

# Perceptions of Mothers in the Use of Measles Immunization Information Across-Sectional Study in Adamawa and Taraba States, Nigeria

<sup>1</sup>Baba Usman, <sup>2</sup>Zainab Mohammed Mustapha

<sup>1</sup>Federal Polytechnic Bali, School of Science and Technology, Department of Library and Information Science

<sup>2</sup>Federal Polytechnic Bali, Library Department

DOI: <https://doi.org/10.5281/zenodo.7977632>

Published Date: 27-May-2023

---

**Abstract:** Measles is prominent and recognised as empathetic health distress in tropical regions of the domain. In spite of the achievements of routine national childhood vaccination programs, it largely remains a public health care concern. This study tends to explore the experiences and perceptions of mothers in the use of measles immunization information in Adamawa and Taraba states respectively. The study adopts a qualitative research methodology with a semi-structured interview. Six mothers of children under five years of age, for those who receive measles vaccination and who do not, were interviewed and cross-examined in various local government areas, which were randomly selected in both Adamawa and Taraba states. The data collected were audio recorded, transcribed verbatim, and subjected to thematic content analysis. The research employed the Theory of Reasoned Action (TRA) framework. The model has three main constructs, which include Behavioural intention; attitude, and subjective norms are those defects that affect mothers toward the use of information on measles immunization. The study revealed that measles immunization information is irrelevant and could not stop the disease. It is generally recommended that mothers should be enlightened explicitly on various vaccine-preventable diseases and their jeopardies to the child's well-being. Thereby depressing their traditional beliefs through various media like public libraries, NGOs, and or UNICEF.

**Keywords:** Measles, immunization, immunization information, Theory of Reasoned Action (TRA).

---

## 1. INTRODUCTION

Measles immunization is one of the most cost-effective public health measures available. Although it is possible to manufacture vaccines against a wide variety of viruses and bacteria. It is essential to ensure that the introduction of a particular vaccine will always confer a major benefit to the population receiving it. According to the Nigeria National Immunization Coverage Survey (NICS) conducted in 2010, the immunization completion rate was 10% among children aged 9-12 months and 53% among children aged 12-23 months. This rate is well below the 90% level recommended by the World Health Organization (WHO) for the sustained control of VPDs. Globally, vaccine-preventable diseases account for nearly 20% of all deaths occurring annually among children under five years of age (WHO, UNICEF, World Bank, 2009).

The 2010 global routine vaccination coverage disclosed that about 19.3 million children remained at risk for diphtheria, tetanus, pertussis, and other vaccine-preventable causes of morbidity and mortality, and about 50% of these children are from India, Nigeria, and Congo. In 2008, the WHO Strategic Advisory Group of Experts on Immunization called for increased information about the factors leading to non-vaccination and under-vaccination of children in order to develop strategies to improve the uptake of childhood immunizations (WHO, 2008). In rural areas of developing countries, there has been relatively little research into parents' knowledge and attitudes toward childhood immunizations (KATCI) (Jheeta M, Newell J, 2008).

## 2. STATEMENT OF THE PROBLEM

Immunization is one of the safest and most effective interventions to prevent disease and early childhood death. Vaccines, on the other hand, stimulate the body's own immune system to protect an individual against subsequent infection or disease. Measles Immunization is a proven tool for guiding and obliterating life-threatening infectious diseases. This is one of the most cost-effective health investment. Demonstrated strategies that make it accessible. In addition to preventing infant mortality each year. However, It has clearly defined target groups, and it can be delivered effectively through outreach activities. Vaccination does not require any major lifestyle change (WHO/Sergei, 2014).

Nevertheless, despite the importance of measles Immunization in recent years, millions of children are not immunized, exposing them to physical defects or premature death, (UNICEF, 2008). This study observed that from 1999 to date, the rate of death of children in North-Eastern states is a high increasing. This is also manifested by the Department of Health in various Local Government in the year 2018 within the states. This documented that the rate of children's death in society is worrisome. Similarly, Musa (2012) and Abdulraheem (2013) indicated that the number of children's death ranging from 1-5 years of age in villages around Adamawa and Taraba is increasing.

