

## **ATTITUDE OF MOTHERS TOWARDS USE OF ANTENATAL CARE AND CHILDHOOD IMMUNISATION SERVICES IN ZAMFARA STATE, NIGERIA: A QUALITATIVE STUDY**

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**ABSTRACT:** Maternal and under-five mortality is averted through the utilisation of antenatal care (ANC) and childhood immunisation services. However, utilisation of the services is determined by the attitude of people towards the services. This study examined the attitude of mothers towards the use of Antenatal Care (ANC) and childhood immunisation services in Zamfara State, Nigeria. A qualitative design was employed for the study. Twelve (12) sessions of Focus Group Discussion (FGD) were conducted, 6 each for mothers and the household heads. Six sessions of Key Informant Interview (KII) were also conducted for traditional rulers and healthcare professionals. The data were analysed thematically using ATLAS.ti8 software. The study identified that most of the mothers and household heads in Zamfara State had positive attitudes towards ANC and childhood immunisation services. Furthermore, the study found that the positive attitude of only mothers towards ANC and childhood immunisation might not suffice as attitudes of healthcare providers and extended family members, as well as religious and traditional leaders' support, exerted strong influences on women's perception of ANC and childhood immunisation services. This study recommends that governmental organisations, managers of maternal and child health programmes, and other stakeholders should educate the general public about the importance of ANC and childhood immunisation and encourage parents, religious leaders, and traditional leaders to improve/sustain the positive attitude towards the services. More importantly, academic staff involved in healthcare professional training should inform their students about the need to accord respect, humility, and commitment to women seeking ANC and childhood immunisation.

**Keywords:** Antenatal Care, Childhood Immunisation, Healthcare Provider, Maternal And Child Mortality

### **INTRODUCTION**

Antenatal care and childhood immunisation services are the most cost-effective strategies for deterring maternal and child morbidity and mortality across the world but people's beliefs, feelings and values towards the use of the services vary considerably from one society to another (WHO, 1992; Rappuoli, 2014; Park, 2015). Antenatal care is a competent preventive and promotive healthcare service given to women during pregnancy. Childhood immunisation concerns injections/vaccines that are administered to children under-fives in order to get protection from childhood killer diseases. Although some people cherish ANC and childhood immunisation services, others willingly criticise and resist the services and both behaviours have serious consequences on maternal and child health. Over the years, researchers, governmental and non-governmental organisations such as the United Nations- Sustainable Development Goals (SDGs), United Nations Children Funds (UNICEF), as well as health professionals continue to worry about a high level of global maternal and child mortality

particularly in developing countries, which are avoidable through effective utilisation of ANC and childhood immunisation services (WHO, 1992; Rappuoli, 2014; Black et al. 2016).

According to collaborative research published by the World Health Organization (WHO et al. 2023), the global maternal mortality ratio (MMR) was estimated at 223 per 100,000 live births in 2020. Sub-Saharan Africa continued to have the highest MMR worldwide which was estimated at 545 per 100,000 live births but Western Africa Sub-region had the highest (754 per 100,000 live births ) in the same year. Maternal mortality in Nigeria has been unacceptably higher than the average for the Western Africa Sub-region. Although the nationwide MMR during the seven years before the 2018 Nigeria Demographic and Health Survey (NDHS) was estimated at 512 maternal deaths per 100,000 live births (NPC, 2018), a recent study revealed 814 maternal deaths per 100,000 live births in Nigeria especially the northern part of the country (Alubo, 2021). The estimate was strengthened by a more recent report which estimated the country's MMR at 1,047 per 100,000 live births (WHO et al. 2023).

In terms of child mortality, things are not all that different in Nigeria. The under-fives born in Sub-Saharan Africa are subject to the highest risk of childhood mortality in the world, with an estimated mortality rate of 71 deaths per 1,000 live births in 2022 (UNICEF, 2024). Based on the 2018 NDHS, Nigeria's under-five mortality rate was estimated at 132 deaths per 1,000 live births which was unacceptably higher than that of Sub-Saharan Africa (NPC, 2018). This is substantiated by a more recent estimate developed by the United Nations Inter-Agency Group for Child Mortality Estimation that Nigeria is among the only five countries in the world that had an under-five mortality rate greater than 100 deaths per 1,000 live births in 2022 (UNICEF, 2024).

The high levels of maternal and child mortality in sub-Saharan Africa countries such as Nigeria could have been prevented through the use of ANC and childhood immunisation services whose coverage remained low over the years in the country (Doctor et al, 2012; Idris, et al, 2013; Gidado et al, 2014; NPC, 2018). Certain factors influence the effective utilization of ANC and childhood immunisation services. Central to this study is the attitude of people towards the services is an important predictor of utilisation of the services. People's attitudes to ANC and child immunisation could be positive or negative and both are important in the utilisation of the services.

