
PATRONAGE OF MATERNAL HEALTHCARE SERVICES AND ASSOCIATED FACTORS IN A RURAL COMMUNITY OF ZAMFARA STATE, NIGERIA

Kabiru Ibrahim Yankuzo

Department of Sociology

Federal University Birnin Kebbi, Nigeria

kabiru.yankuzo@fubk.edu.ng

+2348062619669

Abstract

A significant size of the Nigerian population lives in rural areas and improving health condition of the rural populace especially women and children is paramount to socio-economic development of a nation. This study investigated patronage of maternal healthcare services and associated factors in Yankuzo community, Tsafe Local Government Area (LGA) of Zamfara State, Nigeria. Quantitative and qualitative data were used for the study. Statistical Package of Social Science (SPSS) was used for quantitative data analysis, while ATLAS.ti8 software was used for qualitative data. Underpinned by health belief model as the theory, the study discovered that utilisation of maternal healthcare services was very low in the community. Level of education, patriarchy, insecurity, suspension of financial grant, male healthcare providers and inadequate healthcare staff were the associated factors responsible for the situation. To improve utilisation of the services in the community, the study recommends provision of midwives in the facility and use of traditional and religious leaders for enlightenment of the populace.

Keywords: *Maternal health, maternal mortality, antenatal care, postnatal care, socio-economic factors*

Introduction

Patronage of maternal healthcare services has been recognized as an effective strategy for preventing pregnancy related morbidity and mortality. Women of reproductive age remain the most vulnerable group and continue to experience different diseases and deaths during pregnancy and childbirth. Globally, there has been increasing concerns over high rate of maternal morbidity and mortality especially in developing countries. According to WHO (2018) report, maternal mortality ratio (MMR) in low and middle-income countries (LMIC) was estimated at 415 maternal deaths per 100,000 live births, which is more than 40 times higher than it was in Europe and almost 60 times higher than in Australia and New Zealand in 2017. In Sub-Saharan Africa, MMR in 2017 was very high, where the lifetime risk of maternal death was 1 in 37, compared with just 1 in 7800 in Australia and New Zealand (WHO, 2018).

In Nigeria, Pregnancy and the period surrounding it is a dangerous time for too many women and girls who become pregnant. Thousands of women lose their lives annually in the country due to preventable pregnancy related complications. MMR according to NDHS (2018) was estimated at 512 maternal deaths per 100,000 live births. The lifetime risk of maternal death is even below the Sub-Saharan Africa average, where 1 in 34 women die from maternal related causes. High maternal mortality rate has a serious implication on the socio-economic development of the country as it is often used as one of the indicators of disparities between higher and lower income countries.

Ameliorating the burden of maternal deaths in the world, necessitated a paradigm shift from emphasis on curative to preventive health care delivery systems. It is well known and widely accepted that use of maternal health services such as antenatal care (ANC), childbirth at health facilities, and postnatal checkup prevent maternal morbidity and mortality. As the rate of maternal mortality in Nigeria remains unacceptably high, there is the need for effective and efficient utilization of preventive health services that enable pregnant women in the country to regard delivery as a positive and fulfilling experience; rather than to be associated with suffering, morbidity and in many cases maternal deaths.

In an effort to combat global maternal mortality through increased utilisation of maternal healthcare services, attention has been directed since the Alma-Ata conference of 1978 towards improving primary healthcare (PHC) as an effective strategy for ensuring healthcare for all irrespective of socio-economic background or place of residence. Consequently, most governmental and non-governmental organizations at both national and international levels initiated policies and programs with a view to actualizing the dreams. For instance, government policies such as National Primary Healthcare Development Agency (NPHCDA), the Midwives Service Scheme (MSS), bi-annual Maternal Newborn and Child Health Weeks (MNCHW), and humanitarian donations of pharmaceutical drugs by international organization such as UNICEF, WHO etc. have been put in place in Nigeria to improve primary healthcare services delivery and encourage mothers to easily access the services.

Statement of the Problem

In spite of the concerted efforts, utilization of maternal healthcare services such as antenatal care (ANC) services, childbirth at health facilities and use of postnatal care services remain low in Nigeria. There is inequity in terms of utilisation of the services among geo-political zones and states of the country. The rate at which maternal healthcare services are being utilized in northern Nigeria is low compared to the South. The NDHS (2018) reported only 42.2% of women with 4+ antenatal visit during pregnancy of the most recent birth, in the North West region compared to the South West with 84.2%. Only 25.9% reported for Zamfara State compared to Osun State with 95.6%. More so, 15.6% of mothers delivered in health facilities in the North West compared to South West with 76.3%, and only 10.8%, 7.8% and 7.4% facilities deliveries reported for Zamfara, Sokoto, and Kebbi States respectively; compared with 94.5%, 72.4% and 91.% reported for Imo, Kogi and Osun States respectively. This wide variation has serious implication for health condition and economic wellbeing of people in the State.

