without their assistance and encouragement.

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**Abstract**

The spatial distribution of health infrastructure is uneven; some are located close while some are very far from resident population. Purpose of this study is to examine the factors that affect women's access and utilization of health care services in Kaduna metropolis. Study design was a cross sectional descriptive study, using multi-stage random sampling. Data used for the survey was obtained from structured interview questionnaire. This comprised of women within the reproductive age group of (15-49years).Questionnaire was designed to explore the respondents' knowledge about barriers to accessibility and utilization of health care services. Aim of the study is to examine the factors that determine women's access and utilization of health care services in Kaduna Metropolis. Chi-square method of analysis was used and results revealed that, individual characteristics such as occupation, income, marital status and education were all significantly associated with accessibility to healthcare facilities with a p-value $< 0.05$. Statistical level of significant shows a good fit of 143.37, DF= 4 for education and 96.33 and DF=7 occupational status at 0.05 level of significance. It also revealed a weak relationship between income levels/marital status and utilization. Chi-square results also confirmed that majority of women are denied access by their husbands. Other factors that also contributed include poverty, high number of dependents, long waiting in the hospitals and cost of drugs among others. It is recommended that government and non government organisations should educate the women, their husbands, relations and the community on the need of accessing and utilizing health care services. In addition, proactive government policies will be necessary to ensure that health facilities are located close to where women live, have an adequate number of trained staff, a continued supply of drugs and linked to hospitals by an emergency transport and referral system. This policy would be passed as a bill by the legislative arm of government to empower the Ministry of Health to sustain this.

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# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

Health in the 21st century is a shared responsibility, which involves equitable access to essential health care services and collective defence against transnational threats (WHO, 2008). The large gap in access to and utilization of health care services between women in the developed and developing world is well established. However, discrepancies continue to exist in access to and utilization of health care services by women in the developed and developing countries, the rich and the poor, urban and rural, educated and uneducated in societies. There is also a noticeable discrepancy in terms of maternal mortality.

The historical experience in Europe and United States have confirmed that effective utilization and access to skilled professionals, midwives and later to emergency obstetric services, reduced maternal mortality (Loudon,1992; Hogberg, 2004; Bullough *et al,* 2005). Empirical evidences, also suggest that lifetime risk of maternal deaths in developing countries, especially in African is forty times higher than that of the developed world (WHO, 2001). As a pointer to the magnitude of the problem, Sen. (2001) identified that increasing price of drugs, cost of health services and unregulated privatization of health sectors are some of the factors responsible for the low use of health care services among the poor. Globally, people use health care services for many reasons; to cure illness and health conditions, to mend breaks and tears, to prevent or delay future health problems, to reduce pain and increase quality of life and sometimes merely to obtain information about their health status and prognosis. Health care utilization can be appropriate or inappropriate, of high or low quality, expensive or inexpensive.

The study of trends in healthcare utilization provides information on this phenomenon, and many spotlight areas that may warrant future in-depth studies because of the potential disparities in access to or quality of care. Determinants of health care use and access may also be used as a basis for projecting future health care needs. It is also established that multiple forces determine how much health care people use, the type and timing of that care. Certain forces encourage more utilization while others deter it.

For instance, Dias, *et al,* (2008), studied determinants of health care utilization by immigrants in Portugal using selected data of immigrants through interview and results revealed that immigrant men remained significantly associated with length of stay, legal status and country of origin, whereas immigrant women were associated with length of stay and country of origin. In addition, Priya (2002) studied the implication of health care services based on selected studies in Africa. However, findings clearly showed that when poor women face out of pocket cost, such as user fees when seeking healthcare, the cost of care may become out of reach.

In Kaduna Metropolis and indeed Northern Nigeria, there is an increasing diversity of population which poses new challenges to the general health systems. There is also lack of current data on women's access and utilization, health care services, appropriateness of the care services, client satisfaction, and problems experienced when confronting the health care system. This limits the knowledge about the multiple determinants of the utilization of health care services. In fact, there is a clear need to better understand how to ensure access and use of health care services and to deliver appropriate care with special consideration to women in Kaduna Metropolis, so as to increase awareness, use and undertake healthcare

prevention programmes. Barriers must be identified and approaches to remove them developed.

According to Kaduna State Health Sector Medium Term Plan (2008), women's access to and use of health care services is very poor and inadequate: with basic infrastructure for health still lacking and infection rates very high. There is also a wide spread of poverty, limited knowledge and access to available health care services which is perhaps one of the explanations for poor maternal health outcomes. The women in Kaduna Metropolis need the knowledge to improve their health as they play an enormous part in maintaining the health care services through their caring works at home, in the family, neighbourhood and in the nation. In this regard, policy makers need to understand the drivers of health seeking behaviour of the population in an increasing pluralistic health care system, and also concerning behavioural health promotion campaigns through inter-sectoral collaboration focusing more on disadvantaged segment of the population in Kaduna Metropolis.

## 1.2 Statement of the Problem

Although access to basic healthcare and utilization of services has increased considerably in the last decade, the rapid rate of population growth in Kaduna Metropolis and indeed Northern Nigeria means that an increasing number of people are living without access and effective utilization of health care services. More also, most of these health facilities are concentrated in urban areas which are occupied by less than 47% of the population (Laah, 2009).

Now more than ever, within the context of the global financial crisis, it is imperative that the momentum to achieve global health especially women's health care be sustained, commitments and to fully scale up services. Health is one of the pillars of a country development process and with a decreased access and use of health care services; there is a concomitant increase in unplanned pregnancies, unsafe abortion, an overall deterioration in reproductive health, increased child mortality and malnutrition (United Nations, 2009).

The challenges of providing health care in Nigeria to meet the Millennium Development Goals by 2015 are enormous, despite governmental efforts in recognizing the need to strengthen and improve safe motherhood and child health programmes to reduce morbidity and mortality among mothers. The government has also formulated policies and strategic frameworks to accelerate and integrate family planning and all this efforts continued to fail women. So far, given the health care services available to the people, Nigeria is not on track in eradicating poverty and hunger, reducing child mortality, improving maternal health and combating Acquired Human Immune Deficiency Syndrome (AIDs), Malaria and other diseases.

In spite of the fact that effective utilization of heath care services by women is essential for further improvement of maternal and child health, women have less access to and inadequate use of health care services in Nigeria (UNICEF, 2001). Some of the reasons for the differentials include high poverty, and low literacy rate, thus necessitating for more people depending on government facilities especially in the provision of health care services (National Population Commission, 2004).Studies in other parts of the world have showed clearly, marked variations in determinants of women's access and use of health care services.

For instance, in United States of America, Taylor (2003) examined women's healthcare utilization and expenditure using socio-demographic characteristics. Findings revealed that 91% of women aged 18 years above used any health care services while 82% of adult women reported an ambulatory care visit and 11% of the women had an impatient hospital stay. More also, women with private insurance and those on Medicaid were also most likely to use health care services than uninsured women. In addition, similar studies in the urban slums in India showed that constraints to women health care utilization range from prolonged waiting time, heavy work load at home, long distance, lack of awareness among others (Agarwal, *et al,* 2007 and Shaikh, and Hatcher 2004).

Furthermore, in Ghana, Bour, (2009) studied gender and utilization of health care services in Ashanti region using questionnaires. However, this analyses using multiple regression models, showed clearly the relationship between the complex individual variable and utilization by gender. Although females had greater need for health care than males, they do not utilize it as much. Whereas, quality of service, health status, service cost and education have greater effect on male utilization than females with distance and income having a higher impact on female utilization. Of all this studies, none used hospital records of which the present study seeks to fill. In Kaduna Metropolis, the knowledge to health has many pitfalls and women are faced with high poverty level, illiteracy, unemployment and also face crucial tradeoffs when they attempt to fulfil their biological, social, physiological and other needs. Within household, women bear an inequitable burden of providing food, health and shelter for themselves and their families.

Women also face social and physical barriers to accessing health care services especially due to disproportionate need for reproduction health care. In fact, they have little

to save for contingencies which include health and sicknesses. More broadly speaking, illiteracy increases ignorance in decision-making in health seeking behaviour especially on reliance in traditional birth attendants (TBA), harmful cultural practices among others. However, women's relatively low status and the risk associated with reproduction exacerbate what is already an unfavourable overall health situation. Thus, adequate education, good standard of living, improved awareness and understanding of maternal health could be the only remedy for this malady. Although, issues on access to utilization of health care services in some parts of Kaduna state are much discussed. (Abubakar, 1997; John, 2006 and Shittu, 1995). Against this background, this research seeks to answer the following question:

-What is the level of unmet needs of health care services?

-To what extent has the social, demographic, economic, cultural differentials influenced the utilization of health care services?

## 1.3 AIM AND OBJECTIVES.

The aim of this study is to examine the determinants of women's access and utilization of health care services in Kaduna Metropolis. The objectives that will help in achieving the aim of this study are to:

i assess resource availability and services in selected hospitals in Kaduna Metropolis.

ii examine the factors influencing access to health care services by the women in Kaduna Metropolis.

iii examine the factors affecting the utilization of health care services by the women in Kaduna Metropolis

iv assess the level of unmet needs of the health care sectors.

## 1.4 Hypothesis

For the purpose of this study, the following null-hypotheses were hereby formulated;

$H_{01}$ There is no significant relationship between level of education attained and access to utilization of health care services.

$H_{02}$ There is no significant relationship between income levels and access to utilization of health care services.

$H_{03}$ There is no significant relationship between marital status and access to the utilization of health care services.

## 1.5 JUSTIFICATION OF THE STUDY

Review of extant literature however, shows that most studies examined different geographical locations which were predominantly small sized rural communities. For instance, Pan, (2004) studied health care services and utilization in Tudun- Wada, Zaria. Madaki, (2009), studied factors affecting utilization of maternal health care services among women in Giwa L.G.A of Kaduna State.

Also, Suffiyan, (1997) also worked on social barriers of women of reproductive age and the utilization of maternal health services in Makarfi L.G.A. of Kaduna State. Their

geographic scope, limits the applicability of their result on a large scale, particularly considering the complex multi-ethnicity setting of Nigeria.

## 1.6 RATIONALE OF THE STUDY

The study examines the determinants of women's access and utilization of health care services in Kaduna Metropolis. The need for effective access and use of health care services by women is a key driver for economic growth, wealth and poverty reduction. Although, there have not been much studies on these subject in the study area, the result would reveal the areas that need greater improvement and reinforcement. It will also provide information to the people of Kaduna Metropolis, on how to improve their health including women. In addition, the outcome will also contribute to public awareness of the nature, needs, priorities and increase patronage to access and use of health care services. Finally, the result of this study will also provide data that could be used in helping to achieve the Millennium Development Goals (MDGs).

## 1.7 SCOPE OF THE STUDY

A study on the determinants of women's access and utilization of health care services is a broad study which could be associated with the entire Kaduna State. However, this present study is limited to Kaduna Metropolis which will be zoned into two based on their spatial locations .In some areas of Kaduna Metropolis, there is an overspraw i.e. some areas enter one another.

In addition, Parts of Chikun local government area such as Narayi, Sabon-tasha will be merged with Kaduna North and parts of Igabi Local Government Area i.e. Rigasa with Kaduna South. The focus of this study is on the determinants of women's access and

utilization of health care services in Kaduna Metropolis. In this study, six (6) districts comprised the sample for household survey. They are Doka, Tudun-Wada, Ungwan-Rimi, Kakuri, Narayi and Sabon-Tasha. Since the study is focused on the female gender, women within the reproductive ages of 15 – 49 years will be selected for this study. The income areas, their religious background and ethnic groups.

## 1.8 METHODOLOGY

A reconnaissance survey of the study area was carried out. This helped to give the researcher a better view of the study area, the localities, household types, medical centres and other relevant information.

### 1.8.1 Sources of data

#### 1.8.1.1 Primary sources of data

(i) Questionnaires

(ii) Interviews

Questionnaire: (i) (institutional questionnaire)

This provided information on the availability of maternal health care services in terms of type of service rendered, staff strength, drugs, equipment, activities carried out, health seeking behaviours of the women and personnel in charge of the health centres.

-Questionnaire (ii) (Women questionnaire)

This equally provided information on the acceptability and accountability of services rendered and the effects of factors such as; literacy level, religion, family income,

culture, occupation and utilization of the available services among others. Other information not provided by the questionnaire was obtained from literature and the various Local Government Secretariats in the study area. The questionnaires contained close ended questions in which alternatives provided for the respondents to select from.

The women questionnaire was directed to women within the reproductive ages of 15 – 49 years and the institutional questionnaires was directed to doctors, mid wives, nurses, medical record officers and traditional birth attendants. These were accompanied with interviews using the same question where necessary for those who can neither read nor write in English language and for more probing of the health care providers.

Interview were made to support the researcher with their experience in the area of research interest, the health care providers include doctors, midwives, nurses, medical record officers and traditional birth attendants.

#### 1.8.1.2 Secondary Sources of Data

This was obtained from medical records, books, journals publication, e.g. safe motherhood, Action Health, Bulletin from World Health Organization among others.

### 1.8.2 Research Design

The research design covered the topic ‘‘The Determinants of Women Access and Utilization of Health Care Services’’ in relation to age, ethnicity, religion, education, marital status, parity booking status, income and occupation reflecting different socio-economic and socio-cultural group using medical record to collect information on utilization of health care and services for the year 2010.This helped in achieving a current

data on healthcare utilization in the study area. In light of the above explanations, data were collected from 18 districts of Kaduna Metropolis using medical records (i.e., using secondary data).

Ideally, the whole metropolis should form the sampling frame for the questionnaire survey but the researcher considered the sample size standard following Krejcie and Morgan (1970) opinion in determining sample size which states that a sample size of 384 respondents is appropriate and a representation of a given population of one million in a behavioural research. Though the target population is not a million, but in order to minimize errors, the researcher made use of the above sample size determinant, using a larger sample of one million populations.

### 1.8.3 Sampling Technique

Sampling technique are of two major types namely: the Non –probability sampling technique and the probability sampling technique. The sampling technique used for collection of data was non-probability sampling technique; these are quota sampling technique and purposive random sampling.

#### 1.8.3.1 Quota-Sampling Method

In quota sampling, the researcher decides while designing the study how many people with which characteristics to include as participant. Characteristics might include age, place of residence, gender, class, profession, marital status. The criteria chosen allow the researcher to focus on people assumed that would be most likely to experience, know about, or have insights into the research topic then can go into the community and using recruitment strategies appropriate to the location, culture and study population (Mack,

2005).A selection will be carried out to reflect within the sample, a cross-section of the town's main characteristics.

Residential district study area were selected from the Northern, Central and Southern parts of Kaduna town to reflect the spatial, social, demographic, economic and cultural differentials. In this sampling technique, the researcher selected the following characteristics, age, home, ethnic group, marital status, occupation and education among others. These parameters differ considerably between the districts which are Doka, Ungwan-Rimi, Tudun-Wada, Kakuri, Narayi and Sabon –Tasha.

### 1.8.3.2 Purposive Random Sampling:-

This method was used to pick respondents all through, since most houses are either organized or dispersed. Table 1.1 below shows the number of respondents sampled in each districts using quota sampling. The census figure for women within the reproductive age in 1991 was projected because the national population commission had released the 2006 disaggregated data. The population projected for each locality was therefore used to determine the proportion of respondents to sample.

**Table 1.1 Spatial Distribution of Selected Districts, Localities, Census figures, Percentage Total and Number of Questionnaires.**

| Local government | Districts | Localities | 1991 census figures | 2006 census figures by projection | Sample size | Percentage total |
|---|---|---|---|---|---|---|
| Kaduna North | Doka | Doka | 16,662 | 26,644 | 66 | 17.2% |
| | Ungwan – Rimi | Ungwan – Rimi (G.R.A) | 17,490 | 27,968 | 69 | 18.1% |
| | Tudun Wada | Tudun-Wada | 20,370 | 32,574 | 81 | 21.1% |
| | Kakuri | Kakuri | 25,084 | 40,111 | 100 | 26% |
| Kaduna South | Narayi | Narayi | 7,974 | 12,751 | 32 | 8.2% |
| | Sabon-Tasha | Sabon – Tasha | 9,106 | 14,562 | 36 | 9.4% |
| Total | 6 Districts | 6Localities | 96,686 | 154,610 | 384 | 100% |

Source: *Adapted from National Population Commission (1994) Census 1991 National Summary.*

The purposive sampling method was also used to select four hospitals for the survey (Table 1.2). Three state government hospitals in Kaduna town were selected with one centrally located and popularly known private hospital. The four hospitals selected in the Kaduna metropolis were analyzed for adequacy of facilities, drugs demand and supply, patients registered, disease pattern of distribution for both males and females for the year 2010; prevalent diseases, staff strength, mortality and morbidity patterns of the year 2010.The hospitals are St Gerald's private clinic, Dr Gwamna-Awan, Yusuf-Dan-tsoho Hospital and Barau- Dikko Specialist Hospital.

These hospitals were selected due to their affordable cost of services and most women from all the districts of the metropolis attend at least one of them. In the selected (4) hospitals, one can find geographical polarization in the utilization of health care services by the various localities. In addition, the hospitals are almost equidistant from the centre in opposite directions and showing a striking difference in health care service utilization. However, this can be seen with the overwhelming registered women in the metropolis selected facilities.

**Table 1.2 Spatial Distribution of the selected hospitals and number of questionnaire for survey.**

| Local government | Hospitals | No of questionnaires |
|---|---|---|
| Kaduna North | Barau-Dikko General Hospital, Kaduna Central town. | 06 |
| | Yusuf Dantsoho Memorial Hospital, Nassarawa. | 06 |
| Kaduna South | Dr. Gwamna Awan Hospital | 06 |
| | St. Gerald Catholic Hospital, Kakuri | 06 |
| Total | 4 hospitals | 24 |

Source: Field Survey, 2010

The sample sizes of the hospital data was determined before the data collection, but on the basis of theoretical saturation (the point in data collection when new data no longer brings additional insight to the research questions but repetition) Mack (2005).More also, the six Health personnel questionnaires for each of the four selected hospitals were administered to doctors, nurses, x-ray officers, laboratory staff and record officers while the institutional questionnaires was administered only to head of facilities.

### 1.8.4 Method of Data Analysis

#### 1.8.4.1 Descriptive Statistical Analysis

This technique was used for data summarization. It allowed for description of variables through frequency distribution, presentation of results in percentages, bar charts, tables and pie charts.

#### 1.8.4.2 Inferential Statistical Analysis

Chi-Square

(i) The Chi-square test which is a non-parametric technique of hypothesis testing and a test of fitness was used in this study. The $X^2$ test is particularly suited to data in behavioural sciences. Chi-square was used to test if there is significant relationship between educational level attained, occupation and marital status with the access and utilization of health care services.

In other words, the chi-square tests whether the observed frequencies are sufficiently close to the expected ones.

$$X^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

$F_0$ (Observed frequency)

$F_e$ (expected frequency)

## 1.9 Ethical Consideration

-Informed consent was obtained from all concerned. (Health administrator, healthcare providers and clients).

-Permission was obtained from the hospitals management board and the State Ethical Committee, Directorate of Clinical Services at the Ministry of Health Kaduna-State.

-The respondents were assumed that a level of confidentiality was and will continue to be maintained. That is why no names appeared in any of the instrument used.

# CHAPTER TWO

## 2.1 Conceptual Frame Work and Literature Review

In 1978, Mechanic's general theory of help seeking takes a psychological approach to health care utilization. The theory incorporates ten decision points which determine illness behaviour these are:-

i.) salience of deviant signs and symptoms;

ii.) Individual's perception of symptom severity;

iii.) disruption of the individual's daily life as caused by the illness;

iv) frequency of symptoms and their persistence;

v) Individual's tolerance of symptoms;

vi.) Individual's knowledge and cultural assumptions of the illness;

vii) denial of illness as a result of basic needs;

viii) whether or not response to the illness disrupts needs;

ix.) alternative interpretations of symptom expression; and

ix.) treatment availability via location, economic cost, psychological cost (stigma, humility, etc.), and treatment resources.

Beyond these ten points, Mechanic's theory allowed for illness response to be influenced by either the individual or a person who makes decisions for the individual

(Wolinsky, 1988b).Thus, as expressed in the illness behaviour theory, autonomy and heteronomy influence health care utilization.

Parsons, (1951) proposed one of the first theories of health care utilization which was the sick role. According to this theory, when individuals are sick, they adopt the roles of being ill. This sick role has four main components which are that the:

i.) Individual is not responsible for their state of illness and is not expected to be able to heal without assistance;

ii.) individual is excused from performing normal roles and tasks;

iii.) Being sick is an undesirable state; and

iv.) individual is expected to seek medical assistance and to comply with medical treatment to facilitate recovery.