Studies conducted in other places (Bashir, et al, 2023; Joseph & Jean, 2024) reported that overwhelming majority of the respondents had positive attitudes towards use of ANC services. Findings of earlier study have shown that women that had positive attitudes towards ANC had a higher number of ANC visits than those with negative attitudes (Ogunba & Abiodun, 2017). This shows that positive attitude to ANC tends to predispose prospective mothers to utilize ANC services thereby reducing cases of pregnancy related complications in the society. Personal experiences can also influence mothers' attitudes towards ANC as concluded by Ogu and Alegbeleye (2018) that pregnancy and childbirth are holistic experience that is greatly affected by woman's attitude and type of care received. More so, perceptions of pregnant women regarding their personal experiences relating to ANC services determine their attitudes towards the services (Drigo et al, 2020).

Attitude of people was also found to be important predictor of childhood immunisation. Studies conducted in different countries (Awosan et al.; 2018; Gentle, 2019; Singh et al., 2019, Abimbola & Misbahu, 2023; Resty & Lydia, 2024) reported that most of the respondents

demonstrated positive attitude towards immunisation. Majority considered immunisation to be safe for children and necessary to immunise their children. Most people were interested in ensuring that children are fully immunised after delivery and recommend full immunization of children to their relatives. Furthermore, the studies conducted in Bungudu and Gusau LGAs in Zamfara State where this study was conducted (Gidado et al.; 2014; Abubakar, 2019) also reported positive attitude of most of the respondents towards childhood immunisation. However significant number of the respondents exhibited negative attitude to immunisation arguing that immunisation could cause infertility, vaccination not safe, it is against religion, it causes HIV and sterility.

### **Statement of the Problem**

Positive attitude of mothers towards ANC and childhood immunisation services might lead to optimal utilisation of the services while negative attitude primes low utilisation. Low utilization of ANC and child immunisation services by people is associated with maternal and child morbidity which could unavoidably lead to high levels of maternal and child deaths (Alliance, 2015; Kuhnt & Vollmer, 2017). Factors including mothers' experiences regarding use of ANC and childhood immunisation services, attitude of healthcare providers and extended family members, as well as traditional leaders' supports might shape the attitudes of mothers towards the services in Zamfara State.

Moreover, religion may also contribute to the attitudes of mothers towards childhood immunisation. In the northern part of Nigeria, childhood immunisation was seen by many Muslim clerics as a western ploy to regulate the population of Muslims. The belief that infant immunisation causes infertility or HIV was widespread, which culminated in momentous anti-immunisation resistance in northern Nigeria during the last two decades. This constrained many people from accepting childhood immunisation in the region. Also, the attitude of mothers to ANC and childhood immunisation is shaped by their culture. Some mothers especially in the rural areas and even in urban areas patronise traditional medicine and traditional birth attendants (TBA) even at the time of delivery than modern preventive medicine which may lead to a wrong diagnosis. Furthermore, negative attitudes of health personnel might also affect the compliance of mothers to ANC and childhood immunisation services. Health workers who are expected to exhibit high sense of professionalism by being polite and friendly but some of them tend to be harsh and unfriendly to their clients in the State.

Although Gidado (2014) and Abubakar (2019) examined attitude of people to childhood immunisation in Bungudu and Gusau LGAs during the last decade, to the best of my knowledge, recent study that examined attitude of mothers towards use of ANC and childhood immunisation services in Zamfara State is not available and more importantly, the studies lacked geographical coverage, thus, cannot represent the reality in the whole State. Against the backdrop, this study sought to find answers to the questions below.

### **Research Questions**

This study sought to find answers to the following questions:

- i. what is the attitude of mothers towards use of ANC and childhood immunisation services in Zamfara State?

- ii. what are the factors responsible for shaping mothers' perception of ANC and childhood immunisation in Zamfara State?

### **Aim and Objectives of the Study**

The aim of the study was to examine the attitude of mothers towards the use of ANC and childhood immunisation services in Zamfara State. The specific objectives were:

- i. to examine the attitude of mothers towards ANC and childhood immunisation services in Zamfara State.
- ii. to identify the factors responsible for shaping mothers' perception of ANC and childhood immunisation in Zamfara State

### **METHODOLOGY**

A qualitative, exploratory descriptive design was used to explore the attitude of people towards ANC and childhood immunisation services in Zamfara State, Nigeria. The State consists of fourteen Local Government Areas (LGAs) across three Senatorial Districts (SDs), namely: Zamfara Central Senatorial District (ZCSD), Zamfara North Senatorial District (ZNSD) and Zamfara West Senatorial District (ZWSD). Gusau and Tsafe LGAs from ZCSD, Kaura Namoda and Zurmi LGAs from ZNCD as well as Anka and Maradu LGAs from ZWSD were purposively selected for the study. Two political wards from each of the six LGAs were also purposively selected.

#### **Participants**

The study's population comprised of mothers that had under five children, household heads, traditional rulers and healthcare personnel. Twelve (12) sessions of Focus Group Discussion (FGD) were conducted, 6 each for mothers and the household heads. Furthermore, six sessions of Key Informant Interview (KII) were conducted for traditional rulers and healthcare professionals. The respondents were drawn from three locations - urban, semi-urban and rural areas. The State capital was considered as urban, local government headquarter was considered as semi-urban while other villages were considered rural areas.