Socio-economic and cultural factors might be responsible for the low patronage of the services. Inadequate utilization of preventive health facilities in the State culminates in high maternal morbidity and mortality which could adversely affect many families as well as the overall socioeconomic development of the State. Against this backdrop, this study investigated the level of patronage of maternal healthcare services and examined the factors that affected utilization of the services in Yankuzo community of Zamfara State.

Literature Review

Maternal health has to do with health of women during pregnancy, childbirth and postpartum periods. The services that constitute maternal health include antenatal care, delivery care and postnatal care. WHO (1992), explained antenatal care as an umbrella term used to describe the medical procedures and care that are carried out during pregnancy. In other words, it is the care a woman receives throughout her pregnancy and is important in helping to ensure a healthy pregnancy state and safe childbirth. Delivery care has to do with the act of giving birth at a health facility and attended by a professional birth attendant. While postnatal care is the medical care received after pregnancy.

Among the socioeconomic and cultural variables that influence mothers' decision to use maternal health services may include level of education, level of income, household size, distance, occupation, religion, patriarchy, availability of service, attitude of healthcare providers among others. Akowuah, Baffour & Vitor (2018), conducted a study on determinants of antenatal healthcare utilisation by pregnant women in third trimester in Peri-Urban Ghana. The study revealed that satisfaction, physical distance, quality of service, education, and attitude of health staff influenced the rate at which expectant mothers used antenatal care services. Although the data gathered for the study were accurate, the data were not adequate and the study could also be criticized for not being guided by any theory. This is a gap which this study intends to bridge.

It is well established in the available literature that educational level of mothers determines use of antenatal care services. According to Agunwa *et al.* (2017), the association between maternal level of education and use of ANC services in Nigeria is a positive one. The study demonstrated an increase in utilization of ANC and delivery services with increasing level of education. The finding may be due to the fact that increase in educational attainment tends to increase awareness of health related information which predisposes

mothers to better utilization of health services. Other studies from Navaneetham & Dharmalingam (2002), Onasoga, Afolayan, & Oladimeji (2012), Yarzever & Said (2013), Desalew, Ayele, Kedir, & Desalegn (2014), Ononokpono & Odimegwu (2014), and Akowuah *et al.* (2018), have found a positive and significant association between education and utilization of maternal healthcare services.

Closely connected to education, many studies demonstrated a strong influence of income on utilization of maternal health services. Cost of health care is another major factor that must be considered in terms of healthcare service accessibility, as high cost of health care may push people to finding alternative healthcare facilities. Study conducted by Yarzever & Said (2013), on knowledge and barriers in utilization of maternal health care services in Kano State, northern Nigeria, shows that economic status and distance are barriers to seeking antenatal care especially among poor women who cannot access free government health facilities or transportation fee to health facilities. This finding has been confirmed by Akowuah *et al.* (2018) whose study found a positive relationship between economic status and utilization of maternal health services. Thus, higher income enables households to feed well, have good and hygienic accommodation, acquire good education and have access to good health care services which in turn improve the health status of the individuals or families.

Low rate of utilisation of maternal health services has also been linked to women's socioeconomic dependency on men, and gender inequality arising from religious and cultural influences. Previous studies in northern Nigeria demonstrated faith-related factors as barriers to Muslim women's use of maternal health services. For example, having to obtain permission from significant others such as parents, guardians, cultural or religious leaders and unwillingness to be attended to by male healthcare providers (Doctor, Findley, & Ager (2012). Study conducted by Solanke, Oladosu, Akinlo, & Olanisebed (2015), on religion as a social determinant of maternal health care service utilisation in Nigeria found that religious affiliation had significant influence on utilisation of maternal health care services when compared with the selected social determinants of health analysed in the study. The foregoing shows that policy makers must look at religion if global health targets particularly those directed towards improvement in maternal health can be reached. Individuals, or religious groups may sometimes take extreme positions on some health issues which such extreme positions, are usually based on misconceptions or religious doctrines that are sometimes poorly understood. The study carried out at Ife Central local government area in Osun State by Onasoga, Afolayan, & Oladimeji (2012), shows that there is significant association between knowledge, distance, marital status, religion and level of education of respondents under study and their utilization of ANC services. Although the methodology used for the study was appropriate, the study was not guided by any theoretical underpinning which this study will take cognizance of.

Theoretical Framework

Health belief model (HBM) was adopted to explain utilization of maternal health services. The model originated from a research conducted by three psychologists, namely Godfrey M. Hochbaum, Irwin Rosenstock, and Stephen Kegels (Rosenstock, 1974; Amzat & Razum, 2014). The model was developed in response to a widespread failure of people in the 1950s in the United States to accept disease preventive or screening tests for prevention of TB, cervical cancer, dental disease, rheumatic fever, polio and influenza which were provided on a demonstration basis, free of charge, or at very low cost (Rosenstock, 1974).

