

Utilization of Antenatal Health Care Facilities in Kerang District, Mangu L.G.A of Plateau State.

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Abstract- Antenatal care is a key strategy for reducing maternal and neonatal morbidity and mortality rate because adequate patronage of antenatal care services is associated with improved maternal and neonatal health outcomes. This study focuses on the utilization of antenatal care services among women in Kerang District, Mangu Local Government Area, Plateau State. Random sampling technique was used to select 192 representative women using the administration of questionnaires, while qualitative data was source through Focus Group Discussion (FGDs). Quantitative data was analyzed using descriptive and Chi-square statistic while the qualitative data was analyzed through content analysis. Findings from the study reveals that Primary Health Care Center was the most patronized center for antenatal service (63%), most respondents traveled less than a kilometer to antenatal care clinic (65%). The major benefits for attending antenatal care was to examine danger signs 160 (41.8%) and over half (53.1%) of the respondents did not know the number times that a pregnant woman should attend antenatal clinic. The most preferred place of antenatal care was Primary Health Care Centers (67.7%) and identified affordability as the main reason for patronage. Most women (75.5%) took permission from their husbands to attend antenatal clinic and 50.5% of the respondents gave birth at home during their last pregnancy. Over one quarter (67.2%) of the respondents attended antenatal clinic more than four times. Father was the most consulted immediately when a pregnant woman is sick (79.9%) and when illness persisted (65.6%), their advice was the most important (83.3%). The study concluded by highlight the role of education and literacy in the use of antenatal care services, the perception of receiving all the treatment needed and access issues in antenatal care and health care seeking. In order to reduce maternal and infant mortality and the well being of women in the study area, the study recommended the need for public enlightenment with the involvement of traditional institutions on the utilization of antenatal care services; and the need for health systems to be strengthened, equipped with adequate facilities so that they are able to offer a continuous care from conception through pregnancy and delivery.

Index Terms- Antenatal Care, Utilization, Pregnancy, Focused Antenatal care, maternal health, maternal mortality, infant mortality.

I. INTRODUCTION

Background of the Study

The World Health Organization (WHO, 2013) reported that maternal, and child health outcomes in Nigeria are among the worst in the world, and Nigeria contributes approximately 10% of the global burden of maternal and child death. It also estimated that 59,000 maternal deaths occurred in Nigeria in 2005 and the Maternal Mortality Ratio (MMR) was 1,100 deaths per 100,000 live births, giving a lifetime risk of maternal death of 1 in every 18. The situation in Northern Nigeria is a cause of concern because maternal mortality is much higher than the national average. Antenatal utilization is 65% in developing countries, which is low when compared to 97% in developed countries. Skilled attendance at delivery is 53% in developing countries while it is 99% in developed countries, and postpartum care utilization is 30% in developing countries as compared to the developed countries which is 90% (WHO, 2012).

In Nigeria, antenatal care patronage is reported to be 63%. The wide disparity in maternal health care indicators might explain the wide difference in maternal mortality ratio between the developed and developing countries. The 210 million women who become pregnant each year, 30 million or about 15% develop complications which are fatal in 1.7% in most cases. It has also been a challenge to assess the extent of progress towards the millennium development goal 5 target of improving maternal health due to lack of reliable data, especially in developing countries (WHO, 2010).

Maternal mortality has been difficult to measure accurately in rural areas. This is because the facts are hardly reported for cultural reasons. Maternal mortality ratios in most Sub-Saharan African countries range from 600 to 999 per 100,000 live births. In poor settings, home delivery is usually the cheapest option, but is associated with attendant risks of infection and lack of available equipment should complications occur. In developing countries, specifically in sub-Saharan African countries, many women do not have the good fortune to be attended to by skilled personnel during childbirth. This lack of skilled attendance could be considered as one of the major factors in maternal and infant mortality.

Nigeria has continued to witness a high maternal-mortality ratio, with substantial variation across its regions. Despite this, the use of reproductive health services remains low, and home delivery among women of child bearing age is widespread, hence maternal morbidity and mortality remains a public health problem (WHO, 2012). According to United Nations and World Bank (2005) statistics, an estimated 144 women die each day in Nigeria from pregnancy and related complications, making it one of the worst countries for women to deliver babies in the world.