On the other hand, none of the previous studies viewed this impediment, especially from a North-East viewpoint or cross-sectional studies in Adamawa and Taraba states. Accordingly, the increased risks of diseases in the children population are imparting due to the high rates of vaccine refusal. This could be attributed to immune-deficient, and children are at more risk of being exposed to vaccine-preventable diseases. Many parents especially in various local governments are not fully aware of the benefits of vaccination. This could achieved with the aid of the Theory of Reasoned Action (TRA) as a theoretical framework to discover the sociocultural factors influencing mother's experience leading to immunization rejection.

## 3. RESEARCH QUESTION

1. What type(s) of measles immunization information is available for mothers in Adamawa and Taraba states?
2. What are the experiences of mothers on measles immunization information in both Adamawa and Taraba state?
3. How would the Theory Reasoned Action help in explaining the use of information on measles immunization by Mothers in Adamawa and Taraba states?

## 4. OVERVIEWS

### Measles

Measles is recognised as a serious health problem in tropical and sub-Saharan regions of the world. Despite the successes of routine national childhood vaccination programs, measles remains a public health care concern. In 2018, there were 164,000 measles deaths globally. Measles is one of the leading causes of death among young children. In 2013, approximately 6.2 million children under the age of five died worldwide, and 3 million of these deaths occurred in Sub-Saharan Africa (SSA) (UNICEF, 2014). In 2009, the World Health Organization (WHO) estimated that if global vaccine coverage increased to 90% by 2015, then approximately two million deaths of children under the age of five would have been prevented. In Sub-Saharan, African countries, especially, Nigeria, Uganda, Ghana, etc. Vaccine coverage rates remain well below the WHO goal of 90%, with 82% of children receiving the measles vaccine and 78% completing the three-dose series of pentavalent vaccines providing protection against diphtheria, tetanus, pertussis, hepatitis B, and Haemophilus influenza type B (DPT-HB-Hib) (UNICEF & WHO, 2014).

According to WHO (2017) regional statistics estimated that 37% of them occur in more African countries. From 4th January to 23rd September 2016, a total of 3,905 suspected cases of measles have been reported in four conflict-affected states: 846 in Borno, 2,510 in Yobe, 273 in Adamawa, and 276 cases in Gombe state. In addition, 129 cases were laboratory confirmed. (Nigeria Health Cluster, 2016). A mass vaccination campaign started in 13th January 2017 in order to protect more than four million children (4, 766, and 214) against a measles outbreak in conflict-affected states in North-Eastern Nigeria.

The Borno State Ministry of Health, with absolute support from WHO and partners, has already vaccinated more than 83,000 children aged 6 months to 15 years living in camps for internally displaced people (IDPs) where measles cases had been reported. These campaigns have yielded positive results in the neighbouring states including Adamawa and Taraba, with a reduction of measles cases around the camps (WHO, 2017). There were also 631 suspected cases of measles were

reported from 33 states including the FCT. So far, 19,306 assumed Measles cases with 108 laboratory-confirmed cases (Gov't Nigeria, 2017), 109 deaths (CFR, 0.56%) have been reported in 2017 from 36 states and FCT compared with 23,417 suspected cases and 100 deaths (CFR, 0.43%) from 36 states and FCT during the same period in 2016. (Gov't Nigeria, 2017).

### **Immunization**

Immunization on the other hand is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease. Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. It is one of the most cost-effective health investments. With proven strategies that make it accessible to even the most hard-to-reach and vulnerable populations. This could be delivered effectively through outreach activities. Vaccination does not require any major lifestyle changes (WHO/Sergei Deshevoi, 2014). It has been discovered that when children are born, they inherit specific types of antibodies from their mothers; these antibodies help them to fight different diseases. These are also natural ways of protecting children when they are most vulnerable.