In the beginning, the model was developed with four key concepts: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers (Rosenstock, 1966). The concept of "cues for action" was added later to describe other factors that can trigger behaviour. Later in 1977, the concept of "self-efficacy or efficacy of expectation" was introduced by Bandura to explain how expectations can motivate behaviour. Stretcher and Rosenstock provided a framework which includes mediating factors, which were later added to highlight the influence of socio-demographic variables (e.g., age, gender, ethnicity, occupation, education, and income). Now the major components of HBM include the six major variables and the seventh modifying factors, which could influence course of action (Amzat & Razum, 2014).

The model is relevant to this study because its seven variables tend to push individuals to act in response to health problems in certain ways. They could change individual decision regarding use of maternal healthcare services. What follows explains the applicability of the model to this study.

1. Perceived susceptibility: Rosenstock (1974) stated that susceptibility refers to the subjective risks of contracting a condition. Individuals have different perception on the possibility of contracting a disease. Knowledge or experience of maternal complications tends to increase perceived susceptibility and the consequent use of maternal healthcare services. This may either encourage or discourage mothers' health seeking behaviour.
2. Perceived severity: Belief in the seriousness of a given health problem varies from person-to-person. For example if mothers perceive that pregnancy related complications and childbirths are threat to them, such perception may trigger utilisation of maternal health services.
3. Perceived benefits: the benefits of a particular health related action perceived by individuals determine health seeking behaviour. For example, the perceived benefits of utilization of maternal health to avert complications tend to affect decision towards a particular health behaviour.
4. Perceived barriers: this has to do with the benefits of certain health behaviour (e.g. utilisation of maternal health) minus the barriers or factors like inconvenient, expensive, unpleasant, and upsetting that constrain health seeking behaviour.
5. Self-efficacy: This is the belief that a particular action can lead to certain expected outcomes (Amzat & Ruzum, 2014). Thus, mothers' perception that use of maternal health services could lead to a desired outcome tends to reinforce health seeking behaviour.
6. Cues to action: this is a factor that triggers individuals to take health related action. For instance, personal experience of a disease or contact with a person living with a disease might trigger action to avoid falling into a similar condition.
7. Modifying factors: other factors such as level of education, occupation, proximity to health centres, income, religion, patriarchy and so forth may influence the course of action taken. These socio-demographic factors tend to influence individual decision to use maternal health services.

Methodology

Location of the Study: This study was conducted in Yankuzo community in Tsafe Local Government Area (LGA) of Zamfara State, Nigeria. Data on the total population of the community was not available but estimate of population at ward level in 2020, was 33,353 people (Ministry of Health, Zamfara State, 2021). Majority of the inhabitants were Muslims and very few Christians. Farming was the dominant occupation of the people. Maize, beans, soya beans, corns etc. were among the farm produce in the area.

Population of the Study: The study population was categorized into five which included women that have children under five years, household heads or fathers, healthcare personnel, religious leaders and the traditional ruler in the community.

Sample Size and Sampling Techniques: In order to reach as many women of childbearing age as possible, one hundred and fifty (150) copies of questionnaire were administered to women of child bearing age in Yankuzo town. Formula for determining sample size was not employed due to a lack of accurate population data for Yankuzo community. In terms of sampling procedure, multi-stage cluster sampling and systematic sampling were used. Stage one, the whole community was divided into five clusters, namely: Hayi area, Kanwuri area, Awala area, Yaryara area and Zamfarawa area. Stage two, ninety houses were selected from each of the five clusters and administered 30 copies of the questionnaires at interval of two houses, i.e. every third house was used. Where the target mother was not found, the next house was adopted and where there was more than one target mother, balloting was used to select.

For the qualitative data, six In-depth interviews (IDI) were conducted; 1 traditional ruler, 1 religious leader, 2 fathers and 2 healthcare personnel in the community using purposive sampling technique.

Data Collection: both primary and secondary data were used. The primary data were collected in two ways. First, through questionnaire, administered directly by female research assistants who were employed and trained by the researcher. Secondly, in-depth interviews were conducted by the researcher using IDI guide while the secondary data were collected from official records of Yankuzo PHC and Ministry of Health Zamfara State.

Data Analysis: Analysis of the quantitative data was based on 150 copies of the questionnaire which all were retrieved. Descriptive statistics were used for the analysis using the Statistical Package of Social Science (version 23). The qualitative data were carefully transcribed and translated to English and analysed thematically using ATLAS ti8 software and presented to complement the quantitative data for adequate understanding of the research focus.