#### **Data Collection**

Data were collected through face-to-face discussion and interview using open-ended and unstructured questions derived from the study's objectives. Follow up questions, probing and paraphrasing were used to deepen the discussions. Observations and field notes were made. IC Recorder was also used to capture the discussions.

#### **Data Analysis**

The data were carefully transcribed verbatim and analysed thematically using ATLAS ti8 software.

### Ethical Consideration

Regarding ethical considerations, informed consent and cooperation of each participant was obtained for the conduct and publication of the findings of this research. The study has also been examined and approved by Zamfara State Health Research Ethics Committee, with the ethics approval number: ZSHREC03092021 on 29th September 2021.

### FINDINGS

**Table 1: Socio-Demographic Characteristics of the Participants for FGD**

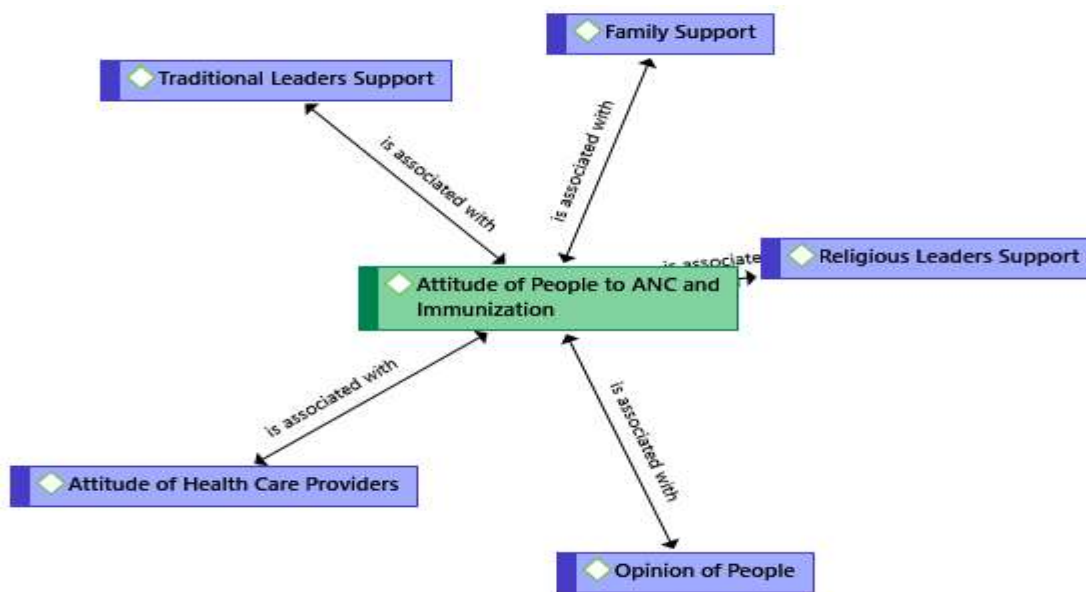
FGD	Sex	Approximate Age	Qualification	Position	LGA
FGD1	Females	35 years	No formal education	Housewives	Anka
FGD2	Males	40 years	Bachelor degree	Household heads	Gusau
FGD3	Females	40 years	No formal education	Housewives	Gusau
FGD4	Males	45 years	Bachelor degree	Household heads	Gusau
FGD5	Females	40 years	NCE	Housewives	Kaura
FGD6	Males	50 years	No formal education	Household heads	Kaura
FGD7	Males	40 years	Bachelor degree	Household heads	Maradun
FGD8	Females	28 years	No formal education	Housewives	Maradun
FGD9	Females	30 years	SSCE	Housewives	Tsafe
FGD10	Males	45 years	No formal education	Household heads	Tsafe
FGD11	Females	40 years	No formal education	Housewives	Zurmi
FGD12	Males	30 years	Diploma	Household heads	Zurmi

Table 1 deals with the socio-demographic attributes of the discussants that participated in 12 sessions of the FGD, eight discussants participated in each session, making a total of 96 participants. Five sessions were conducted in rural areas, five in Semi-urban and two in urban areas. Six sessions were conducted for both house wives and household heads and for those with formal education and those with no formal education across the State.

**Table 2: Socio-Demographic Characteristics of the Respondents for KII**

Informant	Code	Age	Qualification	Position
Informant 1	K1	55 years	Bachelor degree	Health care staff
Informant 2	K2	55 years	PhD	Health care staff
Informant 3	K3	55 years	Bachelor degree	Health care staff
Informant 4	K4	60 years	Grade II	Traditional ruler
Informant 5	K5	72 years	Bachelor degree	Traditional ruler
Informant 6	K6	82 years	Certificate in public admin.	Traditional ruler

Table 2 reveals that six sessions of KII were conducted, three each for traditional rulers and healthcare professionals. All the informants attained different levels of formal education. The analysed data yielded the following themes and sub-themes as shown in Figure 1: Attitude of People to ANC and childhood immunisation, the opinion of people, family support, attitude of healthcare providers, religious leaders' support and traditional leaders' support.