Parsons' theory attempted to identify typically seen behaviour in individuals who are ill. However, while groundbreaking, the sick role failed to account for variability in illness behaviour. As a result scholars have proposed multifaceted models and theories which identify factors influencing health care seeking (Wolinsky, 1988a).Another theory is the Suchman's (1965) stages of illness and medical care (Figure 2.1) indicates five stages of the individual's decision process in determining whether or not to utilize health care:

i.) the individual's symptom experience, including pain, emotion, and recognition of experience as symptomatic of illness;

ii.) the individual's assumption of a sick role during which he or she explores his or her lay referral system for validation of the sick role and for exploration of treatment options;

iii.) medical care contact, during this stage the individual seeks a professional health care system. However, the pace at which a person enters this stage is determined by their membership within parochial and cosmopolitan social networks. If a person's social network is parochial, they will tend to delay medical care contact by continuing the first two stages for longer than a person who is a member of a cosmopolitan network;

iv.) the assumption of a dependent-patient role via acceptance of professional health care treatment. It is possible for this stage to be disrupted if the individual and the professional health care provider have differing opinions of the illness and

v.) the individual's recovery from illness. The individual recovers upon relinquishing their role as patient. However, if an illness is not curable, a person may assume a chronically ill role (Wolinsky, 1988).




*Source; Journal of Health and Human Behaviour. Page 114*.

Figure 2.1: Suchman's Stages of Illness and Medical Care (1965)

There is also the health belief model (Rosenstock, Strecher, & Becker, 1994;) which discusses the individual's actions to treat and prevent disease via consideration of four central variables:

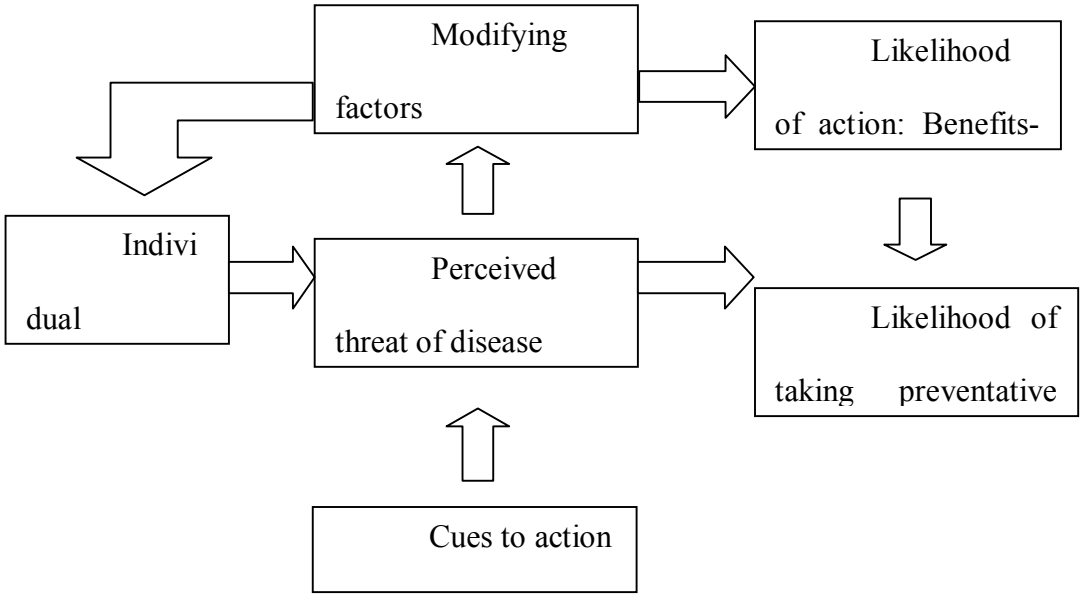
i.) susceptibility to disease is perceived by an individual will seek preventive health services if he or she believes they are susceptible to disease;

ii.) The individual's perception of illness severity, where if a person does not

Perceive the illness as serious; they will not seek treatment or prevention;

iii.) the individual's rational perception of benefits versus costs where he /she will not take will not take action unless the treatment or prevention is perceived as having greater benefits than costs and

iv.) The individual's cues to action, like media, friends, family, or well known citizens can provide an impetus for prevention and the absence of which will reduce the likelihood of prevention.




*Source; New York, NY: Plenum Press pages 5-6*

Figure 2.2: Rosenstock's Health Belief Model (adapted from Wolinsky, 1988)

Andersen (1968) developed a model of health care utilization (Figure 2.3) which looks at three categories:

i.) Predisposing characteristics. That represents the proclivity to utilize health care services. According to Andersen, an individual is more or less likely to use health services based on

demographics, position within the social structure, and beliefs of health services benefits. An individual who believes health services are useful for treatment will likely utilize those services.

ii.) Enabling characteristics. which includes resources found within the family and the community? Family resources comprise economic status and the location of residence. Community resources incorporate access to health care facilities and the availability of persons for assistance;

iii.) Need based characteristics. Which includes the perception of need for health services, whether individual, social, or clinically evaluated perceptions of need (Wolinsky, 1988).

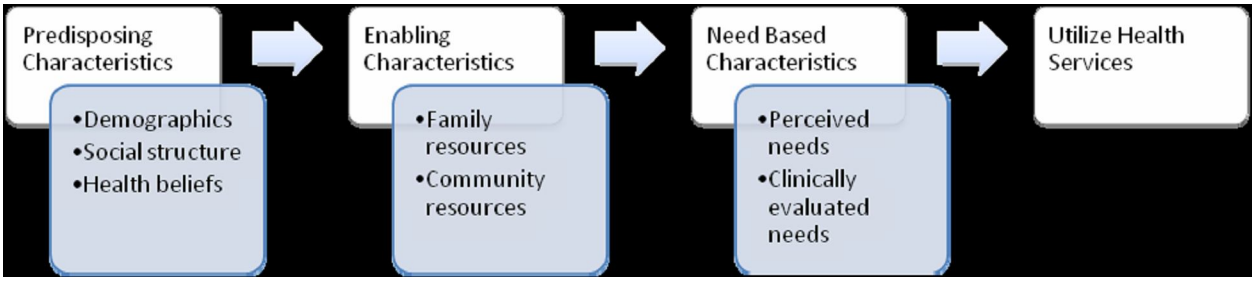



FIGURE 2.3: Andersen's behavioural model of health services utilization (adapted from Wolinsky, 1988).

*Source; sociology of health journal pages 101-116.*

In the 1970s, Andersen's model was later expanded and refined to include the health care system (Figure 2.4). The health care system includes health policy, resources, and organization, as well as the changes in these over time. Resources comprise the volume and distribution of both labour and capital, including education of health care personnel and available equipment.

Organization refers to how a health care system manages its resources, which ultimately influences access to and structure of health services. According to this level of the revised model, how an organization distributes its resources and whether or not the organization has adequate labor volumes will determine if an individual uses health services. In addition, the updated model includes recognition that consumer satisfaction reflects health care use. Furthermore, the model includes the notion that there are several health services available, and both the type of service available (i.e., a hospital, dentist, or pharmacy) and the purpose of the health care service (i.e., primary or secondary care) will determine the type of service utilized. Thus, according to the revised model, whether or not a specific health care service is utilized and the frequency of service is utilized will have different determinants based on characteristics of the population and the health services (Andersen, 1995; Andersen & Newman, 2005).

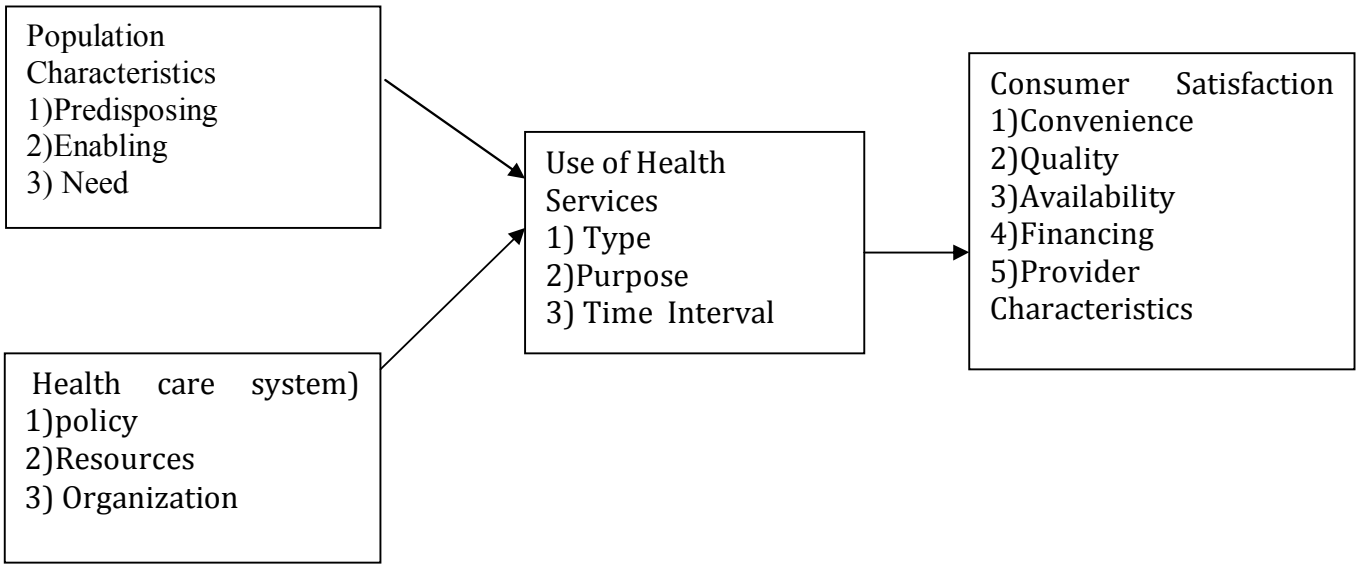



Figure 2.4: Andersen's Phase-2 Model of Health Services Utilization (adapted from Andersen, 1995).

*Source: Milbank Quarterly, pp83*

During the 1980's -1990's, Andersen's model was again revised to form three components with a linear relationship:

1.) Primary determinants;

2.) health behaviours; and

3.) health outcomes (Figure2.5).

Primary determinants are noted as the direct cause of health behaviours; these determinants include characteristics of the population (i.e., demographics), the healthcare system (i.e., resources and organization), and the external environment (i.e., political, physical, and economic influences of utilization). In addition, the model explains that health behaviours determine health outcomes.

Health behaviours include personal health practices (i.e., diet and exercise) and the use of health services. Lastly, the model indicates that health behaviours are the direct cause of health outcomes. Health outcomes include perceived health status, evaluated health status, and consumer satisfaction (Andersen, 1995).




*Source; Milbank Quarterly, page 83*

Figure 2.5: Andersen's Phase-3 Model of Health Services Utilization (adapted from Andersen's 1995).

Young (1981) proposed a choice-making model which is based on his ethnographic studies of health services utilization in Mexico (Figure 2.6). This model incorporates four components that are most essential to the individual's health service choice:

i.) Perceptions of gravity. This includes both the individual's perception and their social network's consideration of illness severity. Gravity is based on the assumption that the culture classifies illnesses by level of severity;

ii.) The knowledge of a home treatment. where a person knows of a home remedy that is efficacious, they will be likely to utilize that treatment before utilizing a professional health care system. Home remedy knowledge is based on lay referral;

iii.) The faith in remedy that incorporates the individual's belief of efficacy of treatment for the present illness. An individual will not utilize the treatment if they do not believe the treatment is effective;

iv.) The accessibility of treatment which incorporates the individuals' evaluation of the cost of health services and the availability of those services. According to Young, access may be the most important influence on health care utilization (Wolinsky, 1988).




*Source; New Brunswick, NJ: Rutgers Univ. Press pp 16*

Figure2.6: Choice-Making Model (Young, 1981).

## 2.2 Variances in Health Care Utilization

While the three theories and three models described in this chapter are comprehensive in their attempts to understand utilization of health services, several short falls limit their ability to be generalized. To begin, although the theories and models address the influence of social networks, they fail to consider adequately the variety in these networks. For example, such man's networks are described as dichotomous, yet Geertsen and Salloway (cited in Cocker ham, 1982) found that social networks exist along a continuum between parochial and cosmopolitan poles.

Thus, in considering treatment options, a network is likely to simultaneously consider both scientific and traditional health care, yet some may be more likely to use one or the other. In addition, the theories and models do not adequately explain the effect of the individual's prior experience of illness. For example, while Young's choice making model considers gravity, the gravity is established within the individual's network group based on preconceived categories of illness severity, not the individual's prior experiences (Wolinsky, 1988). Past experience of illness may influence perception of severity. For instance, some people exhibit relatively minor symptoms of malaria, yet others experience painful aches. To the person who has minor symptoms, malaria may not be perceived as severe. Yet, to the individual's networks, malaria may be an unusually severe illness. If an individual has a prior experience with an illness and perceives the illness as more grave, they may be more likely to utilize preventive health care.

Moreover, other than Young's choice making model and Andersen's revised behavioural model (phase 2), the models and theories do not adequately consider the kind

of health care used. These scholars tend to focus on use of professional biomedicine and overlook alternatives such as traditional medicine or different types of professional medicine. As such, they are not predictive of which health care services are likely to be utilized. Similarly, people often seek different medical care for different illnesses. For example, Klein man (1980) noted that for chronic diseases, Taiwanese used traditional folk medicine while for acute illnesses families often resorted to western based biomedicine. Yet, the models and theories do not make sufficient use of the impact of different diseases on health care utilization.

Finally, other than diseases for which a person believes himself or herself to be at risk, the models and theories disregard utilization of health care services for maintaining a healthy lifestyle. People may access health care simply to maintain their health, not because they perceive themselves as being susceptible to a specific disease. The model used in this study draws heavily from Andersen's behavioural model. This model represents one multidisciplinary attempt to bring together economic, health care-related, socio-cultural and psychological factor which are suitable for this study. The predisposing factors are considered exogenous; hypothesized to influence service use both directly and indirectly through the enabling and need variables; and include age, sex, level of educational attainment, family income, and attitudes and beliefs regarding health services.

The enabling factors include social support, entitlement to health coverage (health or social insurance), having a regular source of care, and out-of-pocket payment. Need for health care is expressed as "perceived need." Finally, the model is partially recursive, that is, it allows for a number of reciprocal causation or feedback loops which characterize the

dynamic and ever-changing nature of the relationship between service use and health outcomes over time.

### 2.3 Conceptual Frame Work: Adaption and modification

The model of utilization of health services used in this analysis is based on the conceptual framework of health-seeking behaviour developed by Anderson and Newman (Anderson and Newman, 1973).This behavioural model proposed that the use of health care services is a function of three sets of individual characteristics these are:

i.) predisposing characteristics, e.g. age, household size, education, number of previous pregnancies, health-related attitude;

ii.) enabling characteristics, i.e. income, characteristics of health care system and accesses, and availability of health facilities; and

iii.) need characteristics, i.e. characteristics of illness, perceived health status, and expected benefit from treatments.

Fosu (1994) argues that the predisposing factors reflect the fact that families with different characteristics have a different propensity to use health care services, while the enabling factors reflect the fact that some families, even if predisposed to use health services, must have some means to obtain them, i.e. income, access, and availability of health services (Fosu, 1994). According to Andersen and Newman, the need factor is the most immediate cause of health service use (Andersen and Newman, 1973). The need factor reflects the perceived health status, as indicated by severity of the morbidity

conditions or the number of morbidities. The presence of predisposing and enabling components may not be enough for a mother to seek health care.

She must perceive the disease as serious and believe that the treatment will provide the expected benefits (Fosu, 1994).Need represents the most immediate cause of health service use. Need for health care can be measured in a variety of ways: self-perceived health status, number of morbidity symptoms, or duration and severity of disability (Fiedler, 1981). Perceived severity or number of episodes of diseases have a positive correlation with health care utilization (Fosu, 1994).Among the predisposing factors considered in this study are respondent age, number of previous pregnancies, age at marriage, family size and mother's education. Husband occupation, economic status, women's employment, and access to health facilities are the enabling factors selected in this study. Finally, this model is used with some modification to be compatible with women‘s access to utilization of health care in Kaduna metropolis.

## 2.4 Identifying Key Concepts of health care utilization theories and models

The described health care utilization models and theories contain threads of commonality via three factors which influence the process of health care seeking:

1) Health care access;

2) Culture; and

3) Social networks.

### 2.4.1. Health care access

Access and patronage of health care services is described the ability to utilize services and incorporates economics, geographic location, abundance of health services, and physical and social resources. If health services are not accessible, it is likely that there will be unmet need for health care. Next, culture is a complex term referring to values, practices, meanings, and beliefs which are transmitted from one person to another through the process of enculturation. Culture, often considered as a barrier to health services, can influence knowledge and beliefs of illness as well as the course of treatment for illness.

A third factor is social networks which can cue an individual to utilize or abstain from health services and can function in identification of illness and illness response. While other elements certainly affect health care utilization, exploring these three concepts is central to understanding determinants of health care utilization. First, the economic costs of health care seeking include not only payment for treatment, but also lost productive time, and the expense of transportation.

Unless provided with a subsidized health care plan, persons of lower socioeconomic status can have difficulty affording the costs associated with utilization of health care, making utilization less likely (Taylor, 2003). Similarly, due to the expense of transportation and time needed to access medical care, especially as health care services become more geographically scarce or distant, inaccessibility may increase (Young and Young-Garro, 1982).

Accessibility of health care is further influenced by physical and social resources. For instance in individuals who have suffered debilitating injuries, geographic location can

become an impediment to the use of health services (Lavela, Smith, Weaver, & Miskevics, 2004).Moreover, beyond physical limitations, social resources are also integral to utilization. Social resources include family economic capital, social support, and group knowledge of illnesses and treatments. For example, among Taiwanese, Kleinman (1980) found that if an individual's family has knowledge of an effective home remedy the person will often attempt that treatment before utilizing professional health care services.

In Kleinman's study, families in Taiwan provided social resources, specifically knowledge, of which a lone ill person may not have been aware. Thus the knowledge and social support available to an individual can affect accessibility of specific health care services.

### 2.4.2 Culture

Culture shapes not only illness treatment, but also illness recognition, perception of illness severity, and confidence in the efficacy of specific treatments for specific illnesses. For example, in many cultures, dementia in elderly is viewed as a normal process of aging; thus it does not necessitate medical treatment. However, in the United States, dementia is considered an illness requiring professional medical care (Ikels, 2002).

As such, variance in health care utilization can result due to cultural knowledge and understandings of illness. Likewise, categories and perceptions of illness are often cultural. Conceptual compatibility is a hypothesis frequently used to explain why members of another culture refuse to utilize health services.

A person with conceptual-incompatibility would be unlikely to utilize available health care because the treatment conflicts with their culturally rooted knowledge of illness

(Young & Young-Garro, 1982).For example, if a person staunchly believes they are infected with influenza yet are told by a healer that they are actually infected with malaria, the person may not have faith in the treatment prescribed. If a person lacks confidence in the ability for a healer to treat their illness, they may be unlikely to visit this healer for further treatment. As such, belief in the efficacy of treatment, influenced by cultural categories of illness, can shape adherence to prescribed treatment and ultimately the use of health care services. Beyond faith in efficacy, cultures can have differing notions of the self which may influence health services utilization.

For instance, in the United States as well as many other western nations, there are two main conceptions of self, one that is autonomous and one that is heteronomous (Gaines, 1992).If an individual is a member of a culture that considers the self as heteronomous, they are likely to have their course of treatment determined by people within their social network (Kleinman, 1980; Ikels, 2002).Conversely, if a culture considers the individual as autonomous, the decisions for treatment are more likely to be made by the individual.

In those cultures that consider the self as heteronomous, an ill individual's treatment may be delayed as persons within their social network discuss treatment options (Janzen, 1978).Yet, even in cultures that stress autonomy, the individual may consult social networks for illness advice.

### 2.4.3 Social Networks

Social networks can provide an impetus for health care utilization but may also press an individual to abstain from accessing health services. Such man's concept of parochial and cosmopolitan networks is useful in considering the effects of social networks.

According to Such man, parochial networks are those that are traditional, close in affiliation, and reluctant to accept new information (Wolinsky, 1988b). Because of their emphasis on tradition, these networks are theoretically likely to utilize home based treatments before scientific based health care such as professional biomedicine.

However, persons belonging to cosmopolitan networks are more progressive, willing to accept new information, and more likely to have a scientific approach to illness. As a result, cosmopolitan network members would be more likely to use biomedical health care. Therefore, social networks affect illness knowledge and patterns of health care utilization. As an individual experiences illness, he or she will often consult their network in an effort to identify the illness and the best course of treatment or prevention (Cocker ham, 1982).

**2.5 The Importance of Understanding Health Care Utilization**

Around the world, there is significant unmet need for healthcare with a better understanding of why people use or do not use these services. Health care organizations can seek to improve the quality of human life. Increasing utilization is challenging especially as a significant number of people tend to use multiple health care. Furthermore, many countries are becoming increasingly diverse and as such, cultures are mixing and influencing one another. However, understanding why people utilize alternative or conventional medicine is central to increasing Healthcare utility and efficacy. With increasing cultural heterogeneity, health care utilization behaviour is likely shifting and addressing the needs and values of this shifting population requiring an understanding of their cultural linked health care utilization determinants.