The determinants of maternal mortality include access to health services, socio-economic status, pregnant women's health status as well as the reproductive behavior of the women (WHO, 2010). Evidence shows that illiteracy is one of the reasons why mothers choose to deliver at home in preference health facilities (hospitals or clinics). Some illiterate women always consider home child birth as natural, cheap and does not have any risk involved (Gabrysch and Campbell, 2009). The cultural belief in northern Nigeria that a woman's nakedness should not be seen by another man aside her husband is believed to be another reason why women choose to deliver at home (WHO, 2005).

Economic accessibility is also seen as a problem associated with home delivery. The financial capacity of the family that is the household head in relation to the costs of a facility delivery including transportation costs in moving to the hospital is one of the major reasons why women or families with low financial capacity choose to deliver at home. In Nigeria the majority of women in their reproductive age deliver at home, according to the National Demographic and Health Survey (NDHS, 2008) with regional variations. The northern part of the country has the highest and most of these home deliveries are not attended by skilled personnel. Socio-demographic, availability of health services, accessibility, behavior and attitudes of the health workers and socio-cultural issues affect delivery in health care facility (Mrisho, et al., 2010).

Global initiatives to intensify policy intervention for maternal mortality began with the Safe Motherhood Initiative in 1987, which was a response to growing recognition that primary health-care programmes in many developing countries were not adequately focused on maternal health. The 1994 International Conference on Population and Development strengthened international commitment to reproductive health. The focus on maternal mortality was sharpened when reduction in maternal mortality became one of eight goals for development in the Millennium Declaration of the Millennium Development Goal (Obaid T.A, 2009). The number of women dying due to pregnancy and childbirth has decreased by 34% from an estimated 546,000 in 1990 to 358, 000 in 2008. Progress is notable, but the annual decline rate is less than half of what is needed to achieve the Millennium Development Goals. To achieve the Millennium Development Goal, the annual decline rate should be 5.5% instead of the current 2.3% (WHO, 2010). In Sub-Saharan Africa, where 1 in 22 women risks dying from maternal causes in her lifetime, the adjusted maternal mortality ratio (MMR) was 900 deaths per 100,000 live births in 2005 (WHO, 2007). This study investigates the utilization of health services in Kerang District of Plateau state, Nigeria.

II. METHOD OF STUDY

The study area

Kerang is one of the districts in Mangu local government area of plateau state. The Kerang highlands are located in Mangu Local Government Area which is about 88 kilometers from Jos, the capital of Plateau State. Kerang comprises of ten villages, it borders Kombun to the north, Panyam and Pankshin to the east, to the south Bwonpe, and Ampang to the west. These beautiful volcanic mountains are the source of cool, enchanting springs,

which supply water to the popular spring water company (SWAN).

Method of Investigation

The study made use of both primary and secondary source material. The primary source were focus group discussions and administration of questionnaire. A total of five Focus Group Discussions (FGDs) one in each selected village was conducted. The selection of the discussants was done to ensure broad representation of the participants in terms of age and educational status. The number of discussants for each session ranged from 8-12. The researcher guided the discussion; an observer recorded and took notes. All the discussions were taped recorded. Tape recording and note taking were used to check and complement each other. Administration of questionnaire to women within the reproductive age group (15-49 years) in Kerang District. The secondary sources constitute information from journals, literature, papers, internet among others.

Analytical Technique

The analytical tools employed for the study were descriptive statistics and chi-square statistics. The chi-square is a non parametric statistical technique used to determine if the distribution of observed frequencies differs from the theoretical expected frequency. All the data generated at the end of every FGD and IDI were transcribed. Verbatim transcriptions were made for all tape-recorded FGDs. Thereafter, all the transcripts were coded. The edited reports of each of the interviews were prepared by themes and the key findings were noted and sorted. This enabled the pooling of similar ideas and statements under a particular code across variables which was used to support the quantitative findings.

Ethical Considerations

Ethical approval to conduct the study was sought and obtained from the health department of Mangu Local Government Area. Permission to conduct the study was also sought from Kerang district Head and Verbal consent was obtained from participating mothers. To maintain confidentiality for participating mothers, names were not used on the questionnaire. Unwilling participants were allowed to withdraw from the interview.