However, starting around six months of age, antibodies start to diminish, and almost completely disappear by the time a child is one-year-old. In the ideal situation, children should start to make their own antibodies. Immunization replaces through Vaccines, which are either parts of the viruses or bacteria (called antigens) or weakened live viruses and bacteria. Immunization is given to children before the mother's antibodies completely disappear. Most children get various vaccines before the completion of one year.

### **Immunization Information**

Immunization Information encompasses the study and use of communication strategies to inform and influence individuals of all ages and community decisions, providing timely, accurate, and proven information about vaccines and the diseases they prevent (Immunization Action Coalition IAC 2013). Like prescription drugs, vaccines are pharmaceutical products that carry two risks: a risk of the product will not work and a risk of the product will cause harm. It also provides ways to prevent vaccine injuries and deaths through public education advocates for informed consent in medical research and medical policies and public health laws, including flexible exemptions in vaccine policies and laws for health reasons and for religious conscientiously held beliefs (Common Wealth, 2013).

Immunization Information enables individuals to seek health medical care, reaching the health facility and receiving appropriate case management by health workers: such as the provision of accurate, comprehensive, and up-to-date information about childhood vaccines, and the diseases they prevent. Immunization information aims to advocate vaccine risk awareness and the right to exercise voluntary, informed consent to immunization (Musa, 2012). It largely works to prevent disease by creating and distributing educational materials for health professionals and the public that enhance the delivery of safe and effective immunization services. It also facilitates communication about the safety, efficacy, and use of vaccines within the broad immunization community, healthcare organizations, and government health agencies (Andre, 2008).

According to Sergei. (2014) argue that an ideal vaccine should confer long-lasting solution, preferably lifelong protection against disease. It should be inexpensive enough for large-scale use, stable enough to remain potent during transportation and storage, and have no adverse effect on the recipient. Routine immunization are acceptable practice for residents in Northern Nigeria. The main obstacle has been the lack of available vaccines (FBA 2005). Some are willing to take their children for immunization at the Primary Health Care (PHC) and Hospitals when diseases such as measles or meningitis threaten (Ejembi et al 1998). Sometimes, the fear of disease overshadows the perceived risk of immunization. However, some immunization is unnecessary or even dangerous undertakings for infants and children.

In the first place, some people attributed the fear of injection and their association did not know how to properly administer injections, leading to infections and possible nerve damage at the site of the injection (Andre, 2008). However, immunization that requires the injection or attenuated viruses may be seen as an unclean or harmful practice that threatens children's health. Lack of confidence and trust in routine immunization as an effective health intervention appears to be relatively common in many parts of Nigeria. The widespread misconception is that immunization can prevent all childhood illnesses. This reduces trust, especially when fails to give such protection, and self-assurance will be lost in immunization as an intervention for any kind of disease.

### Theory of Planned Reasoned Action (TRA)

The Theory of Planned Reasoned Action (TRA), originally introduced by Fishbein in 1967 and extensively refined, developed, and tested by Fishbein and Ajzen in 1975, defines relationships among beliefs, attitudes, norms, intentions, and behavior. External variables encompass all variables not explicitly represented in the model, which comprises demographic or personality characteristics, the characteristics of the behavioral target, and other variables that can influence the formation of beliefs. This example asserts that those external variables affect behavior intention only indirectly by influencing the individual's behaviours and normative beliefs (Ajzen & Fishbein, 1980; Davis, 1986; Dillon & Morris, 1996). The purpose of the TRA is to predict and understand an individual's behaviours by considering the effect of personal feelings (attitude) and the perceived social pressure (subjective norm).