Despite compelling evidence of vaccination, health benefits, an increasing number of parents are refusing to immunize their children. (Omer et al., 2006).As such, unmet need for health care is growing a startling threat to quality of life. Identifying the factors that prevent and spur the use of health care organization, creating programmes for improving health.

Health care management must discern the factors influencing health care utilization. Identifying who will use which services and when these services will be used can help Organizations target consumers for medical contact. Importantly, this knowledge can also help managers identify new customers, spot concerns of consumers who are rejecting health services, and ultimately increase customer satisfaction. Increasing utilization is challenging, especially as a significant number of people tend to use multiple health services. In 1993, Eisenberg et al. performed a study of health care utilization in the United States and found extensive variation.

In fact, use of non-conventional medical care providers, such as acupuncture, chiropractor services, and herbal remedies, surpassed use of conventional medicine (i.e., medical doctors and doctors of osteopathy) by nearly 37 million visits. Although several of the treatments then identified as unconventional are now common within professional biomedicine, this study highlights the extensive use of alternative medicines not formally offered by biomedical practitioners. Understanding why people utilize alternative or conventional medicines is central to increasing health care utility and efficacy.

In addition, many countries are becoming increasingly diverse, and as such, cultures are mixing and influencing one another. This trend is especially evident in the United

States, where it is projected that by 2050, the population will be approximately 50.1% Caucasian, down from nearly 70% in 2000(United States Census Bureau, 2004). With increasing cultural heterogeneity, health care utilization behaviour is likely shifting.

Addressing the needs and values of this shifting population requires an understanding of their culturally linked health care utilization determinants. Similarly, another population trend is aging. Life expectancy in nearly every nation has increased. In 2000, the World Health Organization noted that global life expectancy was 65.5 years, nearly six years longer than in 1980 (Bonita & Mathers, 2003). Moreover, by 2050, there will be approximately two billion people over the age of 60, and the global median age will have increased from 28 (in 2007) to 38. (United Nations Department of Economic and Social Affairs, 2007).The elderly tend to utilize health care resources more often than people under the age of 65. As such, the shift in demographics should be an indicator that utilization of health services is likely to increase. However, despite increased likelihood of use, there are many determinants which can create unmet need for health services.

For example, physical disability has been shown to be a significant predictor of health care utilization among elderly. Elderly who are disabled are less likely to access care than are physically healthy older adults (Linden, Horgas, Gilberg,&Steinhagen-Thiessen, 1997).Although seemingly self explanatory, as global population continues to age, health care organizations must recognize the determinants and Impediment to health care utilization.

## 2.6 Gender and Access to Health Care services

Studies in gender and health seeking behaviour mainly centre on the difference in access to health care between men and women due to gender inequalities. To a higher or lesser extent, inequalities exist in all societies of social classes, but in developing countries and among the poor, they are assumed to have more negative impact on women's health (Hausmann, M. *et al*; 2003).The technical paper on gender and health (World Health Organisation, 1997), proposes a series of further factors which need to be taken into account in health seeking behavioural studies as well as in elaborating gender sensitive health system responses.

On the other hand not being able to show emotions such as fear about an illness hinders men from feeling psychological relief as well as manifesting it in the medical encounter .Other typical problems are that men attend to doctors late so as not to show their weakness or do not comply with health advice that implies a change in habits if they are considered feminise (Fosu,1994).All the same, biological knowledge alone cannot guarantee better health; Women proportionately bear the burden of health inequalities across the globe and face unique barriers in accessing medical care. For example, Woldeyes, (2008) studied gender differences in adult blindness and low vision in the Nile delta, Egypt. However, he used data from interviews and findings revealed that women were found to utilize eye care services 40% less than men.

In addition, females in South Africa, are less likely to have surgery for cataract blindness as burden is higher for women, Nirmalan p et al; 2003. More variations are witnessed especially with respect to gender as a recurring thing. Conversely, Yamasaki –

Nakagawa et al (2001) found women in Nepal more likely than men to seek help from traditional healer first.

The scale of this may be reflected in findings from a recent study of Rahman (2000), in rural Bangladesh, where 86% of women received health care from non-qualified healthcare providers. This has implication for diagnosis and women have been found to have significantly longer delays to diagnosis than men (Needham *et al.,* 2001; Yamasaki Nagakawa *et al.,* 2001).More broadly speaking, Women have the right to enjoy the highest attainable standard of physical and mental health. The enjoyment of this right is vital to their life, well-being and their ability to participate in all areas of public and private life. It is widely asserted that increased gender equality is a prerequisite for achieving improvements in the health of women.

The programme of Action adapted at the 1994 International conference on Population and Development in Cairo, claimed that improving the status of women also enhances their decision making capacity at all levels in all sphere in life; especially in the area of sexuality and reproduction. Gender disparities in access to health care services have been studied in a number of countries .Generally, the time constraint and opportunity costs faced by women are higher than men, thus deterring them from accessing health care services to a large extent. For example, Nwabu et al (1993) found that distance and user fees were both factors that reduced demand for health care, but men were less constrained than women. Furthermore, male bias was also found in other parts of Asia but rare in African context. Accessibility also implies the continuing and organized supply of care that is geographically, financially, culturally and functionally within easy reach of the whole community. The care has to be appropriate and adequate in content and in amount to satisfy

the essential health needs of the people particularly women and it has to be provided by method acceptable to them.

## 2.7 Determinants of Women's Access and Utilization of Health Care Services

Determinants of healthcare involve all behaviours associated with establishing and retaining a healthy state for the purposes of planning health programmes. In addressing this aspect it is important to recognize that this behaviour does not exist in a vacuum but is part of wider health behaviour. Successful interventions will depend on their acceptability and accessibility both of which relate to broaden social factors than simply decisions about "going to the doctor" (GPA/WHO, 1995).

The concept of study, determinants of health care has evolved with the course of time and has ultimately become a tool for understanding how people enjoy the health care system in their respective socio-cultural, economic and demographic circumstances. All these determinants actually define social positions of health and provide a better understanding of the disease process. It is therefore imperative to study the impacts of all the determinants. Below is a review of determinants of women's access to health care services.

### 2.7.1 Literacy Levels

Amongst the maternal characteristics, education of women has been found to have the strongest association with regards to access and utilization of health care services. Education serves as a proxy for information, cognitive skills and values. It exerts effects on health seeking behaviours through a number of path ways. These pathways include higher level of health awareness and greater knowledge of available health services among

educated women, improved ability of educated women to afford the cost of medical healthcare and their enhanced level of autonomy that results in improved ability and freedom to make health related decisions, including choice of maternal service to use (Hotchkiss, 2003; Raghu, 1996).

Educated mothers are more likely to take advantage of public health care services than other women. Education may impart feelings of self worth and confidence as well as reduce the power differential between service providers and clients thereby reducing the reluctance to seek care (Chanana, 1996; Stars, 1998).In Peru for example, formal education of women influence the use of maternal health care services. Results from both cross sectional and fixed–effects model controlling for service availability and the socio-economic status of the household, confirmed the importance of maternal education on the utilization of both prenatal care and delivery assistance (Elo, 1992).

(Becker et al 1993;Fosu,1994) in their study, determinants of the use of maternal health services in rural Bangladesh, using data from survey of maternal morbidity, results from bi-variate and multivariate analysis revealed the importance of mothers education on the utilization of health care services .However, females' education retains a net effect on healthcare service uses independent of other background characteristics, house hold, socio-economic status and access to health care services .The strong influence of mother's education on the use of health care services is consistent with the findings from other studies (Palikadavat, 2004).

Similarly, studies in Thailand and Jordan on determinants of utilization of maternal and child health services, showed clearly that women with increasing levels of formal

education and those living near services were significantly more likely to use services (Shobana,1996). In fact, the odds of using prenatal care and formal delivery assistance is much greater for women with primary schooling compared to women with zero years of schooling (Adnan *et al*., 2008; Raghupathy,1996).Furthermore, education also enables greater awareness of the existence of maternal health care services and benefits in using them. Education empowers women with greater confidence and capability to make decisions on how to use modern health care series for themselves and for their children. There is also evidence indicating that education alone may not be sufficient to improve health care seeking, behaviour.

For example, Kyomuhendo (2003) found that, despite a favourable and an enabling policy environment, universal primary education and decentralization of health services, there has not been an increase in the utilization of emergency obstetric care by women in Uganda, because women's care-seeking behaviour was not the result of individual preference or choices but it was conditioned by poverty and the traditions of the community, poverty, norms and tradition.

Also of equal importance, husband's education reflects tastes and preferences for healthcare utilization. The husband's attitudes towards modern care could, for example, influence the wife's decision of whether or not to seek modern health-care services. Caldwell has suggested that men with higher educational attainment may play a more important role in child-care decisions than men with less schooling (Caldwell 1990).A study in India reported that husband's education has the largest and statistically significant impact on the probability of health care use.

It increases the probability of pre and post natal care use by 10 percent and *8* percent respectively and the probability of the use of trained help at the time of delivery by 7 percent (Shariff & Singh 2002,).

### 2.7.2 Level of Income

In many ways, that income should be an important determinant of health is more plausible in poor societies than in rich ones. Men and women who do not have enough food, poor diet, enough money to feed their children, report severe consequences of their own well being ( Deaton, 2003).

Women, whose incomes are high, are more likely to use both modern and traditional health care services than women of lower incomes (Chakra borty, N.R 2004). It is well known that increased income has a positive effect on the utilization of modern health care services (Elo, 1992; Fosu, 1994). Husband's occupation can be considered a proxy of family income, as well as social status. Differences in attitudes to modern health care services by occupational groups depict occupation as a predisposing factor. Alternatively, viewing occupation as proxy to income, which enables acquisition of more and better health care, depicts it as an enabling factor (Elo, 1992 pp1-20).

### 2.7.3 Employment Status

Dependence on men for economic survival has been a principal barrier to women's control over their reproductive behaviour in developing countries. Empowering women with more economic participation and control in their households and communities might be the key to their achieving control over their own reproductive health. Employment can increase women's economic autonomy and reproductive health status because it raises

awareness and provides new ideas, behaviour and opportunities through interaction with other people outside the home and community (Sharma, Salvangdes and Sinrassamce, 2007). A study in Kenya (Magadi, Madise and Rodriguez, 2000) reported that antenatal care visits tend to start earlier for women in paid employment. They are likely to have greater knowledge about pregnancy and childbirth due to freedom of movement outside household. They also tend to seek information on services available for pregnancy care during work.

On the other hand, employment may not necessarily be associated with greater use of maternal health care, like in Nepal (Sharma, Salvanges and Sinrassamce, 2007), because non-working women may be better off than working women. In the context of developing countries, women's work is largely poverty induced and is likely to have a negative impact on utilization of maternal health services.

### 2.7.4 Occupation

Women's involvement in gainful occupations is one of the important factors positively affecting the use of quality medical care to treat complications. This also empowers women to take part in decision making process about health care in the family. Chakra borty, N.R *et al* (2003), in their study, determinants of the use of maternal health care in Bangladesh, used data from a survey of maternal morbidity. However, results from both bi-variate and multivariate analysis confirm that about 35.4% of women who worked for cash, went to some qualified medical personnel for treatment compared with only 25.3% of those who did not work.

Similarly, husband's occupation can represent family income as well as social status, and it is well established that increased income has a positive effect on the utilization of modern health care services (Elo, 1992).

Differential utilization of health services by different occupational groups also depicts occupation as one of predisposing factors. An empirical research by Paul and Rumsey (2002) in rural Bangladesh showed that fathers employed in non-farm occupations chose trained personnel for delivery more frequently than fathers who were farmers or members of other educations. Furthermore, another study in Bangladesh reported that women whose husbands work in business or services are most likely to be the users of professional healthcare services to treat their complications (Chakra borty *et.al*. 2003).

### 2.7.5 Age at First Birth, Sex and Marriage

Order of the birth has been used as an explanatory variable. It is generally believed that care during delivery would be higher for first order births and is expected to decline as order of birth increases (Elo, 1992; Bhatia and Cleland, 1995). If a woman ever had a still birth in a previous pregnancy, the use of maternal care services would be higher because of known risk factor (Bhatia and Cleland, 1995 127-142).

With respect to birth order, several studies show a strong negative association between birth order and the use of health care services. A study in Turkey by Celik and Hotchkiss (2000) showed that women who delivered their first children were found to be significantly more likely to use prenatal care and trained assistance during the birth delivery than women in the higher order.

Another study in urban areas of the Philippines revealed that the probability of choosing as most frequent either public or private modern care instead of traditional care decreases as the number of children aged zero to six years old increases (Wong, Popkin and Akin,1987).There are perhaps, three possible explanations for this. Firstly, women with first child pregnancy were more cautious about their pregnancies and therefore sought out trained professionals. Secondly, as the number of children that was given birth to increases, women may tend to believe that modern health care is not as necessary and tend to rely more on her past experiences and knowledge from the accumulated previous.

Thirdly, a higher birth order suggests a greater family size and hence lower resources (both time and money) available to seek formal healthcare. Since older and younger women have different experience and influence, their behaviour on seeking health care also varies.

Commonly, younger women are more likely to utilize modern health care facilities than older women, as they are likely to have greater exposure and knowledge to modern health care, also more access to education. Older women, on the other hand, have accumulated knowledge on sex, maternal and reproductive health care and therefore likely to have more confidence about pregnancy and childbirth or they may be less comfortable with modern medicine and more reluctant to take advantage of available services; consequently, they may give less importance to obtain institutional care (Raghupathy, 1996). In contrast, experience and skills acquired by older women should have a positive influence on the use of health services. A study in Nepal by Sharma, Salvangdes and Sinrassamce, (2007) found that women over the age of 35 are less likely to utilize prenatal care but more likely to utilize delivery and postnatal care.

However, a study in Bangladesh indicated that type of assistance utilized at delivery does not differ significantly with the age of the mother (Paul and Rumsey, 2002). In Philippines, older women tend to have fewer traditional visits both in urban and rural areas and to increase their private visits in urban areas (Wong *et al,* 1987).

### 2.7.6 Exposure to Information

Existing research on health outcomes in developing countries has shown the important role of the media in disseminating information on health related issues. Three sources of information are usually used: radio, television, newspapers and magazines. Women's exposure to information through the radio, television and newspaper significantly increases the utilization rates for all services in India (Shariff and Singh 2002). There is a 5 percent increase in the probability of the use of natal care for a woman who frequently listens to the radio compared to a woman who do not.

Moreover, a study by Obermeyer (1993) in Morocco and Tunisia indicated that watching television weekly is associated with an increase in the likelihood of both prenatal care and hospital delivery.

### 2.7.7 Place of Residence

Place of residence can also be an important determinant of the use of modern health care resources for childbirth. A higher proportion of births in urban areas occur in modern health care facilities compared to rural areas Paul and Rumsey (2002).A study in Morocco also indicated that residence, was among the strongest predictors of use of maternal health care, with urban women two or three times more likely to use health services (Obermeyer, 1993).A study in Philippines reported that urban and rural women differed significantly in

the types of prenatal care most frequently used. For the urban women the most frequently used type of care tended to be modern public (40.2%), while rural women frequently used traditional practitioners (45%). Overall, about 38% of the rural and 59% of the urban women had modern prenatal medical care Wong et al., (1987). The importance of place of residence in determining women's use of maternal health care can be explained through the availability of health facilities. It is undeniable that generally, medical facilities are more readily accessible in urban than rural areas. In addition, urban women tend to be more educated and therefore, have greater knowledge about the benefits of maternal health care.

### 2.7.8 Cultural Beliefs and Practices

Leininger (1995), defines culture as "the learned, shared and transmitted values, beliefs, norms and life ways of a particular group that guide their thinking, decisions and actions in patterned ways .Similarly, culture determines people's definition of mental, physical health and their interpretations determines how they deal with the illness Gardener, H, Komitzki, Mutter J. (1998).Cultural attitudes such as religion and ethnicity determine the cultural belief of the people (Shire, 2002). In 1991; Leininger introduced culture care theory to examine perception of health in South Africa.

However, in the study, it was proposed that religion and culture are interrelated and both influence health illness and health seeking practices. The study also indicated that some harmful practices and implications are possible. In east Malaysia, for example, depression is believed to be caused by evil charms cast by jealous relatives and the affected person may seek assistance from a traditional Healer yet in North America, depression is believed to be biological and may be treated with antidepressants (Gardiner H., Komitzki

C., and Mutter J., 1998). Furthermore, women's husband's or mothers-in-laws's belief that maternal health services are inappropriate or irrelevant has been shown to influence women's perceptions and utilization of health care. (Sai, F, and Meacham D, .1992).

### 2.7.9 Religious Beliefs and Practices

Staugard (1985) conducted a research in Botswana on the relationship between church affiliation and the type of utilization of health care services amongst the members of an African independent church. The study suggested that 55.3% of members utilized health care from the "Moporofiti" (prophet) on more than one occasion compared to 11.3% among those with no church affiliation and 14.1% among members of a European church.

This study is therefore consistent with Levin's (1994) conclusion that there is a valid association between religion and health which may or may not be causal. Koenig (1997), reports on a study in Georgia, United States of America, on the impact of religion and on men's blood pressure, by involving a sample of 407 men. The results indicated that those who frequently attended church and also reported that religion was important to them, had lower systolic and diastolic blood pressures than those who were not involved in religious activities. The upsurge in religious activities in some northern parts of Nigeria, has added a new dimension with Missions that are springing up in a bid to cater for the spiritual, physical and medical needs of members (Abubakar, 1997). However, certain religious groups are making negative contributions while some don't belief in the use of orthodox medicines, or refuse blood transfusion. Others conduct deliveries in religious places and attribute complications in pregnancy or delivery to the woman's alleged faith.

Delays in churches contribute negatively as conditions are sometimes worsened and the last alternatives are the hospitals. For example, Purdah and absolute powers of husbands over their wives in Hausa-Fulani Muslim societies, may not effectively allow attendance of ante-natal clinic even after knowing its importance. In fact, with regard to family planning, Islam religion has allowed polygamy and prohibits limitation of family size. In addition, the religion frowns at permanent and non reversible methods of birth control.

### 2.7.10 Language Skill

Differences of language or culture gaps can also affect a choice of a specific health care provider or otherwise (Babar, T,. Shaikh T.,and Hitcher.,J. (2004).In a survey on the health seeking behaviour of the Chinese in Hall, one of the main reasons identified was common difficulty faced by many Chinese due to language problems (Watt, Howel, and Lo, 1993).

### 2.7.11 Decision Making Power to Health Care

Men play a paramount role in determining the health needs since men are decision makers and in control of all the resources, they decide when and where women should seek healthcare (Rani and Bonu, 2003). In a study of qualitative assessment of heath seeking behaviour and perceptions regarding quality of health care services in a rural community of Agra district India, findings revealed that choice of healthcare provider is in fact , dependent on decision makers which could be elder male family members or some other Person from the community (Jain, Nanda and Misra, 2006).

# CHAPTER THREE

# THE STUDY AREA

## 3.1 INTRODUCTION

This chapter focused on the background information of the study area which includes location of the area, physical characteristics, growth and distribution, the economy, health facilities then roads and transport.

### 3.1.1 Location

Kaduna Metropolis is located within Kaduna State the geographical centre of northern Nigeria which lies between latitude 11° 34' and 9° 01' North of the equator and longitude 6° 11' and 8° 49' East of the Greenwich meridian as shown in Figure 3.1. The metropolis is made up of mainly four local government areas; Kaduna North, Kaduna South, and parts of Igabi and Chikun Local Government Areas- The town is some 154 kilometres from Abuja the Federal Capital. Kaduna State shares boundary to the north with Katsina State at the south Plateau state, at the west Niger State and Abuja and the east Kano State. The River Kaduna from where the name is derived tends to divide the town into two parts. The railway lines from the east and west meet here, hence the name 'Kaduna Junction'.