Findings

Table 1: Socio-economic Characteristics of the Respondents (N= 150)

Variables	Frequency	Percentage
Age(Years)		
Less than 18	19	12.7
18-29	84	56.0
30-39	29	19.3
40-49	15	10.0
More than 50	3	2.0
Marital status		
Married	137	91.3
Divorced	9	6.0
Widowed	4	2.7
Educational qualification		
No formal education	37	24.7
Literate in local language or religious texts	42	28.0
Primary certificate	39	26.0
Religious affiliation		
Islam	148	98.7
Christianity	2	1.3
Ethnic background		
Hausa	148	98.7
Fulani	2	1.3
Occupation		
Home making	43	28.7
Food selling	67	44.7
Farming	4	2.7
Art	24	16.0
Traditional medicine woman	1	.7
Others (scent seller, soup items, tailor, groundnut cake, etc.)	11	7.3
Income		
Less than ₦5000	115	76.7
₦5,001 - ₦15,000	29	19.3
₦15,001 - ₦25,000	3	2.0
₦25,001 - ₦35,000	2	1.3
₦35,001 - ₦45,000	1	0.7

Table 1 shows that most of the mothers (85.3%) were within the age brackets 18 – 49 years. This is the age group considered in demographic studies to be highly productive and sexually active. Majority (91.3%) were married, 6% were divorced and 2.7% were widowed in Yankuzo community. Typical of northern Nigerian communities, 98% of the respondents were Hausa and predominately Muslims, majority (52.7%) had no Western education and for those with Western education, none had gone beyond secondary school. This indicates very low literacy level among women in the community. Consequently, the level of education reflected in their occupation. None of the respondents was employed in the formal sector but engaged in small scale businesses that yielded very meagre income. From the table, 76.7% earned less than ₦5,000 as their approximate income from all sources per month. Low income leads to poor education which in turn leads to poor understanding of health related behaviour.

Table 2: Socio-demographic characteristics of the Informants Interviewed

Informant	Code	Age	Qualification	Position
Informant 1	K1	56	SSCE	Religious leader
Informant 2	K2	50	No formal education	Household head
Informant 3	K3	55	ND	Health personnel
Informant 4	K4	29	No formal education	Household head
Informant 5	K5	50	SSCE	Traditional ruler
Informant 6	K6	45	ND	Health personnel

Table 2 shows the characteristics of the informants interviewed; 2 had ND, 2 SSCE, 2 no formal education. Regarding their ages, 4 were 50 years and above, 1 less than 40 years and 1 was 45 years old. A total of six sessions of IDI were conducted for the study. The data gathered through the interviews were thematically analysed using ATLASTi8 software and presented in a figure below.

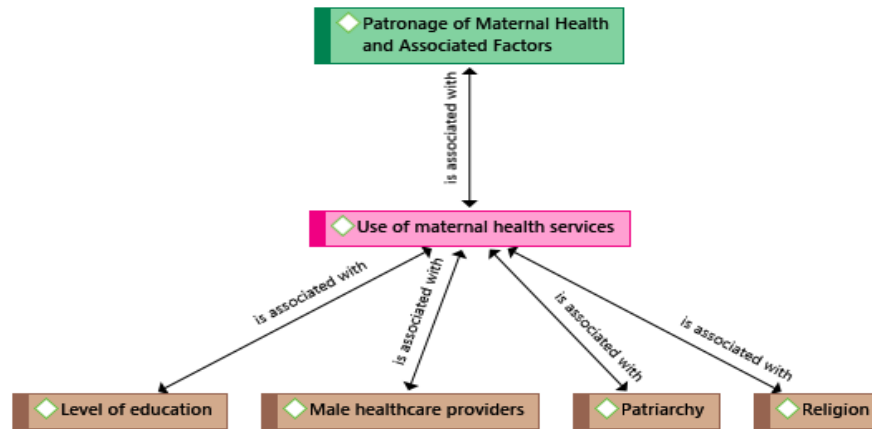


Figure I: Concept Map

The Figure I shows that use of maternal health services, level of education, male healthcare providers, patriarchy and religion were the five sub-themes developed from analysis of the qualitative data. Explanations for the sub-themes were made to complement the quantitative data

Table 3: Views of the Respondents on Utilization of Maternal health Services during the Last Pregnancy

	Response	Frequency	Percentage
Whether maternal health services were available in the community	Yes	150	100.0
	No	0	0
Number of times health facility was visited for ANC.	1	22	14.7
	2	13	8.7
	3	21	14.0
	4	14	9.3
	5	57	38
	6	5	3.3
	More than 6	0	0
Whether iron and folic acid tablets were taken	Yes	132	88.0
	No	18	12.0
Number of ant-tetanus toxoids injection received	1	25	16.7
	2	43	28.6
	More than 2	12	8.0
The place last baby was delivered	Never	70	46.7
	Hospital (attended by professional birth attendants)	41	27.3
	Home (attended by a traditional birth attendant)	63	42.0
	Home (not attended by any one)	46	30.7
Whether postnatal care was sought at health facility	Yes	49	32.7
	No	101	67.3

Table 3 reveals 100% of the respondents reported that maternal healthcare services were available in Yankuzo Primary Healthcare (PHC). Data from the interview with healthcare staff confirmed this. According to WHO & USAID (2018), eight ANC visits were recommended by WHO for normal

pregnancy, as depicted in the Table, majority (38%) had five ANC visits during last pregnancies and none had up to 8 ANC visits. This shows that the level of patronage was below the 8 number of visits recommended by WHO. Most mothers took iron and folic acid tablets during pregnancy and perhaps due to the fact that cases of anemia in pregnancy remain high over the years in Nigeria. According to NDHS (2018), a birth can be protected against neonatal tetanus when the mother receives two doses of anti-tetanus toxoids injection during pregnancy. As depicted in Table 3. Only 36.6% of the respondents received two or more doses of TT injections but significant number (46.7%) did not receive a single dose of the injection. More so, 12% of the respondents did not go for ANC at all out of which 7% because they were healthy, 3% due to lack of husbands' permission and 2% of the respondents said it was due to lack of interest.