**Figure 1: Attitude of People to ANC and Childhood immunisation**

### **3.1 Theme: Attitude of people to ANC and Childhood Immunisation Services**

In the context of this study attitude means people actual feelings of likes and dislikes towards utilisation of ANC and childhood immunisation services. The attitudes of people were assessed about how they perceive ANC and childhood immunisation services, the importance of ANC and childhood immunisation services and their health seeking behaviour. People experiences regarding use of ANC and childhood immunisation services determine their attitudes towards the services. People previous experiences relating to ANC and childhood immunisation services can be positive or negative.

**3.1.1 Peoples' opinion/Attitude of people to ANC:** Concerning the ANC, both the mothers and the household heads had positive attitudes towards ANC services. Generally, the participants from all the FGD sessions, irrespective of their sexes, levels of education or places of residence expressed interests in ANC believing that ANC is very important for women during pregnancy, arguing that the more pregnant women attend ANC the more likely they are to avoid pregnancy-related complications. A male discussant from rural area reported that:

In my opinion, using ANC services is quite important, I strongly encourage mothers to go for ANC in order to remain healthy during pregnancy and have safe delivery. Mothers that attend ANC are more likely to have safe delivery than those who do not (FGD10).

Similar point was also reported by a Semi-urban mother in another session of FGD thus:

ANC is very vital, pregnant women should not wait until they are requested to go for ANC; instead, they should request for it. Women should be informing their husbands or relatives that using ANC services is essential for both the mother and the unborn child (FGD9).

Furthermore, the above positive attitude is strengthened by the fact that most of the people that participated in this study from urban, semi-urban and rural areas have expressed interests in using ANC services including the household heads. Showing their willingness to use the services, a participant from urban area viewed utilisation of ANC as a tradition in their community as quoted thus:

It is impossible to overstate the importance of ANC services. Pregnant women can only know whether they or their unborn children are healthy, what to eat and how to behave to remain healthy by going for ANC. In fact, here in Gusau, going for ANC during pregnancy has become a tradition for women (FDG2).

**Peoples' opinion/Attitude of People to Childhood Immunisation:** Similar positive attitudes have also been reported during FGD sessions in which most of the participants irrespective of their level of education or places of residence believed that childhood immunisation is important in protecting under-five children from childhood killer diseases. Only a few positive views out of many were quoted and presented in this section. Beginning with a household head who had no formal education arguing that:

I take Immunisation of children seriously because it is very vital and I don't joke with it. I take all my children to health facility for immunization because even if a fully immunised child contracted any of childhood diseases will never be as severe as a child who had not received the vaccines at all (FGD10).

An educated male FGD participant from semi-urban area reported that:

Childhood Immunisation is very vital because it strengthens immune systems of children to resist diseases. Taking care of infant is crucial, since we all believe that ANC is beneficial to both mother and the foetus. Now that the child has been born, it is necessary to look after child's health. Because there are childhood killer diseases that if a child is not immunised against them, have a likelihood of contracting them. Nowadays, childhood diseases have been significantly reduced as a result of immunisation. For example, smallpox and polio have been eradicated through immunisation. In addition, we used to see many children in our neighbourhood suffering of whooping coughs, but now there are just a few children in the area with such ailments (FGD7).

Similar points were reiterated by another educated participant in another session of FGD thus:

Stakeholders of immunisation program have come to conclusion that vaccination is a lawful act. Medicine can be divided into two categories: preventive and curative. Because curative treatment is more difficult and expensive, prevention is the most significant and preferred option. When you are immune to a disease, you are free of it. Immunisation as a preventative medication has advantage over curative medicine in that it is free, but curative treatment requires payment. Now that the world has become a global village, if one part of the world is infected by a disease,

the other parts will be affected as well. That is why, whenever a contagious disease occurs, the world's leaders usually work together to ensure that everyone is protected against it. We've all seen how important immunisation is in eradicating a variety of diseases. For example, Europe is now devoid of polio, malaria, smallpox, and other diseases through immunisation. Measles, polio, whooping cough, and other diseases have all declined in Nigeria as a result of inoculation. Children who have received the required doses of vaccines are more likely to be healthier than those who have not (FGD2).

People have now been salvaged from widespread notions that infant immunisation causes infertility or HIV, which culminated in significant anti-immunisation resistance in northern Nigeria during the last two decades. Findings of the study revealed that majority of the participants including those living in the rural areas argued that immunisation is harmless to youngsters as an informant argued that:

There was insinuation that kid immunisation causes infertility, yet I've seen children born 30 years ago who had received immunisation and are now married and have children. They would not have given birth if it had been used to cause infertility (FGD10).