Besides knowing an individual performs a behavior and its frequency, researchers are also interested in knowing why people perform or do not perform a behaviour, what determines their choice and what, and how external variables influence their decision. The TRA is a generalized model to answer these questions. When applied in many empirical studies in diverse situations. It assumed that the TRA is applicable in understanding the determinants of human behaviours in situations in which people may exert their choice (Sheppard et al, 1988; Dillon & Morris, 1996).

Consequently, the model essentially has three main constructs, which include Behavioural intention, Attitude and Subjective norm. This is to predict and understand an individual's behaviour by considering the effect of personal feelings (attitude) and the perceived social pressure (subjective norm). Besides knowing an individual performs a behaviour and its frequency, researchers are also interested in knowing why people perform or do not perform a behaviour, what determines their choice and what and how external variables influence their decision.

### The Theory of Reasoned Action

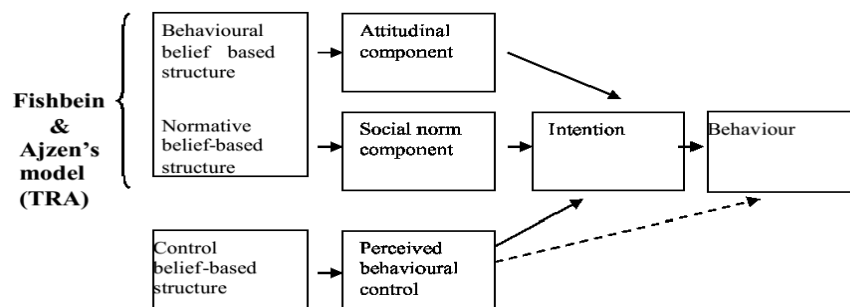


Fig 1

## 5. DISCUSSION

The primary feature of the analysis is the demographic information that details the rudimentary data on the participant across sectional studies from Adamawa and Taraba. It also presents the findings on the perceptions of mothers of children under five years of age. The participants' annotations is being represented in italics form. Accordingly, this was described according to the subsequent themes. It remained essential to find out the socio-demographic information of research participants such as their age group, sex, marital status, educational level as well as employment status.

### Socio-demographic description of the research participants

All the participants were mothers of varied age groups between the age of 25 and 39 years of age. Table 1 below institutes the participants as well as their features. It is also evident that the majority of them were unemployed.

Table 1: Participant socio-demographic characteristics

Mothers of children who received measles vaccination						
Participant	Sex	Relationship	Age	Marital status	Education level	Employment status
P1	Female	Mother	35	Married	SSCE	Employed
P2	Female	Mother	36	Married	Grade II	Housewife
P2	Female	Mother	27	Married	Diploma	Teacher

P3	Female	Mother	39	Married	NABTEC	Unemployed
P4	Female	Mother	Unknown	Married	Unschooling	Business
P5	Female	Mother	32	Married	NCE	Teacher
<b>Mothers/caregivers of children who did not receive measles vaccination</b>						
<b>Participant</b>	<b>Sex</b>	<b>Relationship</b>	<b>Age</b>	<b>Marital status</b>	<b>Education level</b>	<b>Employment status</b>
P7	Female	Mother	38	Married	Primary	Housewife
P8	Female	Mother	35	Married	Diploma	Self employed
P9	Female	Mother	32	Married	Unschooling	Business
P10	Female	Mother	26	Married	Diploma	Business
P11	Female	Mother	35	Married	SSCE	Housewife
P12	Female	Mother	25	Married	Degree	Lecturer

### **Type(s) of Measles Immunization information available for Mothers across the sectional studies in Adamawa and Taraba state**

The research sought to discover the available information on measles immunization. Mothers were cross-examined on the various types of information available on measles immunization. In their response to the interview question, participants identified the types of information on Measles Immunization available for mothers and the succeeding themes established.

#### **Information on deformity**

Most of the respondents are conscious that measles causes fever, rashes, blindness, deformity, and deafness. The research participants were cognisant that immunization reduces measles gravity. Measles is a sickness that affects children. It causes rashes and stops them from consumption of nourishment. It is, however, a dreaded disease that affects children destructively. It might likely turn them sightless, some deaf and sometimes it causes deformity. It is a sickness that affects children, it produces rashes, causes sore throat, fever and it also affects the eyes too."