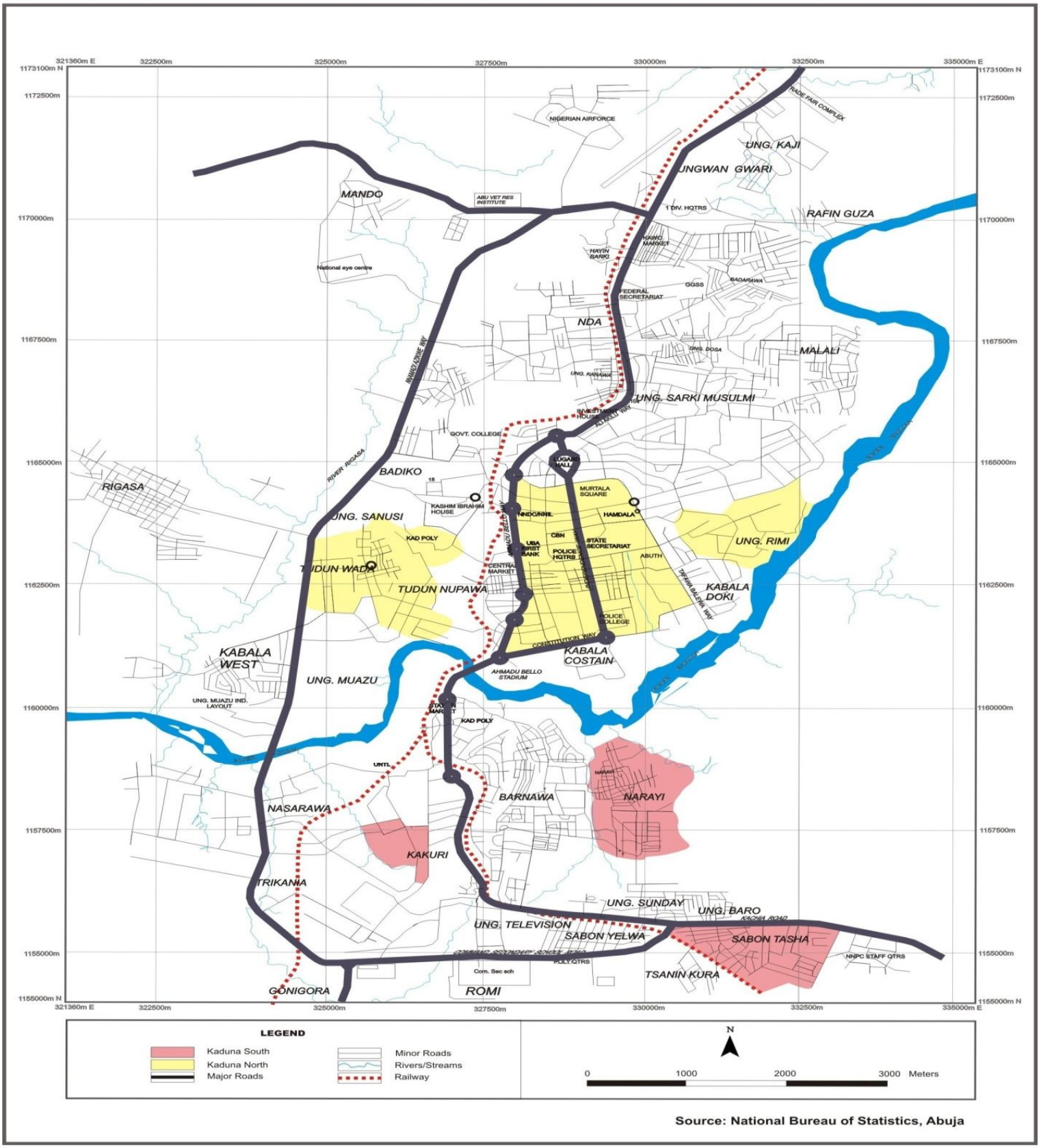



**Fig 3.1 Map of Kaduna Metropolis showing the study areas**

### 3.1.2 Physical Characteristics

#### 3.1.2.1 Climate and Hydrology

Kaduna experience two seasons; the dry and the wet season. The dry season consist of the hot and harmattan period stretching from the months of November to March. The harmattan is often cold accompanied by strong winds blowing from the North-East across the Sahara region. The wet (rainy) season is experienced between the month of April and October. The rain storms are usually strong and windy, sometimes accompanied with thunder and lightning (conventional rainfall) thereby causing destruction to lives and properties in some severe cases. The average annual rainfall is 641mm, while its highest temperature range between 900 Jos. Fahrenheit (27°-32°C) in April, and its lowest between 45°-60° Fahrenheit 14°-l8°C). These seasons have implications on human health (Mamman, 1992).

One of the major influences for location of Kaduna by Lord Lugard is its abundant water resources both surface and underground. The water table is not high and wells are sunk to a low depth. The water used for industrial, agricultural and domestic uses are source from River Kaduna it is the dominant source of water supply in the town. The river is a major tributary to River Niger and originates from the Jos plateau.

#### 3.1.2.2 Topography, Soil and Vegetation

Kaduna town is located within the north central high plains. The topography consists of a rolling terrain at a height of 450-500 metres above sea level. There are sporadic outcrop of solid granite inselbergs to the east and south east of the town.

The land is covered by the north Guinea savannah vegetation type, which consists of trees like locust beans, baobab, silk cotton and shrubs. There is no evidence of mineral deposits in the town. However, it has lateritic and granites which are considered moderately suitable materials for building. The soil texture is water logged and marshy.

### 3.1.3 Historical development of Kaduna metropolis

Kaduna was conceived in 1915 as an administrative and military capital of what was the capital of protectorate of Northern Nigeria founded by the colonial Governor-General of northern Nigeria, Sir Lord Lugard. At the time Lord Lugard first came, Kaduna had been playing the role of a trading station and labour camps with only a few scattered native settlements in the area. These functions seemed to have attracted Lugard.

Another major attraction was the undulating topography of the area when Sir Lugard was looking for a suitable place to serve as the capital of the Northern Protectorate and possibly the capital of Nigeria in the future. It later transformed into the regional head quarter for the defunct Northern Region. After independence by 1967 when new states were created Kaduna became the administrative capital of North Central State (Mamman, 1992).Even when new states and capitals were created in 1976, 1987, and 1996 respectively, Kaduna remained a state capital. Owing to its legacy as an old administrative town, its greatest impetus of the railway from Lagos in 1911, the movement of any units from Zungeru to Kaduna in 1913 and Federal Government presence and textile industries, The town's Vintage position as a nodal town served as an attraction with it large scale commercial activities and human interaction.

The implication of these developments was a tremendous spatial expansion and increase in population, over stretching of utilities and services and increased demand for land. Kaduna also had the advantage of not being inhabited by any of the major ethnic groups. During the course of time, as the seat of government, Kaduna later attracted unto itself a wide range of activities government, commerce, industries and transport. The railway lines from the west and east, exercised their propulsive tendencies by attracting labour and resources from far and near, bringing about a socially mixed residential landscape. The concentration of government employment opportunities and the availability of some social infrastructures and services in Kaduna acted as magnets attracting people from far and near. As people moved in, many located near their next of kin giving leverage for its growth and continued prominence. The initial growth of the town was centred on the administrative nuclear and European quarters now government reserved area (G.R.A) and Sabon-Gari in the northern parts of Kaduna River.

While the railway station, survey department, Makera and Kakuri the early area of development in the southern parts of Kaduna River later changed to industrial and commercial activities have made sub-urban location attractive. This development also gave rise to emergence of settlements like Kawo, Ungwan-kanawa, Ungwan-Shanu, Ungwan-Dosa, Badarawa, Television, Nasarawa, Barnawa and Narayi. The construction of the western by-pass (now named Nnamdi-Azikwe Way) further enhanced the physical expansion and development of Kaduna metropolis west wards. The intermittent religious conflicts in 1987, 1992 and 2000 and relocation of Federal Capital Territory Abuja in 1992 influenced the growth process to the south along Kachia and Abuja road.

With the initiation of the eastern sector physical development plan 1995, it is hoped that physical growth of Kaduna would expand east-words when the plan is implemented.

### 3.1.4 The population of Kaduna Metropolis

Kaduna is a multi-ethnic society. Available evidence shows that the town is habited by over different ethnic groups and forms a portion of the country's cultural melting point with about six major ethnic groups and not less than other smaller groups. Among the major groups are Hausa, Fulani, Kadara, Kagoro, Bajju, Jaba, Gbagyi, Kataf, and Kurama with a host of other ethnic groups, all settled as a result of central administrative, industrial and extensive trading activities. Virtually, all ethnic groups in Nigeria can be found here. Hausa language is the dominant indigenous medium of communication after English which is the official lingua franca of the country. Christianity and Islam are the two main religious groups in the town. The third important group is the indigenous traditional religion, this group has, however, continued to suffer a major depletion in the number of its adherents since the advent of Christianity and Islam.

In the northern part of the metropolis, the Hausas and some immigrants from the southern part of the state reside there and they practice mostly Islam while the majority of the people in the southern part of the metropolis are people of Mix-ethnic groups from Kaduna state and other parts of the country, they profess Christianity. The major Muslim festivals include SalIah celebration of ld-Eid-fitri; Id-Eid-Kabir and Id-Eid maulud while the Christian celebration is Christmas, New Year and Easter. All ethnic groups at one time or the other, within the year, hold different festivals and social gatherings but worth mentioning here are the Tuk-I-Iam, the fan, and durbar festivals. Prominent among the

traditional arts are pottery, leather works, indigo-pit dyeing and traditional baskets/mat-weaving (Kaduna State Economic Empowerment and Development Strategy (KADSEEDS, 2007).

Kaduna metropolis, no doubt has witnessed tremendous population growth from a total number of 40,000 people in 1952, the figure grew rapidly to 149,910 people in 1963. This is about 275 percent increase. In 1991, the figure increased to about 711,155, in 1997, the figure projected by National Population Commission gave a figure of 960,000.In the 2006 census, the figure for Kaduna metropolis was about 1,100,000 million people with the total number of females of about 513,335(National Population Commission, 2009). With a population of a million, Kaduna is fast growing in population size.

The high rate of rural-urban migration coupled with the high birth rate of 2.8% means that the doubling time of the overall population might be short. Two types of families can be distinguished in contemporary Nigeria; these are the nuclear and the extended families. The nuclear family is based on the husband — wife or wives and their children. The extended family, in contrast, consists of two or more nuclear families joined through an extension of the parent child relationship rather than the husband-wife relationship. An example of such a family is an older man, his wife(s), his unmarried children, his married sons, their wives and the children of the later. These three generations live under the same roof or in a cluster of adjacent buildings (Mamman, 1992).

Marriage is very prevalent among Nigerian adult of all ethnic groups. Three types of marriages exist in the town; religious (Christian/Muslim) marriages which normally take

place in the church or mosque, civil, and traditional marriages. In this society, marriage is generally universal (Mamman, 1992).

### 3.1.5 Health Facilities and Medical Practitioners

The state government established a Kaduna State ministry of health, which is a body to oversee all health institutions and activities in the state, this is located in the metropolis, alongside three other state government owned hospitals are in the town. The federal government of Nigeria has also established specialized territory health institutions in the metropolis. These are the psychiatry, eye and ear hospitals. But over the years the health practitioners have been lacking in the health sectors, which have been the concern of the government.

**Table 3.1: Distribution of the Ratio of Health Personnel to Patients**

| Category | Year2000Health Personnel/Patient Ratio | 2004Health Personnel/Patient Ratio |
|---|---|---|
| Medical Doctor | 1:71,309 | 1:31,079 |
| Nurses | 1:4,789 | 1:2,826 |
| Pharmacist | 7,47 1 | 1:20,203 |

*Source: Kaduna State Economic Empowerment and Development Strategy (Kad, seeds), 2007*

### 3.1.6 Education

On the realm of education, Kaduna metropolis hosts many institutions, such as Nigerian fence Academy (NDA), Federal Polytechnic Kaduna, Kaduna State University, Staff Development Centre, Kaduna State School of Health, many government secondary and primary schools and many private secondary, primary and nursery schools.

### 3.1.7 Economy

Economically, Kaduna is one of the major commercial cities in Nigeria, Second only to Kano in the north. The 1956 capital territory law, created limits of the present day city of Kaduna and set in motion the rapid and dynamic physical, economic and social transformation of the town. It also created and located the relevant urban structures upon which Kaduna has continued to develop and grow. These actions culminated in the development of the informal and formal services in the attempt to meet in the services needs of the population in government, military, commerce and industries.

All modern infrastructural facilities are available in Kaduna metropolis being a major urban centre. There is electric power supply, pipe borne water, good roads, several banks, telephone services, an international airport etc. Textile industries have found Kaduna very ideal and so there are at least seven textile mills which employ quite a large labour force. Other industries include breweries, bottling companies, flour mills, and a motor assembly plant to mention just a few. Its industries and companies such as textiles, Peugeot Automobile Company Corporation (NNPC) refinery offer the town lots of economic activities but these companies are not operating at full capacity presently.

In fact, some have resorted to epileptic production while others have folded up due to decline in electric power supply and competition with imported materials especially for the textile industry. It is important to observe at this point that the down turn in Kaduna metropolis is not peculiar to it rather it is a reflection of a national economic stagnation and decline.

### 3.1.8 Trade

Kaduna town enjoys local and international trade fair complex is only second to that of Lagos in terms of size and global patronage. The biggest and most successful multinational companies in Europe such as UTC, Leventis and Challarems reside in Kaduna town. However apart from the annual trade fair that the state hosts, other commercial activities have waned.

### 3.1.9 Road and Transportation

Kaduna metropolis has well tarred roads, which are mainly the major road while minor roads within localities are mostly un-tarred. The major roads are well lined to each other. The main bridge in Kaduna metropolis links Kaduna North to Kaduna South and overheads river Kaduna. There is now a fly-over at Kawo express way, constructed to reduce congestion on the road linking to Zaria. The national airport and major railway junctions link up with major cities in Nigeria.

# CHAPTER FOUR

# DATA PRESENTATION AND ANALYSIS

## 4.1 Introduction

This chapter presents the analysis of the data obtained from the administered questionnaires. The descriptive statistical test includes tables of frequency, pie-charts and bar charts. The questionnaire elicited information from the respondents on determinants of access and utilization of health care services in Kaduna metropolis.

## 4.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

### 4.2.1 Distribution by Age

Table 4.1 shows the distribution of respondents by age. A total of 17.7% of the respondents are in the age group 35-39 years, followed by those within the age group 30-34 years with 17.2% and the least category is those in the age group of 45years with 7.5%.

**Table 4.1 Distribution of Respondents by Age**

| Age Group (years) | Frequency | Percentage |
|---|---|---|
| 15-19 | 33 | 8.6 |
| 20-24 | 62 | 16.1 |
| 25-29 | 61 | 15.9 |
| 30-34 | 66 | 17.2 |
| 35-39 | 68 | 17.7 |
| 40-44 | 65 | 17.0 |
| 45-49 | 29 | 7.5 |
| **Total** | **384** | **100.0** |

Source: Field survey, 2010

Numerous studies in developing countries have shown that demographic factors such as age play an important role in women's utilization of medical services (Sharma *et al*; 2007, Obermeyer, 1993). Table 4.1 shows that majority of the respondents are within the age brackets of 35-39years, in addition, half of the respondents are between 20-34 years of age. These age brackets are young adults, and the finding supports NDHS, 2003 which clearly indicated a broad based structure of the country.

### 4.2.2 Distribution of Respondents by Ethnicity

The distribution of respondents by ethnicity as shown in Fig: 4.1, shows that the Hausas constitute 32.3% of the study population while the second largest ethnic group is the northern minorities with a proportion of 25.3% then the Igbo's and other Southern minorities constitute the lowest percentage (14.0% and13.0%) respectively.

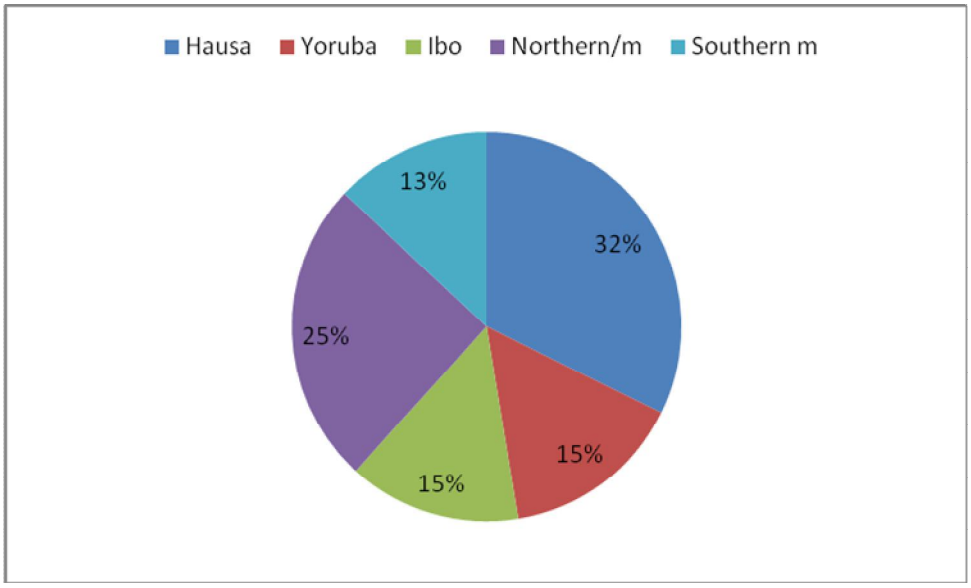



Fig 4.1 Percentage Distribution by ethnicity

Source: Fields survey 2010

This distribution is not unexpected as Kaduna metropolis is an educational town and has attracted many people from all over Nigeria who have come to settle in the town. This observation is in line with similar studies conducted in the past especially in predominantly Hausa Muslim communities were females assume subordinate roles to their husbands and have to get their husbands approval before crying out any activity including those that has to do with health and illness.

### 4.2.3 Distribution of Respondents by Religion

The distribution of respondents by religion in Table 4.2 shows that 53.1% of the respondents are Christians, 45.6 % are Muslims while 1.3% belong to the traditional religion.

**Table 4.2 Distribution of Respondents by Religion**

| Religion | Frequency | Percentage |
|---|---|---|
| Islam | 175 | 45.6 |
| Christian | 204 | 53.1 |
| Traditional | 5 | 1.3 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

Utilization of preventive healthcare services can also vary considerably across religious groups. For instance, utilization of preventive health care in Nigeria is affected by most religious practices and beliefs. Purdah and absolute powers of husbands over their wives in Hausa-Fulani Muslim societies may not effectively allow optimum utilization of health care services (Abubakar, 1997). A study by Mekonon (2000) in rural Ethiopia revealed that religion emerged as an important predictor of ante-natal care utilization.

Perceptions of events may tie followers of various religious groups to the use of formal system only when the tradition option fails. However, we can expect that some traditional beliefs obviously have negative effect on the use of modern delivery care services in the country. In this study, this is not seen presumably because of the increased knowledge of awareness and the ease of access to nearest health facility.

### 4.2.4 Distribution of Respondents by Marital Status

Fig: 4.2 show the distribution of the respondents by marital status. It reveals that 78.9% of the total population are married and 18% are single, while 0.2%, 0.8% and 2.1% of the respondents are separated, divorced and widowed in that order.

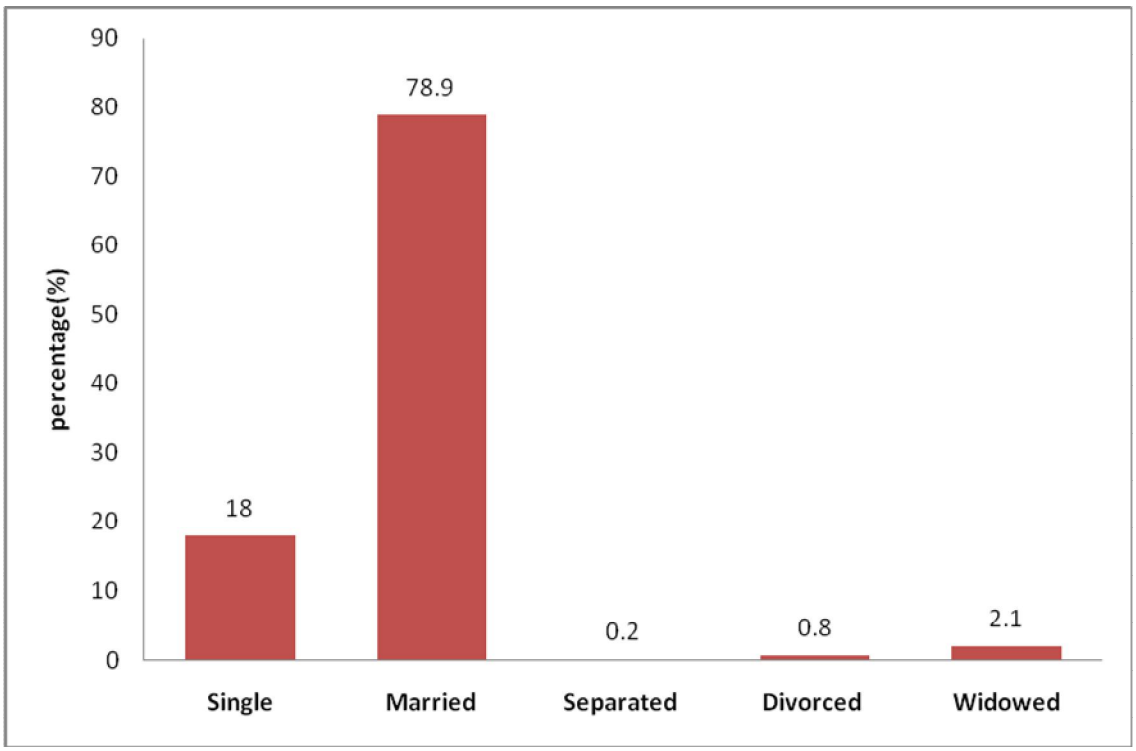



Fig: 4.2 Percentage Distributions by Marital Status

Sources: Field Survey, 2010

Schoenborn, (2004) argued that, the relationship between marriage and health is complex and could affect health outcomes. Healthier people may have a better chance of marrying and staying married because they may be viewed as more desirable marriage partners based on their physical attractiveness, earnings potential, mental well-being, degree of self-sufficiency, or likely longevity. Health care access and use could further be affected by marriage which might also improve access to care by increasing the material resources available to purchase care or by affording access to a spouse's health insurance policy.