In fact, most of the participants of FGD and IDI sessions believed that immunisation is safe. According to an informant "I don't believe vaccines cause infertility; if western civilization was concerned about this, they could have used salts or sugar, which are commonly used by people" (FGD3). A traditional ruler added that "to claim that childhood immunisation causes infertility is a spurious assumption that has since been proven false" (K5). A question posed by a participant from FGD session strengthened the argument that "why do we have so many children today after we were all immunised as children if immunisation causes infertility? Only God has the power to render a person infertile" (FGD5).

However, two male participants from Maradu LGA still had negative attitudes towards childhood immunisation and were the only participants found with such views in all the FGD and IDI sessions conducted across the State. Surprisingly according to one of them who possesses a national diploma and lives in semi-urban setting:

I don't believe in childhood vaccination because I believe it is a western plan to cause infertility in our children. Although some people claim to have seen children who were immunised in the past and now have married and gave birth many offsprings, I have not encountered such a case to my knowledge. As a result, I am convinced that immunisation causes infertility. Those I've seen who were immunised have not yet married. My opinion is not the same as anyone else's. I'm not convinced that children should be immunised. I don't allow my children to receive it, and everyone in our community is aware and am ready to bear the repercussions of my stance (FGD7).

The other one resists child immunisation not because it brings about infertility but due to its side effects as he reported thus:



I used to take my children for immunisation but I stopped it after seeing the side effects of vaccinations. The scenario was that I took my child to the hospital for immunisation one week after birth, and then we returned him for another inoculation after a few weeks. The trouble was that the child's leg swelled after receiving the third dose, which I had to spend a lot of time and money treating him before he recovered. Since then, I have never taken my child for immunisation again and I would not suggest anyone to do so (FGD7).

The foregoing reveals that in spite of the anti-immunisation views expressed by very few participants, the proposition emerging from the findings is that both the mothers and the household heads from rural, semi-urban and urban areas in the State had positive attitudes towards ANC and childhood immunisation services. Resistance to immunisation on account of infertility or HIV that vaccines are alleged to bring is very rare in the State

### **Sub-themes**

The findings of the study have shown that the positive attitude of mothers towards the services might not suffice as the attitude of healthcare providers and extended family members, as well as religious and traditional leaders' support were the sub-themes developed in the study that exerted strong influence on women decision to use or non-use of ANC and childhood immunisation services as explained below.

### **Family Support**

Support from extended family members such as mother-in-law is important, especially in Africa where the extended family system is still pervasive. The way mother-in-law behaves towards ANC and immunisation affects patronage of the services as a mother from a rural area spoke thus:

My husband has interest in using ANC but his mother has not. Whenever I am pregnant my mother-in-law doesn't allow me to attend ANC but used to coach me that I should be patient about pregnancy-related complications, emphasizing that complaining is an act of impatience because all other women experience similar complications during pregnancy (FGD3).

The influence of mother-in-law is not only peculiar to rural areas, a semi-urban mother reiterated that "what discourages me from using ANC is I don't get my husband's permission on a regular basis because his mother does not like going for ANC" (FGD11).

The influence did not only come from mothers-in-laws but included sisters and other family members as reported by a discussant:

When I was pregnant, my friend told me that she didn't use ANC services during pregnancy and was healthy and delivered safely at home. She therefore advised me not to go for ANC because it is a waste of money and time since I am in good health (FGD9).

Similarly, another participant from another session of FGD submitted that:

This is my first child but I did not go for ANC during pregnancy. Though I wanted to go because I heard that ANC is very important to pregnant women, but I couldn't because my husband is no longer alive and his family members did not support me to go (FGD1).

This shows that friends and relative in-laws were also stakeholders in determining utilisation of ANC services in Zamfara State. However, data remained silence regarding influence of family members on mothers' decision to immunise children.

### **Attitude of Healthcare Providers**

The way healthcare providers relate and attend to clients is very important in determining utilisation of the services. Women have the right to be treated with a sense of respect and dignity. The preventive care which is provided to them should be in a dignified manner. Participants from Kaura Namoda LGA unveiled attitude of the healthcare workers as one of the factors that precluded them from attending ANC services. According to a participant:

I used to receive required ANC services during pregnancy before, but owing to poor attitude of healthcare personnel, I have now reduced it. Worst part of it is that government provides free medication to pregnant women but we have to pay for it. Healthcare providers often humiliate clients by condemning them on having too many children. Honestly, poor attitude of health care employees remains one of my major challenges (FGD5).

Poor attitude of healthcare providers discouraged not only utilisation of ANC services and also going to health facilities for delivery as participant added thus:

My husband always supports me to go to health facility for delivery but what discourages me is poor attitude of health personnel handling childbirth in labour room. Let me tell you a scenario, I was admitted in labour room while I was pregnant. A woman in labour was also admitted in the same room. In the night, the woman demanded attention of a matron and started calling her but the matron remarked, you are burdensome and impatient; I am weary and want to sleep, and then went to sleep without attending to the patient. Because of that I refused to give birth my fifth child at hospital. even though I spent many hours in labour at home and my husband insisted that we should go to hospital but I fought the urge to pray all the while that God would help me deliver in my room, and I subsequently delivered safely in my room (FGD5).