On the place last baby was delivered, Table 3 shows that 27.3% of the respondents delivered at health facilities against the majority (72.7%) who either delivered at homes attended by traditional birth attendants or delivered at homes alone. This shows that most mothers delivered at homes attended by unprofessional birth attendants who could not render any competent help in case of child delivery related complications. Furthermore, use of postnatal care is of paramount importance. Only 32.7% went for postnatal check-up, against the majority (67.3%) who did not go for postnatal check-up. The reason for non-use of postnatal care services according to 30% of the respondents was because they were in good health after delivery, 15% stated lack of interest, 7% were not permitted by husbands.

Table 4: Trend of Utilisation of Maternal health Services in Yankuzo PHC from 2019 to 2021 Using Secondary data

Maternal health services received	2019	2020	2021
Number of women that attended ANC	3,848	3,213	2,311
Number of women that received 2 doses of anti-tetanus toxoids injection during pregnancy	2,188	1,996	1,844
Number of women that delivered at health facility	622	555	508
Number of women that received postnatal care	269	218	188

Source: Yankuzo PHC, 2022

Table 4 depicts the total number of women that used maternal health services from 2019 to 2021 in Yankuzo PHC. The data show a decrease in utilization of maternal health services in the area within the three consecutive years. The proportion of women that attended ANC, received 2 doses of TT injection, delivered at health facility and used postnatal care decreased from 3,848; 2,188; 622, 269 women respectively in 2019 to 3,213; 1,996; 555, 218 women respectively in 2020 and further decreased to 2,311; 1,844; 508, 188 women respectively in 2021. The causes of this trend according to the head of the facility were first, a non-governmental organization called Safe the Children used to offer 4,000 Naira as financial grant monthly to women coming for ANC which attracted many women to ANC. Suspension of the program had significantly affected utilisation of maternal health services in the area. Secondly insecurity and emigration prevented women from neighbouring villages to come to the facility and access the services.

Use of maternal health services was one of the five sub-themes developed in this study from analysis of the qualitative data as illustrated in Figure I. Use of maternal health services has to do with the act of using ANC, facility delivery, and postnatal care by mothers. Findings have shown that all the informants interviewed believed that utilisation of maternal healthcare services is very important and all supported their wives to use the ANC services. Specifically, a religious leader reported that:

My wife didn't use ANC services during her first and second pregnancies and used to experience pregnancy related complications such as vomiting, loss of appetite, unable to carry out daily domestic chores throughout the pregnancy periods. When it was time for delivery, she used to spend at least three days in labour and after delivery she used to spend several days suffering from postnatal related complications. Eventually during her third pregnancy I allowed her to use ANC services and by so doing, she remained healthy, carried out all her daily domestic chores throughout the pregnancy and during delivery she delivered safely at home within few hours in labour (K1).

Not only the religious leader that recognized the importance of maternal healthcare services and supported wife to use the services in the community, but also healthcare staff, the traditional ruler and the household

heads interviewed all believed in the efficacy of maternal health services in averting pregnancy related complications. Child delivery at health facility is very important but according to all the informants, most mothers in the community do not go to health facility for delivery except there is complication as reported by a traditional ruler that:

Honestly speaking, most pregnant women in Yankuzo deliver their babies at homes with the aid of traditional birth attendants or by inviting healthcare personnel to meet the women in labour at homes. However, when there is a complication that neither the traditional birth attendants nor the health personnel could handle, then the women are taken to hospital. (K5).

The services offered by the traditional birth attendants and healthcare personnel discouraged many families from taking mothers to hospital for delivery. The implication is that these personnel do not usually come with necessary drugs and equipment which if a client requires emergency surgery or other complications that require more professional competent help, the delay in going to health facility may lead to maternal deaths.

Regarding utilisation of postnatal check-up, all the informants believed that women that delivered safely at homes hardly go to hospital for postnatal check-up. A healthcare personnel who was also a staff of Yankuzo PHC reported thus “most women that safely delivered at homes hardly come for postnatal check-up. Mothers only come to health facility for postnatal care services when postpartum related complications accompanied the delivery” (K6).