Studies on the effect of marriage on health care use and cost, suggests that marriage may reduce health care cost through its effect on the number doctors visits, length of hospital stays and the likelihood of nursing home admissions. However, having a spouse to monitor one's behaviour may encourage healthier living habits-such as a better diet, less heavy drinking and more physical activities on the other hand.

### 4.2.5 Distribution of Respondents by Level of Education

Table 4.3 shows that among the females, those with secondary education account for 33.8% of the respondents followed by those with tertiary education (31.3%), while quranic and primary (16.1%, 10.4%) respectively, and the least are those with none education (8.3%).In addition, the table further shows the respondents spouses' level of education. Spouses' who had tertiary education formed the majority with 44.4% followed by those with secondary education (22%). Primary and Quranic education account for only 17.9% and 9.3% respectively.

**Table 4.3 Distribution of Respondents and spouses by Level of Education**

| **Educational levels** | **Respondents** | | **Spouses** | |
|---|---|---|---|---|
| | **Frequency** | **Percentage** | **Frequency** | **percentage** |
| None-education | 32 | 8.3 | 21 | 7.0 |
| Quranic | 62 | 16.1 | 28 | 9.3 |
| Primary | 40 | 10.4 | 54 | 17.9 |
| Secondary | 130 | 33.8 | 65 | 22.0 |
| Tertiary | 120 | 31.3 | 134 | 44.4 |
| **Total** | **384** | **100.0** | **302** | **100.0** |

Sources: Field survey, 2010

The distribution of respondents and their spouses' level of educational attainment is shown in Table 4.3. It is also evident from these results that, the attainment of tertiary education ranks highest in all with more spouses than the respondents, however, for none education it was insignificantly represented. There are a number of explanations for why education is a key determinant of utilization of health services since it is likely to enhance female autonomy so that women develop greater confidence and capabilities to make decisions about their own health (Caldwell, 1990, Raguparthy, 1996). Hotchkiss (2003) argued that, better educated women are more aware of health problems, know more about the availability of health care services and use the information more effectively to maintain or achieve good health status and seek proper medical care and attention.

However, the distribution pattern of educational levels is consistent with similar studies (Shobanan, 1996 and Hotchkiss, 2003) and the literature suggests significance use of services with increasing levels of formal education. Bartley (2008) is of the view that, it is not education itself that influences health but the social position that is obtained through that particular level of education. Educated women are likely to seek out higher quality services and have a greater ability to use health care inputs that offer care (Celik and Hotchkiss, 2000).

### 4.2.6 Distribution of Respondents by Occupation

Table 4.4 shows the distribution of respondents by occupation where civil servants account for 31.8%, followed by business people and traders with 27.1% and 16.7% respectively, while only a few (1.3%) could include welders, drivers, gardeners, tailors and hand works of life among others.

**Table 4.4 Distribution of Respondents and Spouses by Occupation**

| Occupation | Respondents | | Spouses | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | percentage |
| Fulltime-business | 104 | 27.1 | 90 | 29.8 |
| Civil servant | 122 | 31.8 | 140 | 46.3 |
| Petty trading | 64 | 16.7 | 30 | 9.9 |
| Artisan | 26 | 6.8 | 16 | 5.3 |
| Military | 6 | 1.5 | 4 | 1.3 |
| Farmers | 10 | 2.6 | 6 | 1.9 |
| Unemployed | 40 | 10.4 | 12 | 4.0 |
| Others | 12 | 3.1 | 4 | 1.3 |
| **Total** | **384** | **100.0** | **302** | **100.0** |

Source: Field survey, 2010

Table 4.4 data indicates that with an appreciable level of education amongst the husbands, it is not surprising that 46.3% are civil servants, though business and trading alone were almost 40% (29.8% and 9.9%) of the total respondents. The paucity of farmers (1.9%) may not only be due to the high literacy level recorded but also because the area is largely an urban set up with only limited spaces for agricultural purposes.

Differences in attitudes to modern health care services by occupational groups depict occupation as a predisposing factor. Alternatively, viewing occupation as a proxy to income enables acquisition of more and better health care, depicting, it as an enabling factor. Different occupational groups with a different income have a different effect on the utilization of modern healthcare services (Chakra borty *et al.,* 2003).

The findings of this study are similar to that of Shariff and Singh (2003), which suggested that respondents with more educated spouses are more likely to use health care services than those whose spouses were less educated. Similarly, the results of the present study support the observation by Caldwell (1990), which suggested that men with higher educational attainment may play a more important role in child care decision of whether or not to seek health care services. Thus, it is evident that in Table 4. 3, the highest rankings showed that among the women and their spouses, business and civil service varies with 58.9%, 76.1% respectively.

### 4.2.7 Distribution of Respondents by Income

Table 4.5 shows that 34.1% of the sampled population received five to ten thousand naira (₦ 5,000-10,000) naira per month, while 26.3% receive less than ₦5, 000 per month and those who received more than 31,000 were10.4%

**Table 4.5 Distribution of Respondents by Income**

| Income per month (₦) | Frequency | Percentage |
|---|---|---|
| < ₦5000 | 101 | 26.3 |
| ₦5000- ₦10000 | 131 | 34.1 |
| ₦11000- ₦20000 | 75 | 19.5 |
| ₦21000- ₦30000 | 37 | 9.6 |
| > ₦31000 | 40 | 10.4 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

Table 4.5 shows a striking difference in respondents' income. About 60% 0f the respondents earn below the minimum wage of ₦18, 000.00 per month. This indicates that the respondents are generally poor.

However, a cursory review of the literature suggests that lower income individuals tend to have poorer health and are likely to have a greater demand for a variety of health care services. Low income status is the most reliable indicator of poor health thus, the need for access to health care for low income group is critical for their overall well being. In North West Kano, most women who delivered at home gave major reasons as limited financial resource; God's will and husbands denial (Bour, 2004). Several studies in Cote d'Ivoire and Peru found that fees deter everyone from using the available health care services.

For many low-income people, occupational and locational constraints make it more difficult to access health care products by increasing effective cost and access them. Furthermore, income empowers women to take active part in decision making about health care in the family and also they are not economically dependent, hence could quickly decide on treatment.

**4.3 Awareness of availability of Health Care Facilities**

To test respondents on their level of awareness on health care services, the following question was asked. "Are you aware of the existence of health care services in your community? Fig 4.3 shows the distribution of respondents by awareness of health care services. It indicates that 98% are aware of the existence of healthcare services while 2% are ignorant of health care facilities.

**Table 4.6 Distribution of Respondents by Awareness**

| Level of Awareness | Frequency | Percentage |
|---|---|---|
| YES | 376 | 98 |
| NO | 8 | 2 |
| **TOTAL** | **384** | **100.0** |

Source: Field Survey, 2010

The high proportion of awareness of health care services amongst the population is not surprising since awareness is related to the educational status; the higher the education, he more the awareness and this could further dispel erroneous misconceptions and beliefs about their treatment of health; hence the level of awareness is indeed very high.

### 4.4 Types of Health Care Facility Available

Table 4.4 shows that 41.7% of the respondents say that the major health care facilities in their community are the government hospitals while 31.2%, said it was private hospitals, then Chemist/pharmacist 14.9% and only a few of the respondents (12.2%) said it is the local health centres.

**Table 4.7 Distributions by Types of Health Care Available**

| Type of Health Facility | Frequency | Percentage |
|---|---|---|
| Herbalist/Traditional birth attendants | 47 | 12.2 |
| Private clinics | 120 | 31.2 |
| Government clinics | 160 | 41.7 |
| Chemist/Pharmacist | 57 | 14.9 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

From this analysis, it is clear that there are more Government hospitals in the study area and this is to be expected because the study area is largely an urban setting with so many government hospitals to provide services for the growing population in the Metropolis. Table 4.6, further shows an indication of a growing patronage for herbal medicines.

### 4.5 Perception of Performance of the available Health Care Centres

Table 4.7 shows that 22.7% of women reported that health care services were excellent, while 52% said it is only satisfactory.

**Table 4.8 Distributions of Respondents according to Performances of Health Care Services**

| Perception | Frequency | Percentage |
|---|---|---|
| poor | 88 | 23 |
| Satisfactory | 100 | 26 |
| Good | 123 | 32 |
| Excellent | 73 | 19 |
| **Total** | **384** | **100.0** |

Source: Field survey, 2010

There is growing evidence that perceived quality of healthcare service satisfaction may have a greater influence on health seeking behaviour than do cost and access. On the average, the respondents have a good perception on the quality of performance of health care services in the study area. This was confirmed during the interview conducted with some of the household heads.

The question was asked, "What is the performance of the health care services in your community"?

Respondent explains thus;

*Government hospitals give quality treatment with good doctors coming in a routine. Most of us within Anguwan-rimi find Barau-dikko hospital convenient with a good central position and pregnant women benefit until six months after delivery. It is the biggest hospital with so many theatres and good nurses, the only problem we face is that, there are times when we wait long in receiving treatment besides".*

This statement indicates that the opinion towards the performance of most government hospitals is good because of the quality of doctors and the benefits derived by the pregnant mothers of babies.

**4.6 Accessibility to Health Care Services**

Table 4.8, shows that 68..5% of the women travel less than 30minutes to various health centres while 27.8% of the respondents travel between 30 minutes to one hour and only 3.4% travel more than an hour. In addition, respondents who travelled less than 5kilometers to health centres were (71.3%), while (28.7%) of the respondents travel 5 kilometres.

Concerning the main means of transport, 38.2% of respondents walked on foot, went on bicycle or in a vehicle 29.8% and 24.2 % respectively, and other means to get to the health centre constitute 7.8%. Affordability i.e. financial accessibility is also shown in Table 4.8. Most of the women (73%) stated that the cost of travel was moderate or affordable and only 18% said cost is high .The geographical factors perceived as barriers to health care services as identified by the women include most lack of vehicles (41.5%) and

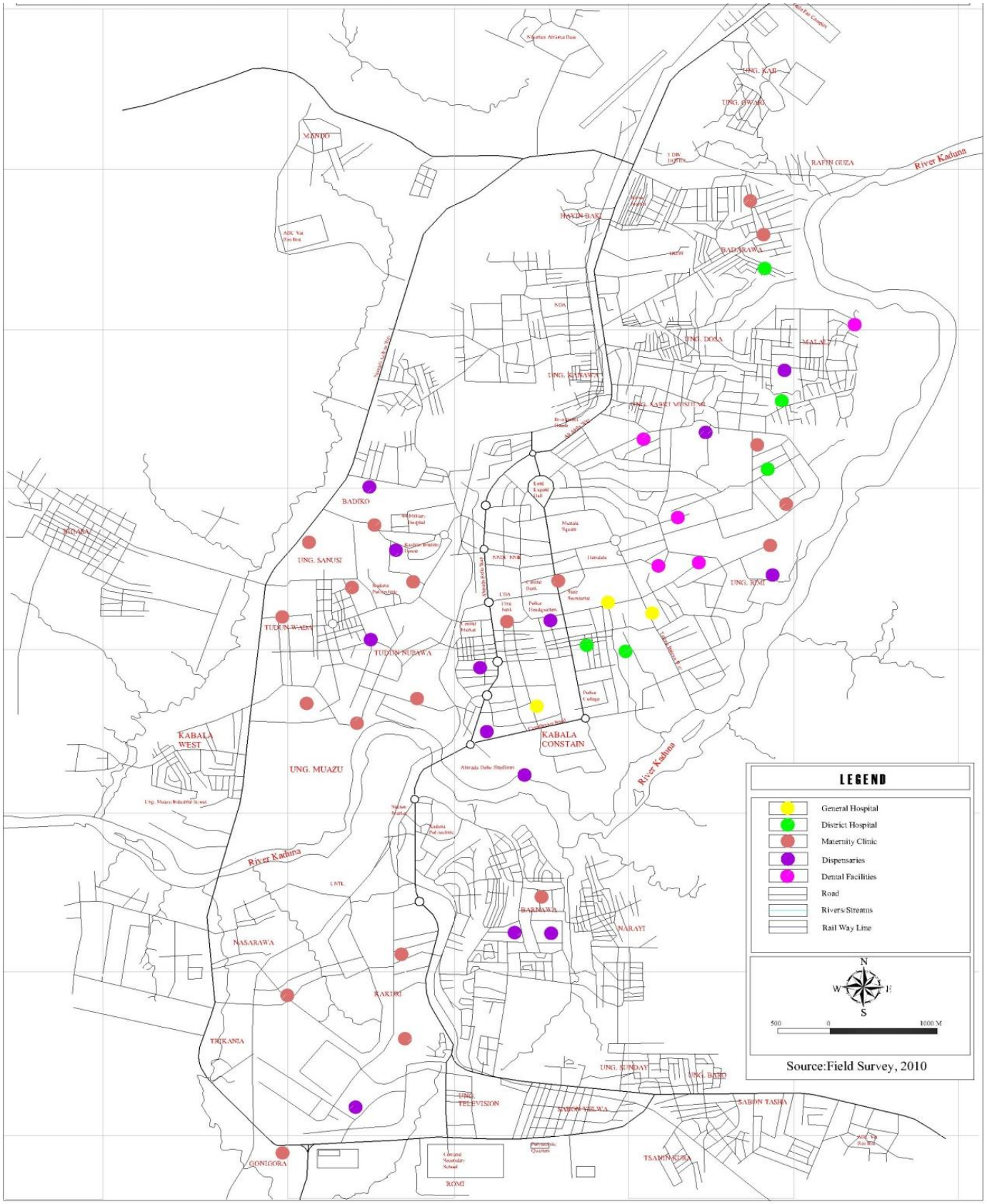



Fig 4.3 map showing existing health facilities in Kaduna metropolis

**Table 4.9 Distribution of Respondents by Access to Health Facility**

| Time taken to cover distance to health care Facility | Frequency | Percentage |
|---|---|---|
| Less than 30 minutes | 244 | 68.5 |
| 30 minutes to one hour | 99 | 27.8 |
| 0ne hour | 13 | 3.7 |
| Total | 356 | 100.0 |
| **Distance to health (km)** | | |
| Less than 5kilometres | 254 | 71.3 |
| More than 5kilometres | 102 | 28.7 |
| Total | 356 | 100.0 |
| **Means of transport** | | |
| Vehicle | 86 | 24.2 |
| Bicycle | 106 | 29.8 |
| Foot | 136 | 38.2 |
| Others | 28 | 7.8 |
| Total | 356 | 100.0 |
| **Perceived cost of transport to health Facility** | | |
| Too high | 64 | 18.0 |
| High | 32 | 9.0 |
| Moderate/affordable | 260 | 73.0 |
| Total | 356 | 100.0 |
| **Main barriers affecting access to health care** | | |
| Lack of vehicles | 148 | 41.5 |
| Bad roads | 46 | 13.0 |
| High cost of transport | 128 | 35.9 |
| Long distance | 34 | 9.6 |
| Total | 356 | 100.0 |

Source: Field survey, 2012

### 4.7 Possession of Health Insurance

Table 4.9 shows that an overwhelming number of respondents (81.5%) are not fully registered with health insurance. In addition, the percentage distribution of respondents registered with the National Health Insurance Scheme (NHIS) is generally very low (15.1%) while those registered by Community Health Insurance Scheme (CHIS) are only 3.4%.

**Table 4.10 Distribution of Registered and Unregistered Respondents with Health Insurance**

| Health Insurance | Frequency | Percentage |
|---|---|---|
| No Insurance | 313 | 81.5 |
| National health insurance | 58 | 15.1 |
| Community health insurance | 13 | 3.4 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

Health Insurance status, an "enabling factor" in the Andersen's model plays a major role in the ability of women to acquire health care services. Furthermore, only a few respondents (18.5%) registered with either national or community health insurance. From the result of Table 4.9, it is clear that health insurance is not fully utilized by so many respondents despite the fact that National health insurance scheme (NHIS) is aimed at supporting secondary and tertiary health payments with the major concerns focused on improvement of access for the informal sector.

The distribution of respondents by type of health centres available as shown in Table 4.8. where a total of 41.7% of the respondents indicated that they attended government clinics and 31.2% said that they attended private clinics in their areas. These

are significant with the current emphasis with government on the Natural Health Insurance Scheme where everybody in the long run is expected to register.

### 4.8 Utilization of Health Care Services by Respondents

The Figure 4.4 shows that 93 % utilize health care services in the metropolis.

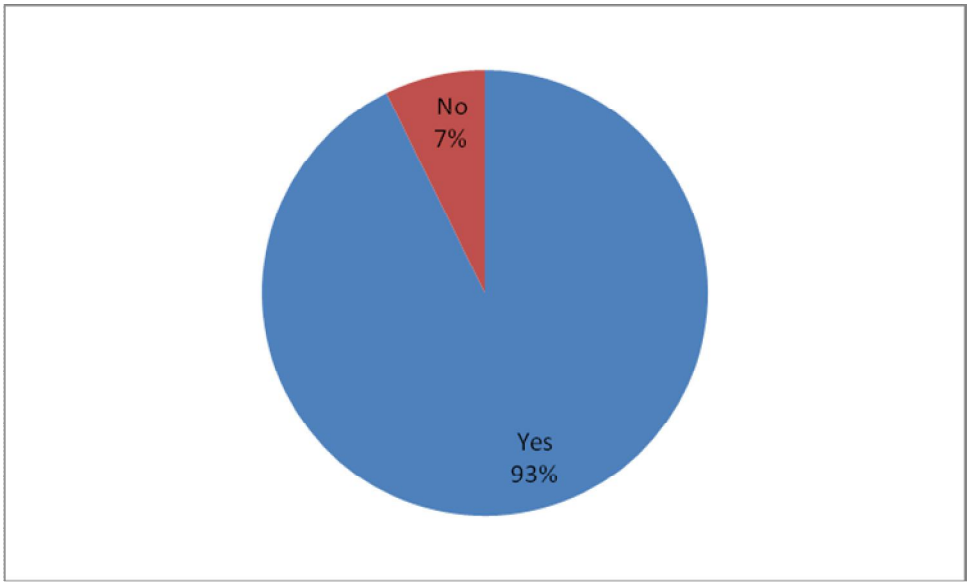



Fig 4.4 Percentage Distribution of Respondents Utilizing Health Care Services

Source: Field Survey, 2010

Utilization rate is one of the health indicators which give information on health status. Acharya and Cleland (2000) argued, it has been documented that client-patient relation, waiting time, pain and management contribute significantly to the utilization of health care services.

### 4.9 Reasons for Utilizing Health Care Services

The results on utilization of care service as presented on Table 4.10, shows that qualified doctors (24.1%) and other supporting staff (20.7%) are major contributors. This is followed by better equipment/services and closer to home (13.5%). In addition, respondents who stated good opening time of services and other reasons were (4.5% and 3.4%) respectively.

**Table 4.11 Reasons for Utilizing Health Care Services**

| Reasons for Utilization of HealthCare | Frequency | Percentage |
|---|---|---|
| Cheaper services | 45 | 12.6 |
| Good services/Equipment | 75 | 21.0 |
| Health workers | 74 | 20.7 |
| Closer to home | 48 | 13.5 |
| Qualified doctors | 86 | 24.1 |
| Good opening time for services | 16 | 4.5 |
| Others | 12 | 3.4 |
| **Total** | **356** | **100.0** |

Source: Field survey, 2010

The Table further reveals that qualified doctors, physical infrastructure and better services were the most alluded reasons for the women utilizing health care.

### 4.10 Reasons for Non-Utilization of Health Care Services

Table 4.11, shows that, among the few women who do not utilize health care services 32.1% gave reasons as long time spent waiting on queues while 28.5% gave the non availability of drugs as the major reason, 21.4% say is lack of trained personnel.