Findings have also shown that poor people are more likely to experience poor attitude of health care providers as stated by a participant:

When compared to wealthy, poor people and villagers are more likely to be humiliated by medical workers. Worst of all, when I was brought to emergency room as a poor lady, we bought N3,000 worth of medicine but only needed N1,000 worth, and the

health care workers refused to give us our leftover medicine, instead used it on another patient in my presence and collected money for it (FGD5).

Although the foregoing shows that some healthcare staff handling maternal health had poor attitudes towards their client, healthcare staff handling childhood immunisation were friendly. Overwhelming majority of the participants argued that staff that handle immunisation treat them well, which is why many mothers have their children immunised.

Although negative attitude of healthcare staff was reported in Kaura Namoda LGA, findings from the interviews opposed those claims as a traditional ruler argued that “we don't have any health staff with a bad attitude. Even at our traditional rulers' committee meeting on health, we had never received a single case regarding poor attitude on part of health professionals in our LGA” (K4). All the healthcare professionals that were interviewed revealed that most people had positive attitude towards the services in the State. A government official who was also a healthcare provider reiterated that:

We have never received any complaint from mothers regarding poor attitude of our health staff at PHC level. We're even glad to get complaints about it so that we can take serious action against any employee found with such habit. Poor attitude among healthcare workers is unquestionably fatal to any PHC, which we cannot tolerate from any employee (K2).

Healthcare workers' attitudes play a great role in determining how pregnant women perceive ANC and childhood immunisation services and bad attitude forms a barrier for utilising the services. Even though the key informants objected the claims women made against the healthcare personnel, the claims may be more credible because most women might not be willing to report/share the insults experienced in the hands of healthcare personnel with other persons due to cultural reasons.

### **Religious Leaders Support**

Religion is a key cultural element that people cherish which does not only influence what people do or say in their day-to-day social interaction but also affects people's views regarding disease aetiology, diagnosis and treatments. Thus, religious leaders are highly respected in the society, their attitudes towards maternal and child health have a profound influence on utilization of both ANC and immunisation services. Findings from all sessions of FGD and IDI that were conducted revealed that no religious leader reported encouraging his follower to resist either ANC or child immunisation services. All the participants believed that religious leaders are now advocates of ANC and child immunisation. A household head stated that “because no preacher said ANC is bad or that people should stop patronizing it, we presume it is not against our religion” (FGD10). The religious leaders are not only supporting ANC but also encouraging parents to send their daughters to schools and read health related courses in order to address shortage of female healthcare providers as a household head reported thus:

Our religious leaders encourage us to use ANC services. They also encourage us to send our daughters to tertiary institutions and read health-related courses since no one wants male health-care providers to attend to his wife in the hospital while female health-care providers are available. By

so doing more women healthcare providers will be available in health facilities to attend to women during ANC and other health related issues (FGD6)

### **Traditional Leaders Support**

Traditional leaders are types of leaders whose rights and legitimacy of authority come from belief in tradition and customs imbedded in a particular group/society. Traditional leaders are also highly respected especially in Africa, they dictate the dos and don'ts of the society as well as possessing a legitimate authority to enforce compliance or non-compliance to any action affecting their followers. Their attitude to ANC and childhood immunisation is a great determinant of utilisation of the services. Findings of the study revealed that traditional rulers supported patronage of the services. In fact, they have been used by government over the years for enlightening people on the importance of the services.

According to a participant:

Immunisation is unquestionably supported by traditional authorities. There was a time some residents in our village objected child immunisation, our district chief invited them to his palace and educated them on the necessity of immunisation which eventually they agreed and their children were immunised (FGD10).

A traditional ruler also added that:

In those days many people resisted child immunisation. There was a time when some rural people objected child vaccination, then the immunisation team called me and informed me about the situation. In addressing the problem, I went to the village and educated the locals about importance of immunisation, after which they consented to have their children immunised (K4).

Another traditional ruler unveiled how traditional rulers synergize with religious leaders to improve immunisation uptake. According to him "Although is uncommon in our area for people to resist child immunisation, we employ religious leaders to intervene whenever there is child immunisation resistance. If a parent refuses to allow his/her child to receive immunisation, we leave him alone" (K5).

### **DISCUSSION**

Attitude of mothers towards ANC and childhood immunisation services does not only determine their perception towards the services but also utilisation of the services. Overwhelming majority of the people that participated in this study irrespective of their sexes, educational backgrounds and places of residence had positive attitude towards ANC arguing that ANC is important, safe and therefore should be utilised by pregnant women. The finding is consistent with that of earlier study in Dodoma Municipal Tanzania by Lilungulu, et al. (2016) which revealed 74.2% of the respondents had positive attitude to ANC services but is in dissonance with Ogunba & Abiodun (2017) who found only 49% of mothers had positive attitude to ANC in a community of Southwestern Nigeria.