Table 5: Views of the respondents on Factors affecting Utilization of Maternal health Services

Factors	Response categories				
	SA	A	UD	D	SD
Hospital delay in the community discourages utilization of maternal health services	15	37	4	62	32
Education encourages utilisation of maternal health services	32	52	0	51	15
Financial resources affects your effort to utilize maternal health services	9	40	7	74	20
Inadequate health care providers affects utilization of maternal health services in the community	27	56	5	48	14
Decision of husbands affects your effort to utilize maternal health services	38	47	6	38	21
Receiving maternal health services from male healthcare provider prevents you from using the services	45	49	1	46	9
Your religion discourages utilization of maternal health services	16	9	7	55	63
Domestic chores discourage you to go for maternal health services.	6	28	4	86	26
Attitude of health care providers prevents using maternal health services	4	55	2	66	23
Fear of wrong diagnosis discourages using maternal health services in the community	19	62	9	46	14

Table 5 shows that majority (84) respondents either agreed or strongly agreed that level of education encourages utilisation of maternal health services against 66 who did not agree. The finding is not surprising because education enables women understand and appreciate what it takes to maintain good health. Data from the interview conducted were consistent with quantitative data. Most of the informants interviewed reported influence of level of education on utilisation of maternal health services in the area. According to a healthcare provider:

Some people especially the non-educated, prefer traditional medicine to Western type. Sometimes when you advise uneducated women on what to do to improve their health conditions, they don't comply. Therefore, educated husbands and wives are more likely to seek maternal health services at facility and comply with medical directives compared with uneducated (K3)

Another healthcare staff reported that “utilization of maternal health services among the educated families is on the increase in the community. Even though both educated and non-educated mothers seek maternal

health” (K6). The foregoing clearly shows that education is a strong tool that empowers people to think wisely and use medical intervention.

Inadequate healthcare providers was another factor that significantly affected utilisation of maternal health services, as (83) respondents either agreed or strongly agreed that inadequate health care staff discouraged seeking maternal health services in the community, against 62 respondents who did not agree. Data from the interview have shown that there was no single midwife in the facility at the time of this study and this could be a reason for women reporting inadequate healthcare providers in the facility.

Patriarchy is another factor that influenced use of maternal health services in the area because 85 respondents either agreed or strongly agreed that decision of husbands affects their efforts to utilize maternal health services, against 59 who did not agree. This shows that majority of wives were ready to comply with whatever decisions taken by husbands including those of not using maternal health services. Similarly, data from the interviews have shown high level of agreement with such finding as most of the informants believed that wives cannot go to health facilities and seek for any health intervention without consent of the husbands. An informant stated that:

Here in the village, you discover that if a husband does not believe in utilization of maternal health services, the wife has no right to use the services. Any attempt to use the services without consent of the husband could lead to divorce especially when the husband is illiterate (K1).

Similarly, another respondent was quoted as saying “absolutely my wife has no right to go for maternal health services without my consent and if she decides to go I would punish her (K2)”. Another, opined that his wife cannot even try going out without his permission (K4). This shows that husbands’ powers to make decision override those of the wives in the community. Wives’ acceptance of subservient position in relation to husbands is not surprising in the area because such belief is imbedded in the social fabric of the society, as it rooted in religious doctrines of most of the respondents. It is apparent that women especially the married ones, only go to health facility and seek maternal healthcare services when it is approved by husbands. The implication is that many wives whose husbands resist seeking maternal health at health facility would be out of bounds to modern ANC, delivery and postnatal care services in the area.

Male healthcare providers attending mothers during ANC, delivery and postnatal check is another factor identified that significantly affected utilisation of maternal health services in the area. Most mothers (94) either agreed or strongly agreed that receiving maternal health services from male healthcare providers prevented using the services, against only 55 who did not agree. There is agreement with findings from the interview. Most of those interviewed opined that women in the area do not want to be attended to by male health care providers and both religious leaders and healthcare staff in the community confirmed such finding. According to a religious leader:

I am a member of the community’s committee on health. I am aware that some women do not allow some male healthcare providers in the PHC to attend to them. The reason is that ANC requires stomach examination and they don’t like such personnel to touch their bodies (K1).

The report that some women do not like male healthcare providers to attend to them has also been confirmed by a healthcare staff from Yankuzo PHC according to him:

Honestly speaking, majority of pregnant women don’t allow male healthcare providers to attend to them. The female staff we have are not always available and therefore use of male physicians have been the only alternative. But we have now requested our local government health department to deploy midwives in the facility to handle maternal health services delivery (K6).

The phenomenon did not only affect ANC but also delivery at health facility as another health staff stated thus:

Most women don’t come to the PHC for child delivery. The reason is that they would be attended to by male healthcare providers. Some women downgrade whoever will

be in the facility to attend to them but when they leave Yankuzo PHC for general hospital Tsafe or Gusau Specialist hospital they don't bother whoever will attend to them (K3).

The finding shows that the effect of male healthcare providers attending mothers during ANC or child birth is enormous in the area. The implication is that many women who dislike receiving maternal health services from male healthcare providers and cannot afford going to other facilities, either might not use maternal health services at all or resort to alternative medicines.