**Table 4.12 Reasons for Not Utilizing Health Care Services**

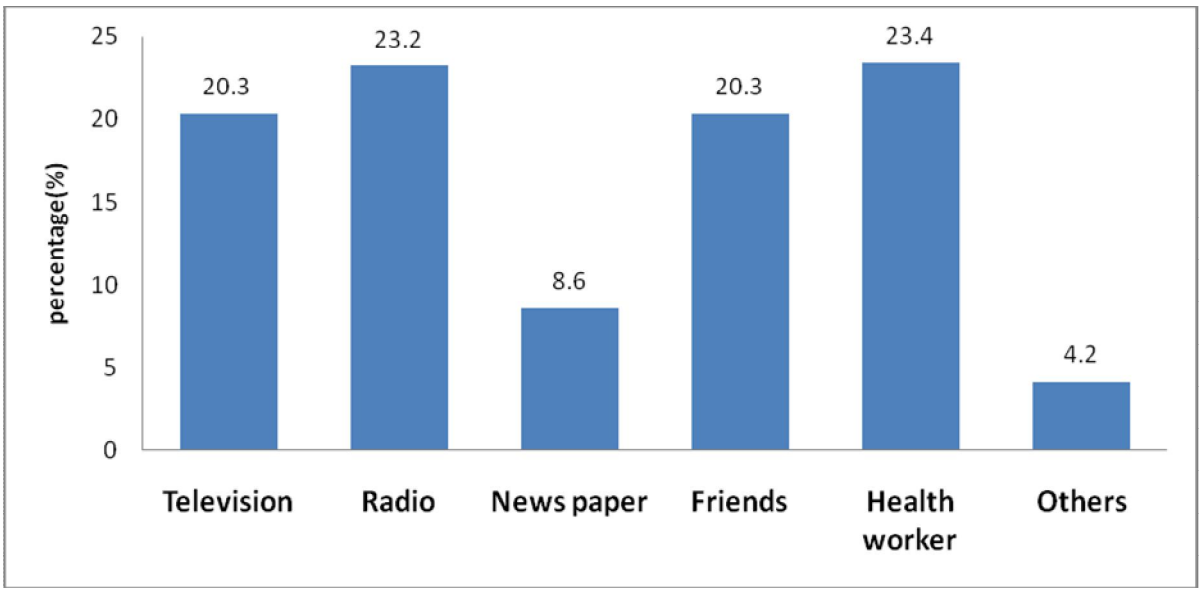
| Reasons for None Utilization of Health Care | Frequency | Percentage |
|---|---|---|
| lack of facilities | 5 | 17.9 |
| time spent waiting on queues | 9 | 32.1 |
| none availability of drugs | 8 | 28.5 |
| lack of trained personnel | 6 | 21.4 |
| **Total** | **28** | **100.0** |

Source: Field survey, 2010

Utilization of services is expressed as the proportion of people in need of a service who actually receive it in a period of time. In some cases, facilities exist but long waiting on queues to see health providers, lack of drugs and unqualified doctors and nurses results in the women not using the health care services. Other reason for non-utilization is the lack of facilities. Furthermore, in assessing preference on modern health facilities, it is important not to be informed only about the preference of those who actually use the facility but also of those who do not use them. A documentation of the perceptions of these non-users is necessary for policy makers and may shed light on the factors that influence people's choice of health care service.

### 4.11 Distribution of Respondents by Sources of Information on Health Care Services

Figure 4.6, shows that the dominant source of information on health care services is from health workers and radio with 23.4% and 23.2% respectively, followed by television and friends with 20.3% each, only 8.6% indicated posters.




Fig; 4.5 Percentage Distribution of Source of Information on Health Care Services Source: Field Survey, 2010

Similarly, the methods of communication as indicated in Fig 4.6, like the television, newspaper, radio among others reach large groups of people more quickly and very effectively. The usefulness of the mass media cannot be over emphasized. This also helps the people to be educated about how to protect themselves from epidemic and also how to understand the benefits of health care services (Laah, 2003).Posters seem to represent only a little impact probably on a variety of most people's level of illiteracy.

The result of this study is not different from the findings of Shariff and Singh (2002) who found television, radio and newspapers as major sources of information which significantly increased utilization rates for all services. However in this finding, it shows that health workers, friends and radio were the major sources of information on health care utilization.

### 4.12 Affordability of Health Care Services

Among the majority who utilize health care, those able to pay for services were 88.5%, while 11.5% of the respondents could not afford health care services.

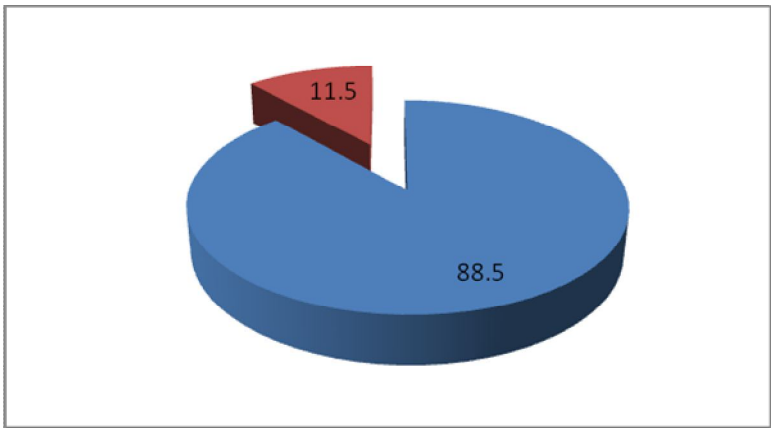



Fig 4.6 Percentage Distribution of Affordability of Healthcare Services by Respondents

Source: Field Survey, 2010

From the data presented in Figure 4.7, it is obvious that majority of the women were able to pay for services even though they visited more government hospitals in their localities which offered free and cheaper services. More also, the striking imbalance in payments for services is due to variations in the respondents levels of income as seen in Table 4.5.

### 4.13 Amount paid for Health Care Services by Respondents

The data presented in Table 4.12, shows the amount paid by women to access services. It shows that 57.2% of the respondents paid between ₦500-1000 and only 19% paid less than ₦500.

**Table 4.13 Amounts Paid for Services by Respondents per visits**

| Amount paid for services | Frequency | Percentage |
|---|---|---|
| <₦500 | 73 | 19.0 |
| ₦500- ₦1000 | 220 | 57.2 |
| >₦1000 | 51 | 13.2 |
| Others | 40 | 10.6 |
| **Total** | **384** | **100.0** |

Source; Field Survey, 2010

Differentials in amount paid for services depend on type of ailment and quality of drugs prescribed by services provided in the available health centres seems to be within the reach of most women. Majority of the women paid the sum of ₦500-1000 naira (57.2%) a few of them paid others (10.6%)

Similarly, a study carried out by Isarabhadi, 2004, reported that the women who paid less, dominated in government hospitals and it was due to the provision of free and cheaper services while the private clinics spend more for treatment but then prompt treatment day and night.

### 4.14 Perception of Respondents for Workers in Health Centres

Table 4.11 presents information on respondents the perception of the attitude of health workers by the respondents. 45.3% of the respondents are of the view that the health workers are good, while 20.6% stated it was satisfactory and 6.5% reported that health workers attitude was very poor.

**TABLE 4.14 Perceptions of Respondents to Attitude of Workers in Health Facilities**

| Attitude of Health Workers | Frequency | Percentage |
|---|---|---|
| Very good | 66 | 17.2 |
| Good | 174 | 45.3 |
| Average | 79 | 20.6 |
| Poor | 40 | 10.4 |
| Very poor | 25 | 6.5 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

There is growing evidence that provider-client relations, attitudes and service satisfaction may have a greater influence on health seeking behaviour than do cost and access. Patient satisfaction increased when provider is informed, explained and instructs patients. In the same vein, confidence and trust are enhanced when nurses take charge and appear to enjoy their work. However, improving the quality of services to ill-persons does not involve providing purely clinical service but also including good human relation skills so as to achieve ultimate health outcome. The study shows the need to improve the quality of services, staff-patient communication and make services more patient-oriented.

Table 4.14 reveals that most women might have been convinced of health workers as a factor in grading their health centres. However, this may imply that overall satisfactions of the health centres were stated well by 83% of the Women who stated that the attitude of health workers were above average. Furthermore, less than 10.4%, was rated poor, the overall attitude was good However, these figures are in concordance with Verma

*et al,* (2000) in a qualitative study conducted in India; however, findings revealed that the client satisfaction of quality had a significant effect on their acceptance.

### 4.15 Sources of Funds for Payment of Health Care Needs

The data in Table 4.14 indicates that, 35.9% of husbands are solely responsible for the payments of healthcare needs of the wives. 30.7% of women paid for themselves and only 4.4% were paid by account of friends and relatives.

**Table 4.15 Distribution of Respondents by Sources of Funds for Payment of Health Care services**

| Source of Fund | Frequency | Percentage |
|---|---|---|
| Personal Income | 118 | 30.7 |
| Friends and relatives | 17 | 4.4 |
| Husband | 138 | 35.9 |
| Free Health Care Services | 111 | 29.0 |
| **Total** | **384** | **100.0** |

Source: Field Survey, 2010

Reliance on husbands might have been due to the fact that, religion and traditional beliefs assign the man the role as head of the family and the one who has the final say in all pertinent matters in the home including funds for health care provision. On the other hand, those respondents who depend on friends and relatives did so due to their low income below the minimum wage of N18, 000.00 per month as shown in Table 4.4.

### 4.16 Distribution of Respondent's by Frequency of Visits to Health Care Service

Figure 4.7 presents the frequency of visits to a health facility where 29.4% of the respondents visit more than once in 6months, 26.3% visited once in three months and only 6.8%o visited health centres more than once in three months.

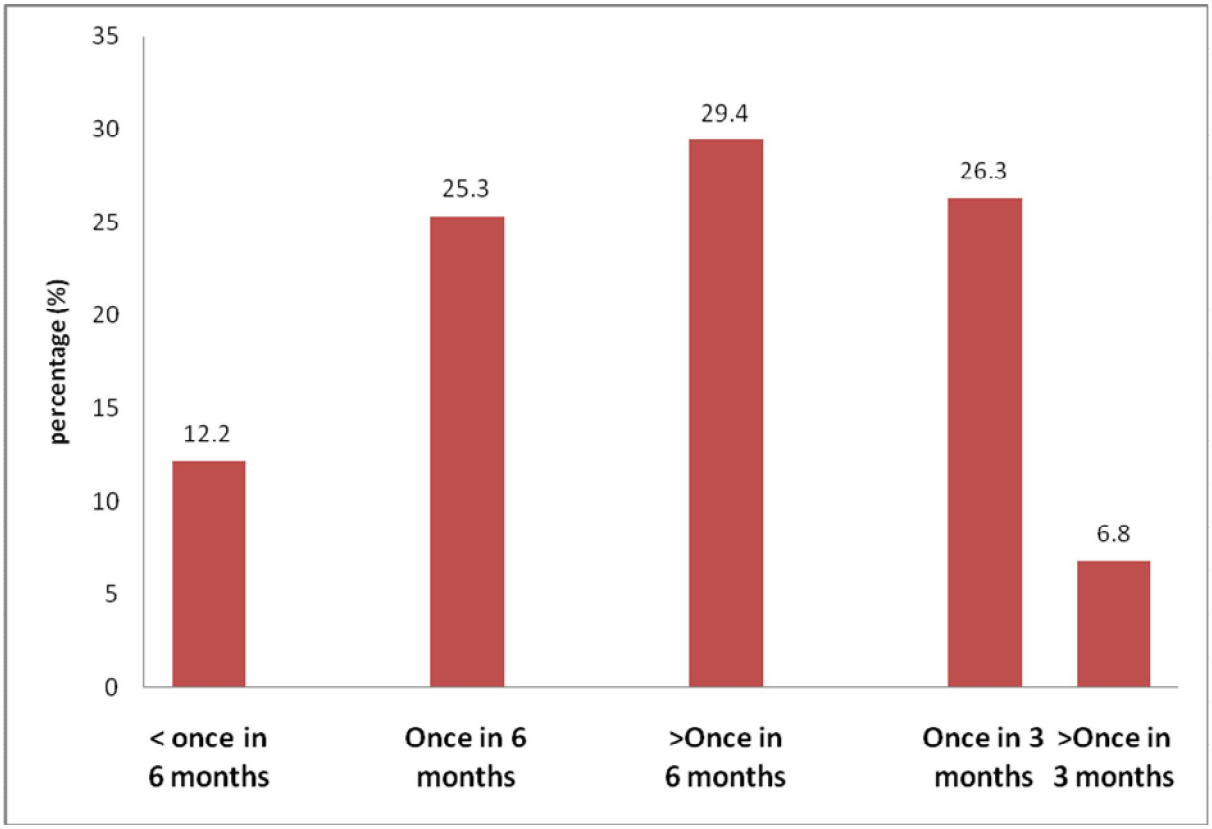



Fig: 4.7 Percentage Distributions by Frequency of Visits to Health Care

Source; Field Survey, 2010

The need for frequency of visits to health care services cannot be overemphasized because of the health benefits derived (World Bank, 1994). A similar research carried out in Nairobi, Kenya (2004) revealed that majority make very few visits to health care services mainly, because of lack of access to institutionalized care and the inability to meet user charges.

Still yet in another study in Ghana, the average number of visits has been stagnant about 3 visits per woman in 5 years (Bour, 2004). Furthermore, Colman, (2000) suggests that less use of preventive services may eventually lead to higher rates of illness and therefore high rates of visits to physicians and ultimately hospitalization. Among the majority of women utilizing health care, the highest frequency of visits were those who visited health centres once in six months followed by once in 3months (29.4% and 6.8% respectively). However, despite the high proportion of women who confirmed they utilize health services, frequency of visits remained too low. It is therefore necessary that this group of women should get proper information and counselling on the benefits of health care services.

### 4.17 Major Problems in Health Care Centres

Table 4.15 shows that 33.8% of the respondents reported that time waiting for Treatment was the major problem while 22% of the respondents reported inadequate doctors and nurses as a major problem.

**Table 4.16 Major problems in Health Care Delivery**

| Major problems | Frequency | Percentage |
|---|---|---|
| Time waiting for treatment | 130 | 33.8 |
| Inadequate doctors and nurses | 84 | 22.0 |
| on availability of drugs | 37 | 9.6 |
| Cost | 33 | 8.5 |
| Unfriendly personnel | 42 | 11.0 |
| Inadequate facilities | 58 | 15.1 |
| **Total** | **384** | **100.0** |

Source: Field Survey,2010

The results in Table 4.15, is in contrast with the observations from (NDHS, 2003) which revealed that the leading barrier to healthcare for many Nigerian women is getting money for treatment. In addition, the results are similar to the findings of Laah, (2009) who observed that long waiting times was the leading problem hindering efficient utilization of health care services in the north central zone of the country.

### 4.18 Types of Diseases that take the Respondents for Treatment

Table 4.16, shows the distribution of respondents by type of diseases prevalent and responsible for the women's going for treatment. On the whole, 27.6 % of the total respondents suffer from pregnancy related illness (haemorrhage, sepsis, induced abortions).This is followed by malaria and typhoid which account for 23.9% and 15.1% respectively.

**4.17 Types of Diseases that take the Respondents for Treatment**

| Diseases | Frequency | Percentage |
|---|---|---|
| Malaria | 92 | 23.90 |
| Typhoid Fever | 58 | 15.10 |
| Pregnancy illness | 106 | 27.60 |
| Ulcer | 24 | 6.30 |
| Cholera | 20 | 5.20 |
| Headache | 4 | 1.04 |
| Cough | 5 | 1.30 |
| Dracunculiasis | 4 | 1.04 |
| Hypertension | 38 | 9.90 |
| Diabetes | 15 | 3.90 |
| Others (specify) | 18 | 4.60 |
| **Total** | **384** | **100.00** |

Source: Hospital records, 2010

From the data presented above, in Table 4.16, most of the respondents that reported pregnancy related illness account for the major reasons why the women are taken to health centres. This agrees with the fact earlier observed that, there is increase in unplanned pregnancies, unsafe abortion and overall deterioration in reproductive health, increased child mortality and malnutrition (United Nations, 2009). Furthermore, it reveals the endemic and epidemic nature of malaria and thus, being one of the major causes of ill-health and death in sub Saharan Africa (WHO, 2009).In addition, the high proportion of typhoid also implies that alluded reasons could be due to the unsafe drinking water and the unhygienic source of drinking water from rains, wells and streams.

### 4.19 Areas of Health Care that need Improvement

Fig: 4.8, shows areas in health care that need improvement. It is certain that 33.9% of the women stated the need for a reduction in the cost of services and 27.9% said the need to provide drugs.

Only 3.4 % of the respondents emphasized the need to have female providers.

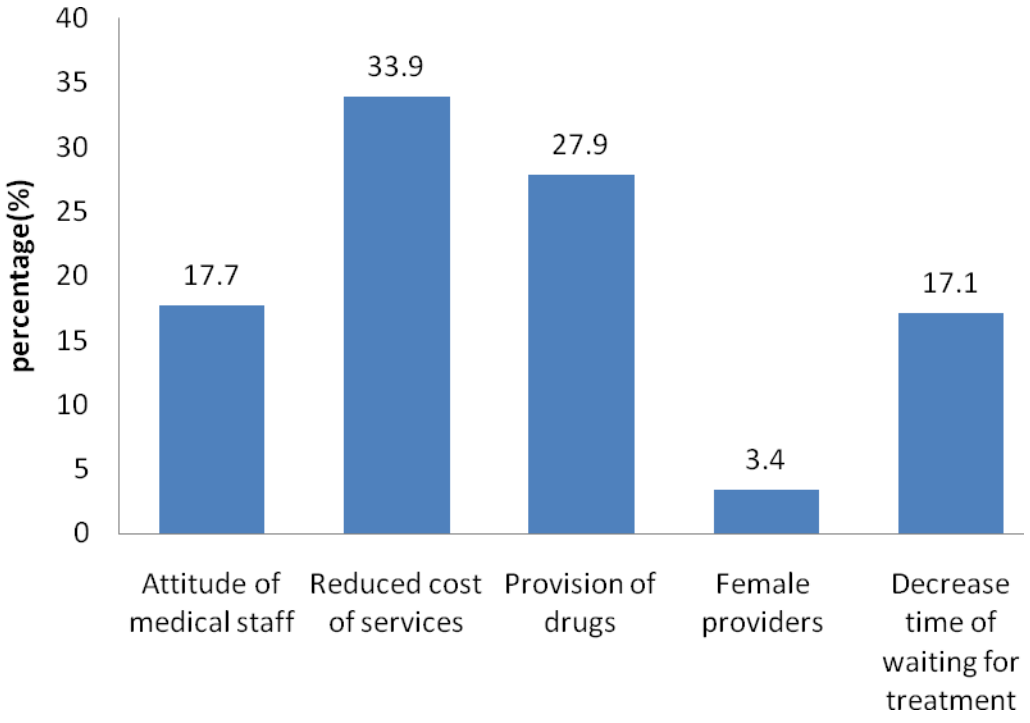



Fig: 4.8 Percentage Distribution of Areas in health care that need improvement

Source: Field survey, 2010

The emphasis on female providers by a few respondents is an indication of cultural attitudes such as religion and ethnicity as observed by Shire (2002).In addition, reduction in cost of services and provision of drugs remained the most important areas that need improvement in this study.

It is certain that the reasons stated above, lead to the dissatisfaction of service delivery for the women. The results further indicates that, cost of services as a problem is not unexpected as majority of Nigerians live on less than one dollar a day and cannot therefore afford to provide for their basic health needs (United Nations, 2000).

### 4.20 Preferred Place for Treatment

Table 4.18, shows distribution by preferred place of treatment; respondents were asked regarding place of treatment, 52.1% and 27.1% preferred private clinics and only 5.2% preferred going to traditional healers.

**Table 4.18 preferred Place of Treatment**

| Places involved | Frequency | Percentage |
|---|---|---|
| Public hospital | 200 | 52.1 |
| Private | 104 | 27.1 |
| Traditional healers | 20 | 5.2 |
| Pharmacist/chemist | 60 | 15.6 |
| **Total** | **384** | **100.0** |

Source: Field survey, 2010

It is clear from this results that most of the respondents rely on the government hospitals for their health care needs. Some of the reasons are in line with the observations by (National Population Commission, 2004; National Bureau of Statistics, 2007) which stated that high poverty and low literacy rates in most states in the north is necessitating more people depending on government facilities especially in the provision of health care. In addition, most of the government hospitals provided free health care services to nursing mothers up to the first birth day of their children.

### 4.21 Reasons for Choice of Place of Treatment

Majority (56.6%) of the women's reasons for preferring treatment in various health care services as seen in Table 4.18 was due to prompt action followed by 19.3% who said it was due to spousal decision.

**Table 4.19 Distribution of Respondents by Reasons for Choice of Place for Treatment**

| Summary of perception | Frequency | Percentage |
|---|---|---|
| Spouses decision | 73 | 19.3 |
| Cheap | 63 | 16.7 |
| Prompt action | 214 | 56.6 |
| Others | 28 | 7.4 |
| **Total** | **378** | **100.0** |

Source: Field survey, 2010

Table 4.19 indicates various reasons why the women prefer treatment in various healthcare providers. The highest proportion of women gave reasons as prompt action. Furthermore, spouse's decision also had an impact to the women's choice of health facility.

In a similar study by Bour (2004), in Ghana on accessibility and utilization of health service, findings revealed that majority of the women said that the hospital was in their community and the main reason for the choice of health facility included nearness and qualified doctors.