Similarly, positive attitude to child immunisation was also found among most of the participant. Childhood immunisation which became a controversial issue in Nigeria in the past, now most people have been rescued from the widespread notions that associated child immunisation with infertility or HIV, which culminated in a widespread resistance to childhood immunisation in northern Nigeria during the last two decades. Most people nowadays believe that vaccines are safe and do not cause infertility or HIV and were willing to take their children to health facilities for immunisation due to the belief that childhood immunisation gives strong protection against childhood killer diseases. This finding agreed with many previous studies conducted in different places of the world (Odusanya, et al. 2008; Gidado, et al. 2014; Awosan, et al. 2018; Abubakar, 2019; Singh et al. 2019; Verulava, et al. 2019; GebreEyesus, et al. 2021) who found overwhelming majority of respondents had positive attitude to child immunisation.

However, this study found that positive attitude of only mothers towards ANC and childhood immunisation might not suffice as attitude of healthcare providers and extended family members, as well as religious and traditional leaders' supports exerted strong influences on mothers' decision to use or non-use of ANC and childhood immunisation services. For instance, attitude of family members towards use of the services/Support from extended family members including husbands, mother-in-law, sisters etc.in Africa where the extended family system is still pervasive, influences decision of African mothers to use or non-use of the services. Poor attitude of healthcare providers in relation to clients especially the poor, lack of support from the traditional and religious leaders in a community can disrupt effective delivery of the services.

### **Conclusion and Recommendations**

This study investigated attitude of mothers towards use of ANC and childhood immunisation services in Zamfara State, Nigeria. Mothers' attitudes to ANC and childhood immunisation could be positive or negative and both are important predictors in utilisation of the services. Although most of the participants had positive attitude towards utilisation of ANC and childhood immunisation services, the positive attitude is greatly influenced by perception of multiple actors including traditional and religious leaders, healthcare providers and extended family members towards the services. Most people had positive attitude towards the services due to the supports accorded to usage of the services by their traditional and religious leaders. Poor attitude of healthcare workers especially against the poor people disheartened many women from not only accessing ANC services but also delivery at health facilities. Extended family members such as husband, mother-in-law, sisters etc. were also stakeholders in influencing how pregnant women perceive ANC and childhood immunisation services in Zamfara State. Therefore, in transforming the people's attitude towards ANC and childhood immunisation, the study recommends that governmental organisations, policy-makers and manager of maternal and child health programmes, professional societies involved in the management of maternal and child health services should enlighten the general public on the importance of ANC and childhood immunisation and encourage both the parents, the religious and traditional leaders to improve/sustain the positive attitude towards the services. Secondly, academic staff involved in training health care professionals should enlighten their students pertaining to the respect, humility and commitments the women coming for ANC and childhood immunisation deserve from healthcare professionals with a view to transforming their attitudes towards maternal and child health. Thirdly, government should take corrective measures against the healthcare personnel found with negative attitude towards their clients

and lastly, the people opposing childhood immunisation deliberately in the State should be identified and appropriately punished by the government.

## REFERENCES

- Abimbola, J. S. & Misbahu, A. T. (2023). Knowledge, attitude and perception of mothers of under- five towards vaccination during supplementary immunization activities in Ibadan North- West Local Government Area, Ibadan, Oyo State, Nigeria. *Journal of Public Health and Epidemiology*, 15(1), DOI: 10.5897/JPHE2022.1405
- Abubakar, A. (2019). *Association between fathers' knowledge, attitude, and practice with routine immunisation status of their under five (5) years old children in Gusau, Zamfara State Nigeria*. Unpublished PhD thesis submitted in partial fulfillment of the requirement for *PhD*. Morgan State University.
- Alliance, W. R. (2015). *Respectful Maternity Care: A Nigeria-focused Health Workers' Training Guide*. Washington, DC: Futures group health policy project.
- Alubo, O. (2021). *Health, Power and Sicknesses in Nigeria: Why the poor face avoidable deaths*. Jos, Leago Charis Enterprises Ltd.
- Awosan, J. K., Ibrahim, O., Yunusa, U. E., Isah, A. B., Raji, O. M., & Abubakar, N. (2018). knowledge, attitude and compliance with full immunisation of children against vaccine preventable diseases among pregnant mothers in Sokoto, Nigeria. *International Journal of Contemporary Medical Research*, 5(6), ICV: 77.83, 10-16.
- Bashir, S. B., Abdul Haseeb Ansari, B. & Arshiya Sultana, B. M. (2023). Knowledge, attitude, and practice on antenatal care among pregnant women and its association with sociodemographic factors: A hospital-based study. *Journal of Patient Experience*, 10(1-11), DOI: 10.1177/23743735231183578
- Black, E. B., Loxminarayan, R., Temmerman, M., & Walker, N. (2016). *Reproductive, Maternal, Newborn and Child Health*. Washington, DC 20433, USA: International Bank for Reconstruction and Development.
- 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.
- Drigo, L., Luvhengo, M., Lebeso, T. R., & Makhado, L. (2020). Attitudes of pregnant women towards antenatal care services provided in primary health care facilities of Mbombela Municipality, Mpumalanga Province, South Africa. *The Open Public Health Journal*, 14, ISSN: 1874-9445, 569- 575.
- GebreEyesus, A. F., arekegn, T., Amlak, T. B., Shiferaw, Z. B., Emeria, S. M., Geleta, T. O., . . . Chanie, S. (2021). Knowledge, attitude, and practices of parents about immunisation of infants and its associated factors in Wadla Woreda, North East Ethiopia. *Pediatric Health, Medicine and Therapeutics*, 12 , 223–238.