III. RESULT AND DISCUSSION

Health Care Services

Table 1: The types of health care facilities, means of transport and distance to health care facilities

Characteristics	Variable	Frequency	Percentage
Types of Health Care Facilities	Private	35	18.2
	PHC	121	63
	Traditional Healer	9	4.7
	Faith Based Center	27	14.1
	Total		192

Means of transport to health centre	Foot	97	50.5
	Bicycle	11	5.7
	Motorcycle	54	28.2
	Vehicle	30	15.6
	Total	192	100
Distance To Health Facilities	<1km	125	65.1
	<2km	49	25.6
	<3km	16	8.3
	>3km	02	1
Total	192	100	

Source: Fieldwork 2019.

Information on types of health care, means for transport and distance to health care facilities are contained in table 2. The table shows that 121 (63%) of the sampled respondents go for antenatal services in primary health care centres; 35 (18.2%) to the private clinics, 27 (14.1%) to faith based centers and 9 (4.7%) to traditional homes. Most discussants in the focus group discussions affirmed that most of them utilization antenatal services in Primary Health care centers, the reasons being that primary health care services are relatively cheap and that there are subsidies from the government, that any woman that attends antenatal care should have a subsidy of 5,000 naira, but this is not effective all over the state. This is to encourage pregnant women to utilization Antenatal care and to reduce maternal and infant mortality

Exactly half 97 (50%) of the sampled respondents used foot as their means of getting to the health centres, 11 (5.7%) used bicycles, 54 (28.1%) used motorcycles, and 30 (15.6%) used vehicle. Majority 125 (65%) of the sampled respondents travelled distance less than 1km to their health Care facilities, 49 (25.5%) travelled a distance of less than 2km to the health Care centre, 16 (8.3%) travelled less than 3km while 2 (1%) travelled 3km and above to health centres.

During focus group discussion most of the women reported that sometimes pregnant women may lack money to transport themselves to the health centres, and Health centre are sometimes located in long distances which discourage pregnant mothers to go and seek for treatment. The discussants reported that within their community, even though the distance is not a problem, but lack of trained personnel, bad attitude of health workers, and cost of drugs are some of the factors that made them opt for alternative medicine such as traditional Healers who are indigenous and understand them."

Table 2: Illness and perception of Treatment

Characteristics	Variables	Frequency	Percentage
Illness in the Past 12 months	Yes	134	69.8
	No	58	30.2
Total Sought treatment	Yes	134	100
	Self	25	18.7
Place of treatment	treatment	28	20.9
	chemist	17	12.7

Private health care	Private	48	35.8
	Primary	16	11.9
	Traditional healer		
Source: 2019.			
Total Satisfaction	Yes	96	71.6
	No	38	28.2
Total Best like about health care facilities	Health worker friendliness	36	26.9
	Drugs Availability	56	41.8
Total Least like about Health Care facilities	Provision of needed Care	42	31.3
	Others	0	0
Total Health worker attitude	Difficulty to get there	2	1.5
	Service or drugs cost	52	38.8
Total Health workers attitude	Transport cost	0	0
	Waiting time	56	41.8
Total	Health workers attitude	24	17.9
		134	100

Information on illness in the past 12 months, place sought for treatment, satisfaction, best likes and least likes about antenatal services contained in table 10. The table shows that a total of 134 (69.8%) of the sampled respondents were ill in the past 12 months - indicating that 58 (30.2%) of the respondents were not ill. Of those that were sick in the last 12 months, all respondents sought for treatment. This indicates the level of patronage of antenatal services by women in the study area. About 58 (71.6%) of the sampled respondents were satisfied with the treatment sought, while those that were not satisfied with treatment in the various health care facilities used for antenatal services were 38 (28.4%). The table also shows that 56 (41.8%) of the sampled respondents best like about antenatal services in various health care facility was because drugs were availability, 42 (31.3%) was because they provided the needed care, 36 (26.9%) because of the friendliness of the health workers. The least like about utilization of antenatal services in the various health care facilities was waiting time 56 (41.8%), service or drug cost 52 (38.8%), health worker attitude 24 (17.9%) and Difficult of getting there 2 (1.5%).

A discussant summarized what they feel less about the health facilities that:

Most women are intimidated by health providers which demoralize them from seeking quality Antenatal care. For instance, when I come go for ANC and the nurses start examining me, they abuse me and even blame me for getting pregnant at a young age, yet I got pregnant without knowing. They say "What were you looking for you young girl? Now you are going to die innocently. The end result of this is that I am not going back for ANC as I fear the health workers attitude, This statement negates the achievement of the MDGs goals 4, 5 and 6"

Table 3: Life birth in the last five years.