### 4.22 Awareness of Family Planning

The data on Fig 4.10 shows that an overwhelming majority of respondents strongly agreed that they were aware of family planning (97%) while not more than (3%) of the women claimed ignorance of family planning.

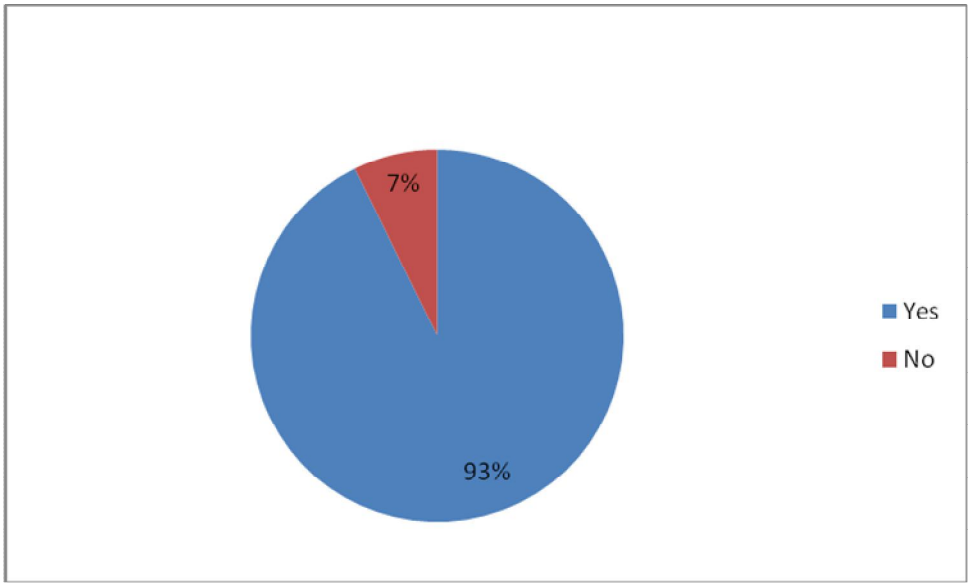



Fig: 4.9 Distribution of Respondents by awareness on family Planning Services

Source: Field survey, 2010

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through contraceptive methods (NDHS, 2008).Information on knowledge, awareness and use of family planning methods were obtained from the women by asking them if they had ever heard or practiced family planning with the main source of information for the method known. Awareness and utilization of Family planning has been noted to play a very significant role in predicting use of a range of health services (Federal Ministry of Health, 1988).

**4.23 Sources of Information on Family Planning**

Table 4.19 provides information concerning the source of respondent's awareness of family planning. Friends and relatives were indicated by 23.6% and radio 23.2% of respondents respectively.

**Table 4.20 Distribution of Respondents by Sources of Family Planning Services**

| Various sources | Frequency | Percentage |
|---|---|---|
| Television | 73 | 19.0 |
| Radio | 89 | 23.2 |
| Friends/Relatives | 91 | 23.6 |
| Newspaper | 43 | 11.0 |
| Health workers | 73 | 19.0 |
| Others | 15 | 3.9 |
| **Total** | **384** | **100.0** |

Source: Field survey, 2010

However, radio, friends and relatives were the dominant source of information on family planning. Similarly, the influences of social relations and family are also supported by a study which revealed that social relations play an important role in the decision to seek care. In some areas a woman cannot be taken to hospital without her husband's permission (WHO, 2004).plethora of studies have shown that, exposure to mass media promotes health related behaviours including contraceptive use, reproductive preferences and treatment for children. (Bankole and Westoff, 1996; Retherford and Mishra, 1997; Rao *et al*, 1998).

### 4.24 Knowledge and Practice of Family Planning Methods

The data in Fig 4.10 shows the percentage distribution of respondents by knowledge of contraceptive methods. The commonest methods of contraceptive used by respondents are injectibles (25.5%) followed by condoms (15.5%) then traditional methods (12.7%).

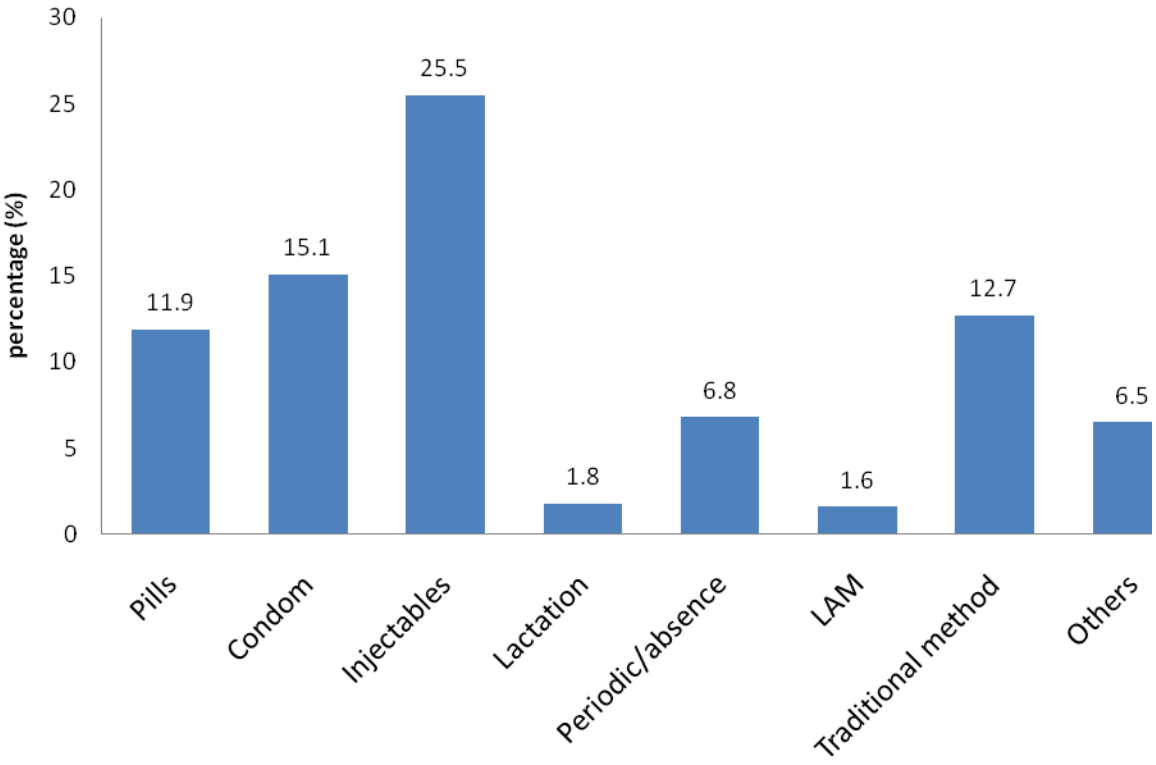


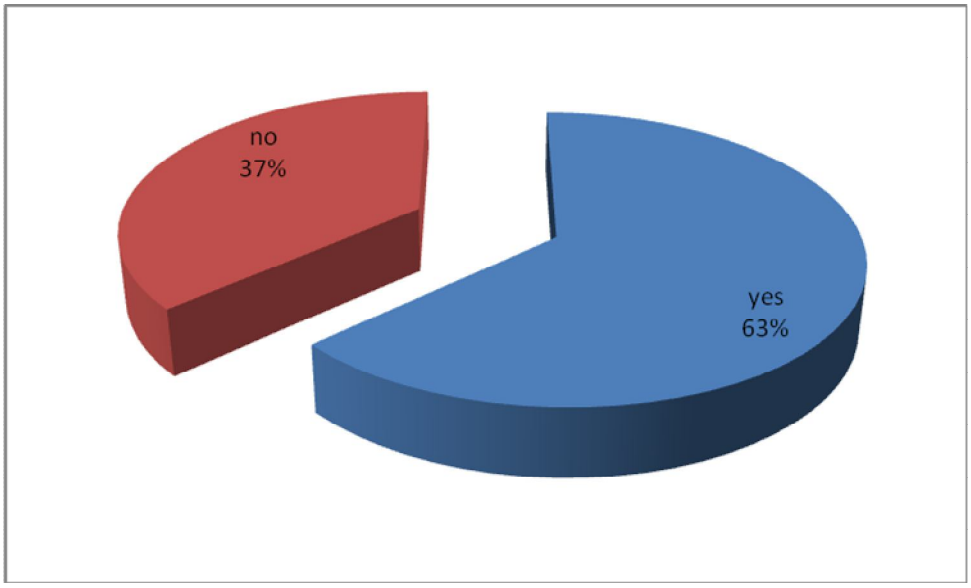

Fig: 4.10 Percentage Distribution of Contraceptive method used by respondents

Source: Field survey, 2010

Factors associated with the low use of contraceptives in Nigeria include low availability of contraceptives in public health Institutions, inaccurate perceptions of the effect of contraceptives, pervading cultural, religious beliefs and poor access of women to contraceptives (Ibrahim, A 2010).This result shows that most respondents were ignorant of contraceptive uses however; there is still room for improvement especially in the areas of community awareness and quality care given at health centres.

**4.25 Utilization of Family Planning Services**

Fig 4.11 shows that 63.3% of the respondent's practice and use family planning services while 36.7% do not practice family planning.




Fig; 4.11 Percentage Distribution of Respondents utilizing Family Planning Services

Source: Field Survey, 2010

The number of persons practicing contraception in a community is a good indication of family planning action. In this study, 63% of the women practice one form of contraceptives or the other. A similar study carried out in Tudun-wada Zaria showed that 68% of women use contraceptives (Aku, 1998).

However, the result of this study is different from the reports of world population, which showed that only 6% of women use contraceptives in Nigeria (Cynthia, 1992). It is different because in this study, majority of the women interviewed were educated and have knowledge, hence practice contraceptives while on the national context a substantial percentage of women are illiterates and do not have knowledge on contraceptives and hence very few practice it.

### 4.26 Reasons for Non-utilization of Family Planning

Table 4.21, shows that among the 137 respondents who do not utilize Family planning services, most alluded reasons were spousal refusal 15.9% followed by religion forbids 11.5% then other reasons were 7.6%.

**Table 4.21 Reasons for non- utilization of Family Planning services by Respondents**

| Reasons for not utilizing | Frequency | Percent |
|---|---|---|
| Religion forbids | 44 | 32.2 |
| Spousal refusal | 61 | 44.5 |
| Where to get it | 3 | 2.2 |
| Others | 29 | 21.1 |
| **Total** | **137** | **100.0** |

Source; Field survey, 2010

In view of the point above, there is need for full co-operation of husbands to be sought in trying health programmes through health campaigns directed specifically to the women on the need to educate their wives and importantly utilize both family planning services.

### 4.27 Distribution of Status/Cadre by Health Personnel in the Four Selected Hospitals

Table 4.22, shows that Female staffs especially Nurses are prevalent in nearly all the hospitals due to the fact that Obstetrics and Gynaecological services (O and G) are prevalent in most of the hospitals in the metropolis.

The need for staffing standards and requirements to provide appropriate and quality primary healthcare cannot be over emphasized. It further shows a low distribution and inadequacy in staffing; this observation is similar to that of (WHO, 2003).

In adequate staffing is also a major determinant of women seeking for health care services especially as health workers may play a crucial role in the pricing of drugs, safety of equipment and materials; however, there is need for improvement of skills of health staff through appropriate training.

**Table 4.22 Distribution of Health Personnel by Cadres in the Metropolis.**

| Staff | St. Gerald's Hospital Kakuri Total | Total (m) | Total (f) | Barau-Dikko Specialist Hospital | Total (m) | Total (f) | Yusuf Dantsoho Hospital T/Wada | Total (m) | Total (f) | Dr. Gwamna-Awan Hospital | Total (m) | Total (f) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nurses | 87 | - | 87 | 246 | 10 | 236 | 120 | 0 | 120 | 272 | 3 | 269 |
| Lab Staff | 3 | 1 | 2 | 40 | 18 | 02 | 26 | 13 | 13 | 54 | 10 | 44 |
| X-ray | 3 | 2 | 1 | 7 | 03 | 04 | 10 | 04 | 06 | 04 | 02 | 02 |
| Community Health Extension Workers | 2 | 2 | - | 7 | 00 | 07 | 03 | 01 | 02 | 04 | - | 04 |
| Doctors | 11 | 10 | 1 | 11 | 05 | 06 | 14 | 14 | 00 | 31 | 23 | 08 |
| Record Officers | 17 | 3 | 14 | 66 | 20 | 46 | 43 | 18 | 25 | 45 | 16 | 29 |
| Social welfare | 1 | 1 | - | 03 | 02 | 01 | 1 | - | 01 | 01 | 01 | - |
| Pharmacy | 4 | 2 | 2 | 11 | 02 | 09 | 18 | 06 | 12 | 34 | 09 | 25 |
| **Total** | **128** | **21** | **107** | **391** | **60** | **331** | **245** | **56** | **183** | **445** | **64** | **381** |

Source: Field Survey, 2010.

The main category of health resource in the health care system are doctors, nurses, midwives, public health nurses and the community health workers (community health officers , community health extension workers and health assistance).

This health resource for health is vital for successful implementation of the ward minimum health care package. To ensure that staffing requirements are met, government established schools of health technology to produce junior community health extension workers (CHEW) and other support staff. Table 4.22 indicates that the inadequacy of health resource personnel reflects a general apathy of the public towards health centres. This result indicates that there is an unequal distribution of health personnel in all the hospitals selected.

### 4.28 Challenges Affecting Optimal Performance of Health Personnel's

Table 4.23 presents information on the major challenges affecting the optimal performance of health personnel's in the 4 selected hospitals. Half of the respondents in St Gerald (50%) were not satisfied with their monthly pay while in Yusuf Dan-tsoho hospital, two-third percent (66.7%) were not comfortable with condition of services. In all the four hospitals, poor policy implementation, inadequate supply of drugs and equipment was represented below 16.6%.

**Table 4.23 Challenges affecting optimal performance of health personnel's in the selected hospitals**

| Challenges of health personnel | Dr Gwamna Awan Hosp | Barau Dikko Specialist Hosp | Yusuf Dantsoho Hosp. T/Wada | StGerald's Hospital Kakuri |
|---|---|---|---|---|
| | (F) (%) | (F) (%) | (F) (%) | (F) (%) |
| Monthly pay | 2 (33.3%) | 1 (16.6%) | - - | 3 (50%) |
| Lack of materials | 1 (16.6%) | - | 1 (16.6%) | - |
| Poor-policy implementation | - | 1 (16.6%) | - | 1 (16.6%) |
| Inadequate supply of drugs/equipment | 2 (33.3%) | 2 (33.3%) | 1 (16.6%) | 1 (16.6%) |
| Condition service | 1 (16.6%) | 2 (33.3%) | 4 (66.6%) | 1 (16.6%) |
| **Total** | **6 (100.0%)** | **6 (100.0%)** | **6 (100.0%)** | **6 (100.0%)** |

Source; Field Survey, 2010

From the Table 4.23, the poor conditions of service are not surprising as considerable efforts by government to improve over the past decade have been progressive. Although in Yusuf Dan-tsoho, condition of services might have been satisfactory for the majority. However, there is need for improvement in the condition of services for all hospitals so as to bring about greater efficiency in productivity. In addition, crucial choices must be made in relation to the process that will influence the performance of the work force as defined in the Table 4.22 above.

### 4.29 Distribution of Registered Patients in the Year 2010

Fig 4.12 shows the distribution of registered patients in the four selected hospitals in the metropolis for the year 2010. Barau-Dikko a tertiary health care remains the biggest hospital with over 200,000 females and 110,000 males registered patients in the year 2010

followed by Yusuf dan-tsoho and St Gerald. The least represented patients registered were in Dr. Gwamna-Awan hospital.

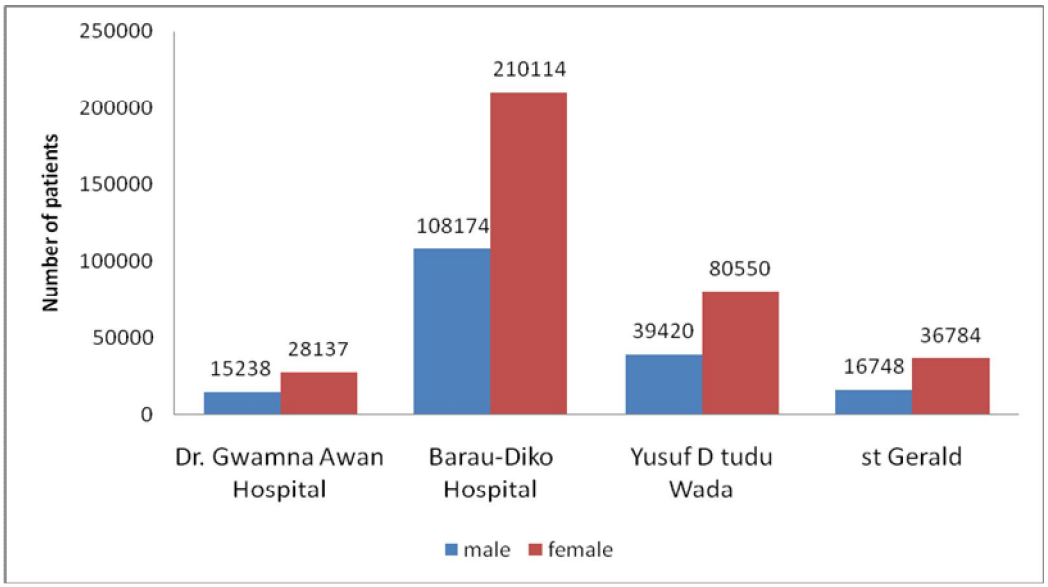



Fig: 4.12 Registered Patients for the year 2010 in the Four Selected Hospitals in the Kaduna Metropolis

Source: Field survey, 2010

In all the hospitals, females dominated almost twice the number of males; however, this supports the observation of a new trend emerging and a drive for gender equality. The large group of women registered in the hospitals indicates that, increased time in waiting on long queues to see doctors may not be surprising and this may even deter some of the women from seeking health care. In the same vein, there is urgent need to renovate deteriorated facilities and ensure provision by checking or replacing worn out facilities in order to improve health seeking practices.

## 4.30 SUMMARY OF CHI-SQUARE RESULTS ON ACCESSIBILITY AND UTILIZATION OF HEALTH CARE SERVICES

**Table 4.24 Summary of results of chi-square analysis of relationship in Marital status, Occupation, Income, Education and Access to Health Care Services**

| Socio demographic characteristics | Computed chi-square | Table value | Degree of freedom | Level of significance |
|---|---|---|---|---|
| Income | 1.81592 | 0.75 | 4 | 0.05** |
| Education | 12.4631 | 9.49 | 4 | 0.05** |
| Occupation | 37.8019 | 2.17 | 7 | 0.05** |
| Marital Status | 17.9244 | 0.71 | 4 | 0.05** |

** Significant at 05%

Source: Field Survey, 2010

**Hypothesis one: There is no relationship between marital-status, Income, Occupation, and Education with access to health care services**

From Table 4.24, the chi-square test in respect to access to health care by individual characteristics such as income, education occupation and marital status show statistically significant relationships with access to health care facilities and a p-value > 0.05.

Table 4.24 also shows that, all the computed chi-square values are more than the table values. In other words, all the null hypothesis are rejected as significant differences are established thus, it implies a statistically significant relationship and therefore, occurrence is not likely due to chance.

The magnitude of the relationship however varies for each socio-demographic characteristic. Based on higher ranking, occupation, marital status and education show a

strong relationship while income shows a weak relationship. Occupation was highly significant due to the fact that working women were more likely to get access to health care, secondly, the high level of education in the study area, confirms that better educated women and spouses are more aware of health problems, know about the availability and may influence their attitude towards modern medicines (Shariff and Singh 2003).

Thirdly, with a good proportion gainfully employed, income could easily be sourced to pay for cost to health centres. In addition, whether the women are married, single, separated, widowed or divorced; they have access to health care by available means such as bus, motorcycle or on foot.

**Table 4.25 Summary of results of chi-square analysis of relationship in Marital status, Occupation, Income, Education and Utilization of Health Care Services**

| Socio-demographic characteristics | Computed chi-square | Table | Degree of freedom | Level of significance |
|---|---|---|---|---|
| Income | 6.57841 | 9.49 | 4 | 0.05** |
| Education | 12.4631 | 9.49 | 4 | 0.05** |
| Occupation | 37.8019 | 2.17 | 7 | 0.05** |
| Marital Status | 4.225 | 5.99 | 4 | 0.05** |

** Significant at 05%

Source: Field Survey, 2010

**Hypothesis two: There is no relationship between marital status, Income, Occupation and Education with access to health care services**

Table 4.25 shows the summary of results of chi-square analysis of relationship with income, education, occupation, marital status with the use of health care services. The

results identified two strong predictors of the use of health care. Most notably, women's occupation and education appeared to be major factors influencing the use of the available health care service.

Although marital status and income of the women revealed that at (4) degree of freedom and 0.05 level of significance each, their table values (5.99 and 9.49) respectively, are greater than the calculated value (4.225 and 6.57841) respectively.