#### **Information on resistance to immunization**

Responses gotten from the respondents on information available on types of information measles immunization, revealed that respondents see no reason for immunizing their children. However, the research participants assumed that being immunised or not would certainly be contracted. It is better we depend on Religious studies, "...if it is destined for a child to have it, sure it would... Our prayer is for God's protection. This is basically because most of the time, those that took their children to the Hospital, always complain of time wasting and unavailability of drugs."

#### **Information on only children contracted the disease**

The respondents are mindful that the individuals who contract the measles disease are commonly children. The study participants know that measles is a sickness that affects offspring. It causes rashes and stops them from eating food. Consequently, from the finding, it is discovered that there is various information available on measles ranging from who contracts it, what measles is and reasons not subscribing to measles immunization.

### **What is the experience of mothers on the use of measles immunization information in Adamawa and Taraba State?**

In an attempt to answer the research question on the perception of mothers on the use of information on measles immunization three key categories materialised:

**1. Disbelieve.** This category describes the narratives related to disbelieving the use of information on immunization by participants. Participants do not believe immunization can serve as a preventive measure for vaccine-preventable diseases in order to reduce and control children's deaths and defects; saying nothing can prevent a child not even immunization except the Almighty.

**2. Destiny.** This category emerged from the narrative related to the mother's perception of the use of information on immunization. Participants believe that all the death and physical defects are caused by vaccine-preventable diseases. In addition, there are natural remedies. ...." *Nothing can stop or cure it not even immunization*".

**3. Adverse Effect of Immunization.** This category also emerged from the narratives of participants believing that immunization has complications based on experience. Various participants query the safety of these vaccines. Which are sometimes perceives as possibly leading to hazardous substances in the body. ...*For those taking their children for*

*immunization, you will see a child crying all day long with a high fever, and that injection normally given at hand (BCG), the place gets swollen, pains and brings out spouse. if not lucky the one given on legs deformed a child"*

With all the enlistments and benefits of immunization. More or fewer mothers do not believe immunization can control and prevent children's deaths and physical deformities. They are of believed that it happens according to destiny. Hence, they believe that Almighty Creator is sufficient in all deaths and physical deformities. "...*He alone heals, nothing else, not even the so-called immunization*". This goes with Renne (2010) —kariyan assertions that a mother's immunization is seen as unnecessary or even dangerous to undertake for children regardless of an impending epidemic. Stating that prayers are sufficient, seeking for ultimate protection from Divinity." ...*because what HE decreases be it death or physical deformity nothing can change it.*" Participants also perceive tendencies of likely adverse complications of immunization after fever, loss of limbs (legs usually) and wounds at vaccinated areas. According to Roy (2010), in most rural communities, one family's negative experience with immunization can affect the decision of other family in the community on immunization.

### **Using TRA to explain the perception of mother on the use of Measles Information**

According to this theory, an individual's behaviour (e.g., the use of one information resource rather than the others), is determined by his/her intention to perform the behaviour (e.g., select to use the information resource), and this intention is a function of his/her attitude toward performing the behaviours. Along with the perceived social influence of people who are important to him/her (Fishbein and Ajzen 1975). The theory addresses the norms and value system of the community govern behaviours and information by Fishbein and Ajzen (1975), accompanying the recommended behaviour of mothers towards immunization information. Moreover, the theory helped to influence an individual's approach to understand, making sense and use of information.