Characteristics	Variable	Frequency	Percentage
Infant born alive in the last five years	None	30	15.6
	One	96	50
	Two	61	31.8
	Three and above	5	2.6
Total		192	100
How many of those infants are alive in the past five year	None	32	16.7
	One	114	59.4
	Two	45	23.4
	Three and above	1	0.5
Total		192	100

Source: Fieldwork 2019.

Information on life birth in the past five years contained in table 11 .The table reveals that 96(50%) of the sampled respondents had one child in the past five years,61 (31.8%) gave birth to two children, 5(2.6%) gave birth to three children and above while 30(15.6%) of the sampled respondents did not give birth in the past five year. Slightly more than half 114(59.4%) of the sampled respondents had one child alive in the past five years, 45(23.4%) had two children alive,1(0.5%) had three and above. A further look at table 10 shows that there some deaths in the locality in the past five years. The deaths may be attributable to some of the women who do not attend antenatal clinic, where they will be examined for any complications that may arise during pregnancy and some may attend, but didn't give birth in the clinics.

4.4: BENEFITS OF ANTENATAL CARE SERVICES

Table 12: Benefits of attending antenatal care

Characteristics	Variable	Frequency	Percentage
Benefits of antenatal care	Check danger signs	160	41.8
	Check that the baby is growing well	43	11.3
	Be immunized	75	19.5
	Learn how to prepare for healthy birth	56	14.7
	Learn how to care for newborn	27	7.0
	Others	22	5.7
Total		439	100

Source; Fieldwork 2019.

Respondents views on the benefits of attending antenatal care is contained on table 12.The table shows that 160(41.8%) were of the opinion that it is to check the danger signs, 43 (11.3%) to check that the baby is growing well, ,75(19.5%) to be immunized,56(14.7%) to learn how to prepare for a healthy birth,27(7.0%) to learn how to care for newborn; while 22 (5.7%) to attend antenatal for other reasons.

IV. DISCUSSION AND FINDINGS

Slightly more than half 50.5% of the participants use foot as their means of transportation. Unreliable transport is also a barrier to access skilled delivery in rural areas, failure to plan in advance for transport cause higher number of women to deliver in their homes even if they had planned to deliver in health facilities (Mrisho et al, 2007;Magoma, M., 2010). Similar findings have been documented by study done in Nepal where by women who planned to deliver in health facilities 18% delivered at home due to lack of transport (Bolam et al, 1998). In rural Tanzania for instance 84% of women who give birth at homes are intended to deliver in health facility but due to transport problem and long distance to health facilities they end up delivering home (Bicego et al 1995).

Study shows most participants (65%) travelled a distance less than 1KM to attend antenatal clinic. This agrees with studies carried out by to Lekan and Sanni (2010), there is a general consensus among a researcher investigating the relationship between distance and utilization of healthcare facilities, according to him, this relationship is that fewer people are willing to patronize a particular facility as the distance from it increases. Empirical investigations revealed the existence of other factors, in addition to distance, as influencing the patronage pattern of healthcare facilities. For instance, Adejuyigbe (1973) demonstrated that attendance at each medical centre in Ife region is a function of both types of service available there and the distance from other center providing similar services. Okafor (1977) analyzed the spatial distribution and efficiency of hospital facilities in the old Bendel (now Edo and Delta) State. He found that there were discrepancies between the population distribution and the distribution of hospital facilities. (Olajuyin et al,1997) investigated the effect of location on the utilization of healthcare facilities in Irewole Local Government Area of Osun State, Nigeria. They found that healthcare facilities were unevenly distributed among the settlements and that the distance was a paramount factor. Ajala et al.(2005) studied accessibility to healthcare facilities as a panacea for sustainable rural development in Osun State, Nigeria. A study that was carried out by Sheldon (1981) in three rural areas of Guatemala, shows that the vast majority of persons have a reasonably good access to health service, even taking bad roads and slow travel times into account. Furthermore, the ministry of health has strategically located its facilities in congruence with rural market centre, which virtually the entire population visits regularly. Analysis of one thousand eight hundred (1800) actual patients visits however, shows that most of the patients cover only short distances. Several other studies also found that physical proximity of health care services, especially in the developing countries, plays an important role in utilization of these services (Airey, 1989; Paul, 1991).