It therefore means that since the table values for marital status and income levels are greater than their calculated values thus, the null hypothesis is retained. In other words, these indicate that despite their status in marriage or income levels, the women make use of the available health facilities. See information on Table 4.25

From the results shown in Table 4.25, it is obvious that Utilization of health care services has no relationship with the level of monthly income. This finding is different from that of (Shaikh and Hatcher, 2004) where in their study found out that income significantly influenced the use of health care.

The study agrees with the study by Aung (2008) who studied Health seeking behaviour among Myanmar migrant workers in ranong province. Probable reasons could be because of the few that are divorced, singles, unemployed usually tend to ignore their health problem and so utilization level is too low. On the other hand, the chi-square test in relation to utilization of health care services by the respondents occupation and education show that their compared chi-square value at (7) and (4) degree of freedom at 0.05 level of significance respectively, indicate that the calculated values for occupation and education

(37.80119 and 12.4631) respectively are more than the table values observed (2.17 and 9.49) respectively.

This shows that there is no significant difference in women utilization of health care services with their occupational or educational levels. In other words, the null hypothesis is rejected as a significant difference is established. This implies statistically significant and it means the occurrence is not likely due to chance.

The results show that, there is a strong influence of women's education on the utilization of health care services and it is consistent with findings from other studies by (Shobana, 1996; Berker *et al*; 1993 Fosu, 1994 and Raghuparthy, 1996) who also observed that, the more educated women are more likely to use the health services. One possible explanation for this result is that education is likely to enhance women's confidence, capability to make decision regarding their health, thus making use of available health care services. Although this observations are differing from a study by Kyomuhendo, 2003 who discovered that universal primary education and decentralization of services did not have any impact in the utilization of obstetric care by women in Uganda. Reasons were based on norms, tradition and poverty induced among others.

With regards to occupation in Table 4.25, it remained as the strongest predictor found in the utilization of health care services. However, this result is different from the study by Sharma *et al* 2007, who discovered that occupation may not necessary be associated with greater use of health care services by the women in Nepal.

This difference may be due to the fact that, in most developing countries, respondents were equally literates and none educated, in addition, most of the jobs were

poverty induced which had a negative impact on utilization of health care services whereas in this study majority, of the women were educated, more were gainfully employed and have the knowledge about various modern health care services. However, this finding also corroborates the observation that women involved in gainful employment is one of the important factors positively affecting the use of quality medical care to treat complication.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 SUMMARY

The focus of the study was to explore the determinants of women access to and utilization of the health care services in the Kaduna metropolis. To this end, a total population of 384 female respondents within the reproductive age group of 15 – 49 years were interviewed with structured questionnaires as the tool. Majority of the sampled population are within the age bracket of 20 – 39 years, which are the ideal ages for optimum reproductive performance. Hausa's and the Northern minority constituted a third of the total respondents with Christians slightly more than Muslims. Majority of the women were housewives who earned #5000 – #10, 000 monthly.

Of the 384 women, a higher proportion of the women were married while only a few were either singles, widows, separated and divorced. This study has shown that the knowledge of health care access/use and benefits is high with all women. This high rate of awareness can be attributed to the high level of basic education among the respondents with

with least a primary level. It can also be due to the level of employment among the women. However, a small percentage of the women lack complete knowledge on the services. In this study, a very high proportion of the women utilize health care services but only a few had proper visits to health care. Visits help in monitor, not all utilize mainly due to ignorance of the benefits. Awareness of healthcare services was extremely high among the respondents. Most of those who were not utilizing health care despite awareness gave

reasons as time spent waiting on queues, lack of facilities, drugs and then lack of trained personnel among others.

However, major reasons for overall satisfaction, are due to better services and good doctors. Accessibility is not a limitation to the full utilization of these services as they were readily available and easily accessible to them. A large number of the women could afford for the services charged. A high proportion of the women were within the national health policy's five kilometre (5km) range to a facility. Only an insignificant number of the women are staying more than 5km to the various health facilities. Concerning the main means of transport, most of the women walk on foot, followed by bicycle and vehicle then other means to get to the health centres was represented by only a few women. Financial accessibility revealed that, cost of travel was affordable and only a few said it was high. The geographical factors perceived as barriers to health care services as identified by the women include lack of timely vehicles followed by high cost of transport, bad roads while an insignificant number of women stated long distance.

Also, there is apparently higher utilization rate amongst the women and this is because of qualified doctors, other supporting staffs are major contributors, this is followed by better equipment and services. However, most of the women confirmed that within their various districts in Kaduna metropolis, government clinics dominated followed by the private clinics then others like chemist, pharmacist, herbalist and traditional birth attendants T.B. Furthermore, one-fifth of the women reported that the health care services in their various communities were excellent in the services given by the health providers and half of the total women stated that the performance were satisfactory.

Concerning areas that need improvement, majority gave their reasons as, the reduction of cost of services and supply of drugs. Cost of health care service was satisfactory with most respondents spending less than 500 naira on each visit. Most of the respondents visited health centres more than once in six months.

Diseases that took the women most for treatment was pregnancy related illness such as haemorrhage, sepsis and induced abortion malaria, typhoid while other sicknesses accounted for their morbidity contributed by only a few. With regards to staff strength the findings showed that it is grossly inadequate in all health care centres, majority attend government hospitals which give free medication. The study also found that none of the health care services have all the diagnostic and treatment equipment. In addition, Barrau-Dikko Specialist hospital remained the biggest with the highest registered patients (200,000 females and 110,000 males) registered in the year 2010.Next is Yusuf Dantsoho and St Geralds while the least represented is Dr Gwamna- Awan general hospital. In all the four hospitals selected, health personnel's were inadequate with majority of the health workers confirming inadequacy of drugs supply and equipment, poor policy implication among others. Three-fifth of the respondents who were aware of family planning services also utilize their services. Most alluded reasons for non utilization to husband disapproval and religious prohibition.

## 5.2 CONCLUSION

In conclusion, Chi-square method of analysis used revealed that the level of utilization of health care services in Kaduna Metropolis is significantly influenced by Education and Occupation Status. The statistical level of significant show a good fit of 143.37, DF=4 for Education and 936.33 and DF=7 Occupational status at 0.05 level of significance. It also revealed a weak relationship between income levels/marital status and utilization. Chi-square confirmed that majority of women are denied access by their husband. Other factors that also contribute include high number of dependents, long waiting in the hospitals and cost of drugs among others. Overall, the study has shown that there is a good level of knowledge, acceptance, and utilization of health care services by the women in Kaduna metropolis compared to previous studies done in Kaduna state. However, the there is still room for improvement especially in the areas of community awareness on health care services benefits and quality of care given at health care centres.

## 5.3 RECOMMENDATIONS

The determinants of women's access to and utilization of Health Care Services in Kaduna metropolis have been studied and various means of improving them have been observed. Based on the conclusion drawn from the findings of this study, therefore make the following recommendations;

1. Since there are a lot of barriers hindering access to health care utilization, the ministry of health and other agencies (local and international) should develop strategies which will enhance women's access and utilization of health care services by creating more health care centres.

2. Since the level of illiteracy is very high amongst women, health workshops, seminars should be organised by the government at the local government and state level to enlighten and sensitize the women on health care utilization. Non-governmental organizations which are concerned with health related issues also

   have vital roles to play in organizing seminars and workshops geared towards health care utilization.

3. The government through the mass media (radio and television) should embark on aggressive campaigns directed towards women's place in health care access and utilization.

4. The study also recommends that district headquarter heads should be involved in the dissemination of information to women concerning health care utilization and access found within their community.

5. The government at the local, state and federal levels as a matter of urgency create and improve the road net work leading to health care centres within Kaduna metropolis for easy access and utilization by women.

6. The professional health care givers like nurses, doctors and traditional birth attendants should be sent on further training, organise workshops and seminars so as to improve their services on health care utilization and access for women within Kaduna metropolis.

7. The ministry of health in conjunction with other agencies should embark on the renovation of existing health care structures and also equipping them with modern and state arts of equipment for easy health care delivery

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## APPENDIX 1

**DEPARTMENT OF GEOGRAPHY AHMADU BELLO UNIVERSITY, ZARIA**

**RESEARCH QUESTIONNARE (WOMEN QUESTIONNAIRE).**

Thank you for accepting to be part of this research to examine the determinants of women's access to and utilization of healthcare services in Kaduna metropolis. Your accurate response will provide valuable information for possible decision of proper health care. Strict confidentiality will be maintained. Your name is not needed on the questionnaire.

TOPIC: "Determinants of Women's Access to and Utilization of Health Care Services in Kaduna Metropolis"

**A. Personal Data.**

1.1 Age at last birth day (a) 15-19 yrs ( ) (b) 20-24 yrs ( ) (c) 25-29 yrs ( )

(d) 30-34 yrs ( ) ( e) 35-39 yrs ( ) (f) 40-44 yrs ( ) ( g) 45 and above ( )

1.2 Ethnic group (a) Hausa ( ) (b) Yoruba ( ) (c) Igbo ( ) (d) northern minority ( )

(e) Southern minority ( ) (f) others (specify) ……..……..

1.3 Religion (a) Islam ( ) (b) Christianity ( ) (c) Traditional ( ) (d) Others (specify)

……

1.4 Highest level of education: (a) Qu'ranic ( ) (b) Primary ( ) (c) Secondary ( )

(d) Tertiary ( ) (e). None education

1.5 Occupation a) Business / petty trading (  ) (b) civil/public servant ( ) (c) Housewife (  ) d) Student (  )  (e) others (specify) ……

1.6 What is your monthly income  a) less than ₦ 5,000 (  ) b) ₦ 5,000 – ₦ 10,000 (  )

(c) ₦ 11,000 – ₦ 20,000 (  ) d) ₦ 21,000 – ₦ 30,000 (  )  e) ₦ 31,000 and above  (  )

1.7 What is your marital status: a) Single (  ) b) Married (  ) c) Separated (  ) d) Divorced (  ) e) Widowed (  ).

1.8 Husband's highest level of education: (a) Qur'anic (  ) ( b) Primary  (  )

c) Secondary (  ).  (d) Tertiary (  )  e) None (  )

1.9 Husband's  occupation  a) Business / petty trading (  )  b) Civil/public servant (  )

c)  Trader (  ) d) Artisan (  ) e) others (specify)...……..

**B. Level of Awareness on Availability, Accessibility and Affordability of Health Care Service.**

1.10 Are you aware of the existence of health care services in your community?

a) Yes (  ) b) No (  )

1.11 What is the source of your information (a) Television (  )  (b) Radio (  )

c) Newspaper (  )  (d) Friend/relative (  )  (e) Health worker (  )

f) Others (specific) ……

1.12 What type of health centre do you have in your community?

a) Local health centre ( ) b) Government hospital ( ) c) Private clinic ( )

d) Don't know ( ) e) others (specify)……..

1.13 What are the services rendered?

(a) Vaccination ( )

(b) General disease check up ( )

(c) Blood pressure check ( )

(d) Blood group and genotype ( )

(e) HIV counselling and testing ( )

(f) Malaria prophylactic treatment ( )

(g) Weight monitoring ( )

(h) Breast feeding practice and family planning ( )

(i) Personal hygiene and nutrition education ( )

(j) Cancer screening ( )

1.14 Are you able to pay services and medication? (a) Yes ( ) (b) No ( )

1.15 What is the attitude of the health care workers? a) Bad ( ) (b) Fair ( ) (c) Good ( )

(d) Very good ( )

**C. Factors Determining the Access to Health Care Services**

1.16 What are the reasons for patronizing the health care service?

a) Cheaper ( ) b) better services ( ) (c) closer to home ( ) d) good doctors ( )

e) Good opening hours ( ) f) other reasons (specify)…….

1.17 How long does it take you to get there? a) Less than 30 minutes ( )

b) 30 minutes to one hour ( ) c) Greater than one hour ( )

1.18 What is the means of transportation to the nearest health centre?

Private vehicle ( ) Commercial vehicle ( ) Walking (foot) ( ) Bicycle ( )

Others (specify).....

1.19 How do you perceive the cost of transportation to the facility?

Too high ( ) High ( ) Moderate/Affordable

1.20 In your opinion, which of these geographical barriers mainly affect your visits to Health care?

Long distance ( ) Lack of vehicles ( ) Bad roads ( ) High cost of transportation ( )

Others specify ( ).....

1.21 Are you able to pay for services and medication rendered? Yes ( ) No ( )

1.22 If yes, how much did you pay? a) Less than ₦500 ( ) b) ₦ 500-₦ 1000 ( )

c) Greater than ₦ 1000 ( )

1.23 How do you pay for the health care needs? (a) Income ( ) (b) Subscription for health care needs ( ) (c) Husband employment ( ) (d) Free health care services by the government

1.24 If it is from insurance, what is your source? (a) National health insurance scheme (b) Community health insurance scheme ( ).

**D. Factors Determining Utilization of Health Care Services**

1. 25 Do you use the health care services? a) Yes ( )b) No ( )

1.26 What are your reasons for utilizing the health care services? a) Monitors health status of women ( ) b) Monitors health status of babies ( ) c) Prevents complications ( ) d) others (specify)……..

1.27 If No, what are your reasons?

a) Lack of facilities ( ) b) Time spent waiting of queue ( ) (c) Non availability of drugs ( )

(d) Lack of trained personnel ( ) e) Attitude of health workers? ( ) (f) Others (specify)……

1.28 If you were to decide on a place of treatment, where would you prefer?

a) Home ( ) (b) Private clinic ( ) c) Hospital ( ) d) Prayer house ( )

e) Traditional healers ( ) f) others (specify)…….

1.29 Why do you prefer the above place for treatment? (a) Spouses decision ( )

(b) Its cheap ( ) (c) to conform with tradition ( ) (d) prompt action ( )

(e) Others (specify)…….....

1.30 Do you think the amount charged for services rendered is affordable?

Yes ( ) b) No ( )

1.31 How would you grade the available health service? A) Poor ( ) b) Average ( )

c) Satisfactory ( ) d) Excellent ( )

1.32 Which group of women can benefit from health services a) Single women ( )

b) Married women ( ) c) Pregnant women ( ) d) others (specify)…….

1.33 Frequency of visits to the health service a) less than once in 6 months ( )

b) Once in 6 months ( ) c) More than once in 6 months ( ) d) Once in 3 months ( )

e) More than once in 3 months ( )

1.34 What areas of health care services do you think needs improved facilities?

a) Attitude of medical personnel ( ) b) Reduced cost of service ( )

c) Provision of drugs ( ) d) Female providers ( ) (e) Decrease time waiting ( )

f) Others (specify)…….....

1.35 What are the major problems in the health care centre?

a) Time wasting in receiving treatment ( )

b) Inadequate doctors and nurses ( )

c) Inadequate facilities ( )

d) Payments of services rendered e) other problems (specify)……

E. knowledge and use of family planning methods and services

1.36 Have you ever heard of family planning? (a) Yes ( ) (b) no ( )

1.37 Which types of family planning have you heard of? (a) Condoms ( )

(b) Injectibles ( ) (c) Pills (d) Lactation ( ) (e) Withdrawal (coetus interrupt us) ( )

(f) Periodic abstinence ( ) (g) Amenorrhoea ( ) (h) others (Specify)…….

1.38 If yes, what is the source of your information? (a) Television ( ) (b) Radio ( )

(c) Newspaper ( ) (d) Friend/relative ( ) (e) Health workers ( )

(f) Others (Specify)…….

1.39 Have you ever practiced any form of family planning? (a) Yes ( ) (b) No ( )

1.40 If yes, what type? (a) Pills ( ) (b) condoms ( ) (c) injectibles ( ) (d) lactational

( ) (e) Periodic absence ( ) (f) amenorrhoea (LAM) ( ) (g) traditional method ( ) (g)

Others (specify)…….....

1.41 If no, why? (a) My religion forbids it ( ) (b) spousal refusal ( ) (c) Don't know

Where to get it ( ) (d) it is expensive ( )

(e) Others (specify)……

1.42 What is your stand on family planning?

(a) It is beneficial ( ) (b) it is harmful (c) my religion forbids it ( ) (d) My husband does not approve of it ( ) (e) others (specify) …….....

**THANK YOU.**

## APPENDIX 2

## HUMAN RESOURCE PERSONNEL QESTIONNAIRE

## DEPARTMENT OF GEOGRAPHY A.B.U, ZARIA.

Thank you for accepting to be part of this research to examine the determinants of women's access to and utilization of healthcare services in Kaduna metropolis. Your accurate response will provide valuable information for possible decision of proper health care. Strict confidentiality will be maintained. Your name is not needed on the questionnaire.

Name of institution _____

Locality_____

Total Patients registered in 2010_____

Male _____ Female _____

Number of deaths? Male _____ Female _____

Morbidity pattern for females in the last year? _____

Mortality pattern of females in the last year? _____

**PERSONAL DATA**

7. What are the numbers of health personnel in this health facility?

| Doctors | Male | Female | Total |
|---|---|---|---|
| Nurses | | | |
| Laboratory staff | | | |
| x-ray staff | | | |
| Community health | | | |
| Extension workers<br><br>CHEWS | | | |
| Record clerks | | | |
| Social welfare | | | |

INFRASTRUCTURE

(Tick as available)

8. Labs ( ) Generators ( ) Running water ( ) Boreholes ( ) Theatre facilities ( ) labour

Wards ( )

9. How many theatres for gynaecological problems do you have? _____

10. How many special clinics do you have? _____

11. How many pharmacists do you have? Male _____ Female _____

12. Do you have ambulance? Yes ( ) No ( )

13. If yes, numbers available _____

14. How many are functioning properly? _____

## APPENDIX 3

## INSTITUTIONAL QUESTIONNAIRE

**DEPARTMENT OF GEOGRAPHY AHMADU BELLO UNIVERSITY, ZARIA.**

Thank you for accepting to be part of this research to examine the determinants of women's access to and utilization of healthcare services in Kaduna metropolis. Your accurate response will provide valuable information for possible decision of proper healthcare. Strict confidentiality will be maintained. Your name is not needed on the questionnaire.

Serial number

1.0 What is the name of this health facility? _____

1.1What is the cadre? Primary health care ( ) secondary health care ( ) tertiary health care ( ).

1.2 Name of the Local Government_____

1.3 State: _____

1.4 Sex: _____

1.5 Age: _____

1.6Educational qualification _____

1.7How long have you been in this health facility?_____

1.8 What is your status/cadre? A) Doctor ( ) (b) Nurses ( ) c) Record officers ( ). (d) X-ray

1.9 Which department do you work?

a) GOPD (general out-patient department ( ) b) SOPD (surgical out-patient department

( ) c) Paediatrics ( ) d) General surgery ( ) e) O and G with family planning.

1.10 Do you have adequate health personnel and facilities in these health care services?

Yes [ ] No [ ] in doubt [ ]

2.0 Which of the following equipment do you have?

(Tick all the appropriate ones)

Weighing machine [ ] Delivery forceps [ ] Sphygmomanometer [ ]

Vacuum extractor [ ] Haemoglobin meter [ ] Immunization facilities [ ]

X-ray machine [ ] Foetal stethoscope [ ] urinalysis equipment [ ]

Refrigerator [ ] Body grouping and transfusion facilities [ ] Family planning IGT [ ] health meter [ ] Water supply [ ] toilet [ ] Drug card board [ ] electricity [ ]

2.1 How many of the following materials do you have? (State number)

Beds _____ motor vehicles_____

Wards _____ motor cycles _____

Ambulance _____ bicycles_____

Others (specify) _____

2.2 Which of the following drugs do you have?

Anti- malarials [ ] Haematinics [ ] Analgesics [ ]

Egometrine/syntocinon [ ] dressing bandages [ ] gention violet [ ]

2.3 Do you operate the drug revolving fund (DRF) scheme? Yes [ ]No [ ]

2.4 Is the drug revolving fund functional? Yes [ ]No [ ]

2.5 Which of the following services do you offer? Tick all the appropriate ones

Ante-natal care_____ Growth monitoring_____

Post-natal care_____ Nutrition education_____

Natal-care _____ Immunization_____

Family planning_____ Health Education_____

Encouragebreast feeding_____ Others(specify)_____

2.6 What is the type of family planning services offered? Natural [ ] Pills [ ] injectables [ ]

IUCD [ ] Condom [ ] only advice [ ].

**2.7 IMMUINIZATION SERVICES**

| VACCINE | CURRENTLY AVAILABE | | SHORTIN SUPPLY | | PROBLEM WITH STORAGE | COST |
|---|---|---|---|---|---|---|
| | YES | NO | YES | NO | | |
| BCG<br>POLIO<br>D.P.T.<br>MEASLES<br>TOXOID | | | | | | |
| | | | | | | |

2.8 What are your major challenges in your department that affects your optimal performance?

Monthly pay ( ) lack of materials in the department ( ) inadequate supply of drugs and equipment/materials.( ) poor policy implementation ( ) condition of service ( ).