#### ***Behavioural Intention***

From the study, it is observed that some mothers in Adamawa and Taraba states have the intention of using and not using the measles immunization information. Ajzen and Fishbein (1980) proposed that a person's behaviour is determined by the individual's intention to perform the behaviour and that this intention is, in turn, a function of the person's attitude toward the behaviour. One of the potential reflectors of possible behavioural outcomes is intention. The intention is the cognitive representation of a person's readiness to perform an intended behaviour, and it is considered to be the immediate indicator of behaviour. Behavioural intention measures the relative strength of a person's likelihood to perform an anticipated behaviour. It comprises motivational or attitudinal factors that capture how persons are engaging to perform the intended behaviour (Ajzen 1991). Therefore, TRA conjectures that behavioural intention is the most influential predictor of behaviour. In a meta-analysis of 87 studies, an average correlation of 53 was observed between intentions and behaviour (Sheppard et al. 1988).

#### ***Attitude***

Some participants articulate they were told not to go closer to one that is affected. Stay away from such a child, not taking their child closer. They visited the affected child when assume he is healed. They have no reason to take their children, after it was said that, it is a sickness that is being injected into a child. Attitude is an individual's favourable or unfavourable feeling about performing a specific behaviour. These beliefs are called behavioural beliefs. An individual will intend to perform a certain behaviour when he or she evaluates it positively. Attitudes are determined by an individual's belief about the consequences of performing the behaviour (behavioural beliefs), weighted by his/her evaluation of these consequences (outcome evaluations). Attitude is determined by behavioural beliefs (beliefs about the likelihood of various consequences) and evaluations of how good or bad it would be if those consequences happened. Thus, attitude is an individual's salient belief as to whether the outcome of his or her behaviour will be positive or negative. (Hardeman, Johnston, Johnston, Bonetti, Wareham & Kinmonth., (2002).

#### ***Subjective norms***

The findings in this study point out that, mothers within the community highly perceive and attribute vaccine-preventable diseases to Jinn's and Witch Craft, which are deeply rooted to socio-cultural practices and religious beliefs. In the other hand, mothers believe that vaccine-preventable diseases were caused by Jinns and Witch Craft and have no cure. Consequently, it affects children's destiny as such; nothing can stop it from happening, not even the so-called immunization. These beliefs constitute factors leading to the rejection of measles immunization information use.

Similarly, during antenatal care visits at the clinic, health workers share information on the importance of immunization to a child's health through health talk at the clinic. However, mothers resist/avoid information on immunization communicated by the orthodox health workers, due to mistrust. Some participants state that *"it is better not to immunise their children, it is always mild on a child if not immunized and prefer the native medicine."*

Societies experiencing information avoidance are in a state of inappropriate, doubtful, untrusted and unverified (Musa 2013). This involves the stage in which the relationship between the information seeker and the information provider is awkward. This can be understood through the TRA (1980) which states that information coming into a small sphere from the outside may if it is at odds with the community's norms and worldview or if it comes from a source who is not trusted be dismissed as worthless, inaccurate, or even dangerous and, thus, ignored or avoid.

Burnett and Jaeger (2008) have pointed out that, generally TRA are very useful for examining information behaviours within specific social contexts. In the current study, the use of measles information among mothers within the scope of the TRA include sharing of information about the prospects of living in a community, whereas relatives, religious leaders, husbands, everyday information-seeking behaviour such as seeking permission from their husband about everything they want to do in the community.

Concerning the formation sharing, the findings indicated that mothers are aware of vaccine-preventable diseases, they have experienced the signs/symptoms, severity and complications (death or physical deformity). Yet, based on their collective worldview, social norms, believability and trust, disbelieve in the entire use of the measles immunization programme. It could be seen that mothers utilise information on the dangers of accepting immunization communicated by their parents, relatives, husbands and religious teachers.

Subjective norms are assumed to be a function of beliefs that individuals approve or disapprove of the behaviour. Beliefs that underlie subjective norms are normative beliefs. Normative social influence is defined by the influence of other people which leads us to conform in order to be liked and accepted by them (Aronson, Wilson, & Akert, 2005). Although an action may not be accepted or approved by an individual, normative social influence places pressure on an individual to comply with the group's social norms. Normative social influence has been shown to impose a highly persuasive influence on individuals.