- Gentle, S. K. (2019). Knowledge and attitude of mothers towards immunisation in Emohua Local Government Area of Rivers State. *International Journal of Innovative Healthcare Research*, 7(4), 38-52.
- Gidado, S., Nguku, P., Biya, O., Waziri, E. N., Mohammed, A., Nsubuga, P., . . . . .Sabitu, K. (2014). Determinants of routine immunisation coverage in Bungudu, Zamfara State, Northern Nigeria. *Pan African Medical Journal*, 18( 1), 1 - 5.
- Idris, H. S., Sambo, N. M., & Ibrahim, S. M. (2013). Barriers to utilisation of maternal health services in a semi-urban community in northern Nigeria: The clients' perspective. *Niger Med Journal*, 54(1), 27–32, PMID: PMC3644741, 23661896.
- Joseph, W. J., Jean Claude, R. P. O. (2024). Knowledge and attitudes of antenatal mothers towards intimate partner violence in the Gambia: A cross-sectional study. *PLOS Global Public Health*, 4(2): e0001257. <https://doi.org/10.1371/journal.pgph.0001257>
- Kuhnt, J., & Vollmer, S. (2017). Antenatal care services and its implications for vital and health outcomes of children: evidence from 193 surveys in 69 low-income and middle-income countries. *BMJ Open* 7:e017122. doi:10.1136/mjopen-2017-017122, 1 -7.
- Lilungulu, G. A., Matovelo, D., & Gesase, A. (2016). Reported knowledge, attitude and practice of antenatal care services among women in Dodoma Municipal, Tanzania. *Journal of Pediatrics and Neonatal Care*, 4(1), 00125. DOI: 10.15406/jpnc.2016.04.00125.
- National Population Commission and ICF International (2018). *Nigeria Demographic and Health Survey*. Abuja, Nigeria: Federal Government of Nigeria.
- Odusanya, O. O., Alufohai, F. E., Meurice, P. F., & Ahonkhai, I. V. (2008). Determinants of vaccination coverage in rural Nigeria. *BMC Public Health* 2008, 8:381, 1 - 8.
- Ogu, R., & Alegbeleye, J. (2018). Improving maternal health: Women's attitude to antenatal care utilization is crucial. *Clin Obstet Gynecol Reprod Med* 4:doi:10.15761/COGRM.1000209
- Ogunba, B., & Abiodun, O. (2017). Knowledge and attitude of women and its influence on antenatal care attendance in southwestern Nigeria. *Journal of Nutrition and Health Sciences*, 4(2), 207, ISSN: 2393-9060.
- Park, K. (2015). *Preventive and Social Medicine*. India: Bhanot Available from: <https://www.medicosideas.com/k-park-pdf/> , accessed on 23rd November, 2023
- Rappuoli, R. (2014). *Vaccines: Science, Health, Longevity, and Wealth*. USA: Proceedings of the National Academy of Sciences of the United States of America, 111(34), 12282.
- Resty, N. & Lydia, A. (2024). Knowledge, attitude, and practices of mothers towards child immunisation at Gombe District Hospital, Butambala District. Across-sectional study. *Student's Journal of Health Research Africa*, 5(3), e-ISSN: 2709-9997, p-ISSN: 3006-1059

- Signh, B. K., Badgujar, B., Yahaya, S., Rahman, A., Sami, M., Badgujar, S., . . . Ansari, T. M. (2019). assesment of knowledge and attitude among postnatal mothers towards childhood vaccination in Malaysia . *Journal of Human Vaccines and Immunotherapeutics*, *15*(11), 2544–2551.
- Verulava, T., Jaiani, M., Lordkipanidze, A., Jorbenadze, R., & Dangadze, B. (2019). Mothers' knowledge, attitudes and practices towards child immunisation in Georgia. *Open Public Health Journal*, *12*, 232-237.
- UNICEF (2024). Levels and Trends in Child Mortality Report. Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation
- WHO. (1992). *Maternal Health and Motherhood Program: family and reproductive health*. Geneva: WHO.
- WHO, UNICEF, UNFPA, World Bank Group, and the United Nations population division (2023). *Trends in Maternal Mortality: 2000 to 2020 Estimates*. Available from [https://apps.who.int/iris/bitstream/handle/10665/194254/9789241565141\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/194254/9789241565141_eng.pdf?sequence=1) Accessed on 28<sup>th</sup> February, 2023.