Furthermore, most of the respondents as shown in Table 5 either disagreed or strongly disagreed that religion, hospital delay, financial resources, domestic chores and attitude of healthcare staff prevent use of the services and therefore did not significantly affect utilisation of maternal health services in the community. Specifically, only 23 respondents either agreed or strongly agreed that religion discourages use of maternal health services against majority (118) who either disagreed or strongly disagreed. Data from the interviews revealed that all the informants believed that their religion accepts modern maternal health services. According to a religious leader:

Use of maternal health services such as ANC is acceptable in my religion. Because Islam encourages the adherents to take preventive measures against diseases. Muslims are therefore enjoined to use anything that protects them from contracting a disease (K1).

Similarly, a traditional leader observed that:

Our religious and traditional leaders always encourage followers to utilize maternal health services because of their importance. We pray that God continues to bless the government and non-governmental organizations that support maternal health programs. Today maternal morbidity and mortality have drastically reduced due to modern maternal health services being received by women during pregnancy (K5).

Discussion of Findings

Poor maternal health services is a risk factor for adverse pregnancy and childbirth outcomes among mothers. Based on findings of this study, majority (38%) had five ANC visits during last pregnancies and none had up to 8 ANC visits which shows that the level of patronage was below 8 number of visits recommended by WHO and adopted by Nigerian government. More so, only 36.6% of the respondents received 2 or more doses of TT injection while the significant number (46.7%) did not receive a single dose of TT injection throughout pregnancy periods. It can therefore be deduced that the level of utilisation of maternal health services was very low in the community. The finding was lower than that of a study by Awasthi, *et al.* (2018) in Nepal which found 70% of the respondents to have received TT Vaccines and 68.3% of the mothers consumed iron and folic acid tablets. However it was consistent with Babalola & Fatusi (2009) which found 60% of the mothers used antenatal services at least once during their most recent pregnancies, but only 44% had skilled attendants at delivery and 41% received postnatal care services in Nigeria.

Approximately 70% of the respondents did not deliver at health facility and did not use postnatal checkup. This finding was not consistent with that of Mwase, *et al.* (2018) who found 89% facility based delivery in Burkina Faso. Also, inconsistent with Al hazmi, *et al.* (2017) who revealed that 80.1% of mothers used ANC services and followed up their pregnancies consistently and regularly. Low utilization of maternal health services in the area is not surprising, because the community is located in Zamfara State which according to NDHS (2018) had only 25.9% of women with 4+ antenatal visits, 10.8% delivered at a health facility during the pregnancy of the most recent birth, in the State. Also in line with a report released by NBS, (2018).

The finding is related to perceived susceptibility, perceived severity and benefit aspects of the HBM used for the study. According to Rosenstock (1974), when an individual believes that he/she is vulnerable to a disease and that the disease is severe and a given action such as utilization of maternal health services

would be effective in averting or reducing the threat of maternal morbidity and mortality, these tend to trigger patronage of the services.

Level of education was found in this study as an important determinant of utilisation of maternal health services. This finding is consistent with previous ones by Yarzever & Said (2013), Desalew, Ayele, Kedir, & Desalegn (2014), Ononokpono & Odimegwu (2014), and Akowuah *et al.* (2018). Education enables mothers understand basic information and instructions that are good to health and emancipates both mothers and fathers from fatalistic and stoical attitudes to health.

The use of maternal health services depends on husbands' approval in Yankuzo community and also greatly influenced by sex of the physicians. This finding was similar to that of Ewhrudjakpor (2008) in Warri which reported that most husbands directed wives to female native birth attendants. Previous study (Katung, 2001) had also established that the type and cadre of health care providers influence the trends in health care utilization). The variables (education, male healthcare providers and patriarchy) related to what the Rosenstock (1974) identified in the theory as modifying factors that tend to influence individual decision to utilize maternal health services.

Conclusion and Recommendations

Patronage of maternal health services and associated factors were the concern of this study. Utilisation of maternal health services such as required number of ANC visits, TT injections, facility-based delivery and use of postnatal care among mothers in Yankuzo community was very low. Factors such as level of education, patriarchy, male healthcare providers, inadequate healthcare staff, and suspension of financial grant, insecurity and fear of wrong diagnosis were responsible for the situation. If the current state of affairs were not addressed, women would continue to experience maternal related morbidity and mortality in the community. To improve utilisation of maternal health services in the community, this study recommends that information and communication activities should be strengthened on the importance of maternal health services through religious and traditional leaders as well as healthcare providers in the community. The religious leaders teaching women Quranic education should enlighten mothers on issues such as number of ANC visits that are required before the child is born, required doses of TT injection during pregnancy, importance of facility-based delivery and postnatal care. Also, to motivate men in mosques at regular intervals to support their wives to use the services. Healthcare providers should also do the same at the PHC center while the traditional ruler should enlighten fathers during public gatherings as well as assigning town crier to make announcement in the community at a regular interval. Government should also post to the facility, adequate female healthcare staff or midwives that can effectively handle maternal healthcare delivery.

References

- Adgoy, T. E. (2018). Key Social Determinants of Maternal health among African countries: a documentary review. *MOJ Public Health*. Available: <https://medcraveonline.com/MOJPH/MOJPH-07-00219.pdf>. Accessed on 16th November, 2019.
- Agunwa, C. C., Obi, I. E., Ndu, A. C., Omotowo, I. B., Idoko, C. A., Umeobieri, A. K., & Aniwada, E. C. (2017). Patterns of maternal and child health service utilization in a rural community in south eastern Nigeria. *BMC Health Services Research*, 17:715 DOI 10.1186/s12913-017-2653-x
- Al hazmi, M. J., Habib, M. H., Sebeih, H. S., Khan, M., Elmaghrabi, A. S., Tharwat, J., . . . Mahmoud, H. N. (2017). Awareness of antenatal care importance among Saudi pregnant women in Madina. *Journal of Gynecology & Women's Health* 4(4): JGWH.MS.ID.555649, 1-15.
- Akowuah, A. J., Baffour, A. P., & Vitor, A. D. (2018). Determinants of antenatal healthcare utilisation by pregnant women in third trimester in pre-urban Ghana. *Hindawi Journal of Tropical Medicine, ID 1673517*, 1-8.
- Amzat, J., & Razum, O. (2014). *Medical Sociology in Africa*. Switzerland: Springer .

- Awasthi, S. M., Awasthi, R. K., Thapa, S. H., Saud, B., Pradhan, S., & Khattry, A. R. (2018). Utilization of antenatal care services in Dalit communities in Gorkha, Nepal: A cross-sectional study. *Journal of Pregnancy, ID 3467308*, 1-8.
- Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors. *BMC Pregnancy and Childbirth, 9:43*, 1 -13.
- Desalew, Z., Ayele, B., Kedir, T. & Desalegn, A. A. (2014). Factors Affecting Utilization of Maternal health care services in Kombolcha District, eastern Hararghe Zone, Oromia Regional State, Eastern Ethiopia. *International Scholarly Research Notices*, ID 917058, <http://dx.doi.org/10.1155/2014/917058>
- Doctor, H. V., Findley, E. S., & Ager, A. (2012). Using community based research to shape the design and delivery of maternal health services in northern Nigeria. *Reproductive Health Matter, 20(39)*, 104 - 112
- Ewhrudjakpor, C. (2008). Cultural factors blocking the utilization of orthodox medicine: A case study of Warri Area in Delta State. *Review of Sociology, 14 (1)*, 103-119.
- Katung, P. Y. (2001). Socio-economic factors responsible for poor utilization of PHC services in rural community in Nigeria. *Nigerian Journal of Medicine, 70(1)*, 28-29.
- Ministry of Health, Z. S. (2020). *Zamfara State estimated Ward Population*. Gusau: Zamfara State Ministry of Health.
- Mwase, T., Brenner, S., Mazalale, J., Lohmann, J., Hamadou, S., & Somda, A. M. (2018). Inequities and their determinants in coverage of maternal health services in Burkina Faso. *International Journal for Equity in Health, PMC5948792, PMID: 29751836*.
- National Bureau of Statistics (2018). *Statistical report on Women and Men in Nigeria*. Federal Government of Nigeria
- Navaneetham, K. & Dharmalingam, A. (2002). Utilization of maternal health care services in Southern India. *Journal of Social Science & Medicine 55 (2002)* 1849–1869
- Nigeria Demographic and Health Survey (2018). Abuja, Nigeria: National Population Commission.
- Onasoga, O. A., Afolayan, J. A., & Oladimeji, B. D. (2012). Factors influencing utilization of antenatal care services among pregnant women in Ife Central LGA, Osun State Nigeria. *Pelagia Research Library Advances in Applied Science Research, 3(3):1309-1315*. Available online at www.pelagiaresearchlibrary.com
- Ononokpono, N. D. & Odimegwu, O. C. (2014). Determinants of maternal health care utilization in Nigeria: a multilevel approach. *Pan African Medical Journal. 17(1)*.
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs, 2*, 328–335.
- Rosenstock, I. M. (1966). Why people use health services. *Milbank Memorial Fund Quarterly, 44(3)*, 94–127.
- Solanke, L. B., Olusegun, A. O., Ambrose, A., & Samson, O. O. (2015). Religion as a social determinant of maternal health care service utilisation in Nigeria. *African Population Studies, 29 (2)*, PP. 1868 – 1881
- WHO. (1992). Maternal Health and Motherhood Program: family and reproductive health. Geneva: WHO.
- WHO (2018). World Health Statistics: Monitoring Health for the SDGs. Geneva: World Health Organization.
- WHO & USAID. (2018). *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience: Summary Highlights and Key Messages from the World Health Organization's 2016*. USA: WHO.

Yar'zever, S. I. & SAID, Y. I (2013). Knowledge and barriers in utilization of maternal health care services in Kano State, northern Nigeria. *European Journal of Biology and Medical Science Research*, 1(1), pp.1-14