## 6. SUMMARY

The study revealed that there is different information available on measles ranging from who contracts it, what measles is, and reasons not subscribing to measles immunization. The participants also perceive immunization information as irrelevant due to their disbelieve in information on immunization, they see the disease as destiny and not be stopped through immunization and perceived measles to have adverse effects on children. Participants are living within the Theory of Reasoned Action. That is, based on their Behavioural Intension, attitude, and subjective norms towards the use of information on measles immunization.

## 7. CONCLUSION

Access to quality information on immunization by mothers has a direct effect on awareness and vaccination rates. Based on the findings, this study concluded that mothers perceive the measles vaccine as a disease of small children from experience and diseases with lifetime threats to children. Participants also believe Vaccine preventable diseases come naturally and have no cure, medically happen according to destiny. Hence, Almighty is sufficient in all deaths and physical deformities. He alone heals, nothing else, not even the so-called immunization, a little better with traditional medicines. From the findings majority of respondents have unsatisfactory perception towards measles immunization and analysis proved that mothers' perceptions about immunization is important factors that influence access to measles immunization information which are ultimately predictors of full child immunization. It is also established that factors such as religion, behavioural intention, attitude, and subjective norms among others are all associated with the use of measles immunization information. Religion and cultural factors and lack of trust are the key issues and challenges that confront the acceptance of polio. These sociocultural practices and religious beliefs make mothers stereotype the entire Programme as spurious.

## 8. RECOMMENDATIONS

Based on the outcomes, it is recommended that mothers of children across the states should be enlightened more on vaccine-preventable diseases and its dangers to children well-being. Discourage their traditional beliefs through various media sources like local Radio stations (FMs), public libraries, NGOs, United Nations, and WHO as well as UNICEF. There

should be continuous campaigns across the states through Primary Health Care centers and incorporation of more strategic Health communication approaches that can help sharpen the mother's perceptions positively. Various Health centers across the states and queries should be addressed by qualified health personals to encourage the use of information on measles.

Finally, the stakeholders, investors, and gatekeepers of the various community should be involved in all aspects of the immunization program, e.g. Village Head, religious leaders, influential persons among the community members, given the fact that as a social type community they only accept information that comes from and within the states territories.

Lastly, our profound gratitude goes to TETFund for the financial support and all other interventions developing academic for excellence in our great country Nigeria. Appreciation also goes to medical professional from various General Hospital and all other Health centres for their time, mutual understanding and support in carrying this research work.