In a study in Bangladesh, Bahaman and colleagues (1982) found that geographical distance is one of the most important determinants of health care service utilization in rural areas. Most literatures indicate that there is a positive relationship between distance and utilization of health facilities in general. Erinosh (1998) in one of his studies on the relationship between spatial location and use of health facilities revealed that patients who reside near health facility are more likely to utilize the facility than those who are residing far away, because of travel time and transportation costs. Stephenson and Matthews (2004) also revealed that distance needed to travel to the nearest health facility in Mumbai, India, among migrants, was cited a serious problem that prevents women from receiving prenatal care and delivering in a medical institution.

The study shows that the vast majority of 38.5% of participants earn less than five thousand naira only monthly (#5,000). This also is in consonance with the studies in sub-Saharan African countries most people are living under the poverty line and with low financial accessibility. A study conducted in South Africa on utilization of maternal health service shows that lack of financial resources for transport and distance to health facilities were the greatest barrier, (Tlebere et al., 2007) inability to pay long distances from health facilities to residential areas, combined with high transport cost contributed to low utilization of PMTCT services. Okafor (1982) has argued that the idea of travel cost has serious implications for the location and use of health care services. Most potential users do not want to spend much money on transport as observed by Owumi and Jegede (1991).

Majority (53.1%) of the participants did not know the number of times that a pregnant woman should attend antenatal clinic, many studies have demonstrated the Antenatal care contributes to good pregnancy outcomes and oftentimes benefits of antenatal care are dependent on the timing and quality of the care provided, (WHO and UNICEF, 2003). It has been shown that regular antenatal care is necessary to establish confidence between the woman and her health care provider, to individualize health promotion messages, and to identify and manage any maternal complications association between lack of antenatal care and perinatal mortality, low birth weight, premature delivery, pre-eclampsia, and anaemia (Ahmed and Das, 1992a).

In a study conducted in Mexico by (Coria-Soto et al., 1996) inadequate number of visits was associated with 63 per cent higher risk of intrauterine growth retardation. Similar results were reported in a Bangladeshi study where birth weight was positively correlated with the frequency of visits at antenatal clinics. These are some of the prevailing traditional beliefs and practices among most of the communities in some part of Nigeria that hinder the full utilization of modern health facility in general and maternal health care services in particular.

V. CONCLUSION

The role of education and literacy in the use of services and the perception of receiving all the treatment needed is evident in this study. It was found that if women had the choice though, most of them would use formalized or conventional medicine. The study also highlighted the importance of access issues to health care seeking. These factors involved costs associated with seeking

treatment, distance and the time taken to travel to health care facilities. Most of the population that sought antenatal care felt their needs were met, although some number did not seek antenatal care. The study results show that while women did not always have the means or the motivation to use health care services, these services may also not have the expertise to assist them. This study did not independently assess the quality of the treatment available to people, only the perception of satisfactorily receiving antenatal treatment needed.

In order to develop longer term solutions to the problems of motivating women to use health care services and comply with the required time to start visiting and the number of visits to health facilities, so as not to further increase problems of pregnancy complications; good quality health care services that are accessible and adequately resourced, need to be provided to the consumer. This is not a new concept and is certainly not an issue which is completely relegated to the domain of developing countries. It is tempting to self-diagnose and take medication or hope to feel better, rather than expend time and money on something that may just cure itself.

The prioritization of scarce resources for health care in the study area is particularly important. This requires information regarding the communities using these services and identifying where gaps exist. Quality health care that is comprehensible to women, affordable and accessible should be the goal of the government.

VI. RECOMMENDATIONS.

In order to reduce maternal and infant mortality, there should be a considerable improvement in the health and well being of women in Kerang district; the following recommendations are proffered:

1. There should be adequate public enlightenment, with the involvement of traditional institutions on the patronage of antenatal care services. It is believed that this awareness will have long lasting effect on the perception and attitude of women towards patronage of antenatal care services which will invariably reduce both maternal and infant mortality rate among women in Kerang district.

2. The health system must be strengthened, equipped with adequate facilities so that they are able to offer a continuous care from conception through pregnancy and delivery.

3. There should be a general improvement in the socio-economic status of the women at large, including the availability of free and compulsory education up to at least secondary level.

4. There is need to provide needed care which is comprehensive, culturally sensitive and which respond to the needs of child bearing women and their families.

5. In order to ensure that every woman has undeniable access to antenatal care services, there is a need to establish maternity waiting homes, maternal centers in those areas where access to road and transportation are unavailable.

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