### REFERENCES

- [1] Abdulraheem, I.S, Onajole, A.T, Jimoh, A.A.G & Oladipo, A.R, (2011) Reasons for Incomplete Vaccination and Factors for Missed Opportunity Among Rural Nigerian Children, *Journal of Public Health Vol.3(4) pp. 194-203*, <http://www.academicjournal.org/jphc> Retrieved on 21/11/2014
- [2] Andre, F E., (2008) Vaccines Greatly Reduce Disease, Disabilities, Death and Inequity Worldwide Bulletin of the World Health Organization. Vol.86 p.81 -160 at <http://www.who.int/bulletine/volume/86/2/07040089/en/#R22> retrieved on 18/12/2014
- [3] Canavan M.E, Sipsma HL, Kassie GM, Bradley EH. (2014). Correlates of complete childhood vaccination in East African countries. *PLoS One*. 2014;9:1–7.
- [4] Commonwealth (2013) Understanding Childhood Immunization in Australia. Australian Health Studies. Vol 12.
- [5] Jheeta M, Newell J. (2008). Childhood vaccination in Africa and Asia: the effects of parents' knowledge and attitudes. *Bulletin of the World Health Organization*. 86:419–20. pmid:18568264
- [6] Musa, I. A (2012) Resistance to Polio Immunization Information in Kano, Nigeria, A Dissertation Presented to School of Library and Information Management Emporia state university, Kansas. 548-56
- [7] Sergei, D. (2014) World Health Organization: Immunization Action Coalition. Determinance of vaccines Basics. (Immunization)
- [8] UNICEF (2008). *The State of the World's Children*. New York: UNICEF
- [9] UNICEF (2014). Level & Trends in Child Mortality. The UN Inter-Agency Group for Child Mortality Estimation. Available: [http://www.data.unicef.org/fckimages/uploads/1410869227\\_Child\\_Mortality\\_Report\\_2014.pdf](http://www.data.unicef.org/fckimages/uploads/1410869227_Child_Mortality_Report_2014.pdf).
- [10] WHO, UNICEF (2014) Immunization summary, a statistical reference containing data through 2013. Available: [http://www.who.int/immunization/monitoring\\_surveillance/Immunization\\_Summary\\_2013.pdf](http://www.who.int/immunization/monitoring_surveillance/Immunization_Summary_2013.pdf).
- [11] WHO, UNICEF, World Bank: State of the world's vaccines and immunization, 3rd ed. 2009. Available: [http://whqlibdoc.who.int/publications/2009/9789241563864\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241563864_eng.pdf).
- [12] Bryman, A. (2012), *Social Research Methods*, 4th edn, Oxford University Press, New York
- [13] Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done?. *Qualitative research*, 6(1), 97-113. Retrieved from: <https://journals.sagepub.com/doi/abs/10.1177/1468794106058877>
- [14] Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. 4<sup>th</sup> ed. Sage publications.
- [15] Creswell, J.W. (2009), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd edn, Sage Publications, Thousand Oaks, California.
- [16] Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in Qualitative Research: Insights from an Overview of the Methods Literature. *The Qualitative Report*. Vol 20(11): 1772-1789.
- [17] Guba, E.G. & Lincoln, Y.S. (1989), *Fourth Generation Evaluation*, Sage Publications, Newbury Park, California.



- [18] Guthrie, J. & Parker, L.D. (1990), —Corporate social disclosure practice: A comparative international analysis, *Advances in Public Interest Accounting*, 3: pp. 159- 175.
- [19] Ifidon, S.E. & Ifidon, E.I (2007). *Basic Principles of Research Methods*. Benin- City: Good News Express Communications.
- [20] Keeves, J. P. (1997). *Educational Research Methodology and Measurement*. Cambridge: Cambridge University Press.
- [21] Letsoalo, B., Coetzee, J., &Ukpere, W. (2014). Stakeholders' Perception of a Human Resources Development Intervention. *Mediterranean Journal of Social Sciences*. Vol 5(1): 740-751
- [22] Mason, J. (2002). *Qualitative Researching*. 2nd Edition, London: Sage.Lincoln, Y.S. andGuba, E.G. (1985), *Naturalistic Inquiry*, Sage Publications, Beverly Hills, California.
- [23] Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Sage publications.
- [24] Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. Revised and Expanded from *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass. John Wiley and Sons Inc.
- [25] Merriam, S. B. (1998). *Qualitative Research and case study application in education*. SanFrancisco:Jossey-Bass Publishers. Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd Edition, Thousand Oaks C. A: Sage.
- [26] Merriam, S. B., & Grenier, R. S. (Eds.). (2019). *Qualitative research in practice: Examples for discussion and analysis*. John Wiley & Sons.
- [27] Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods: Integrating Theory and Practice* (4<sup>th</sup>ed.). Thousand Oaks, C. A: Sage.
- [28] Rudolph, J. (2002). *Research Sampling Techniques in Education*. New York: Pitman.P 168- 187.
- [29] Silverman, D. (2011), *Interpreting Qualitative Data: A Guide to the Principles ofQualitative Research*, 4th edn, Sage Publications, London.
- [30] Silverman, D. (Ed.). (2016). *Qualitative research*. Sage.
- [31] Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage