DETERMINANTS OF CHILD HEALTH AMONG INTERNALLY DISPLACED PERSON IN TARABA STATE, NIGERIA.

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CERTIFICATION

This is to certify that this research work - Determinants of child health among internally displaced persons in Taraba state, Nigeria - was carried out by OFINNI DOYIN COMFORT with Matriculation Number DSS/13/1181 of the Department of Demography and Social Statistics, Faculty of Humanities and Social Sciences, Federal University Oye Ekiti, Ekiti State, Nigeria.

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DEDICATION

This research work is dedicated to God Almighty, the Alpha and the Omega, the source of all wisdom and understanding to whom I give all glory, for giving all I needed to see through my first degree and my parent Engr. And Mrs Akinola Gabriel Ofinni.

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ABSTRACT

In Nigeria, not many considerations have been taken into the health of vulnerable children at the Internally Displaced Persons Camp. Hence, the need for more research that will help in designing necessary intervention programme. This study examines the determinants of child health among internally displaced persons in Taraba State, using data from a well-structured questionnaire. Binary logistic regression model was employed in multivariate analysis. Findings revealed that women between the ages 21- 30 are 6% less likely to have children with good nutritional status, compared to women with ages less or equal to 20. (CI= 0.96, p=0.055). Women in age group 31-40 and 41- 50 are 2.2 time and 2.4 time more likely to have good nutrition, compared to women in age group less than 20 respectively.

Furthermore, women from monogamous family are 1.46 times more likely to have children with good nutritional status compared to women in polygamous family (CI= 1.46, p=0.028).

The study also revealed that women with 5-9 and 10+ children are less likely to have children to good nutritional status, compared to those with children less than 5 (3% and 55%) respectively.

The study concludes that empowerment of women at the IDP camp, through education will greatly increase the nutritional status of the children.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

Determinants of child health among internally displaced persons

Health can be defined as the state of physical, mental, intellectual, social and emotional well-being and not merely the absence of disease or infirmity (United Nations, 2000).

Ottawa Chapter for Health Promotion (1986), proposed that children's health is the extent to which individual children or group of children are able or enabled to develop and realize their potentials, satisfy their needs and develop capacities that allows them to interact successfully with their biological, physical and social environment. Child health refers to the period between birth and five years old when children are particularly vulnerable to disease, illness and death. From one month to five years of age, the main causes of death are pneumonia, diarrhea, malaria, measles and HIV. Children's health encompasses the physical, mental, emotional and social well-being of children from infancy through adolescence. Malnutrition is estimated to contribute to more than one third of all child deaths.

Early childhood health and nutrition is a true reflection of countries' level of development. These health indicators are directly linked through existing policies, plans and programmes to countries' investment in early childhood and respect for children's rights. Analysis of health and nutrition indicators should include the environmental and social determinants of disease, mortality, poor population groups' quality of life and the yawning inequality gaps between and within countries.

According to Sandoval-Priego, 2002, Children health status as indicated by nutritional status. Malnutrition is one of the current health problems among the under five children that the world is currently facing and is associated with more than 41% of the deaths that occur annually in children from 6 to 24 months of age in developing countries. World Health Organization in (2001) reported that 54% of all childhood mortality was attributed directly or indirectly to malnutrition with Sub-Saharan Africa having a high rate of prevalence. (Lutter and Rivera, 2003).

However, the health of any child is directly or indirectly linked to the environment the child lives. Studies have shown that children who are displaced as a result of war, famine and violence suffer more health challenges. (Abiodun, 2010).

Globally, over 40 million people were displaced as a result of wars and violence due to religious and ethnic conflicts in 2015 while 19.2 million were displaced by natural disasters such as famine and floods. In Africa, 12 million people were displaced by armed conflict and violence. There were hundreds of thousands of people displaced by natural disasters. Despite these large numbers of internally displaced persons (IDPs) in Sub-Saharan African countries and the potentially negative impact of displacement on the health of these populations, there is limited information on the health problems of IDPs in the region. In Nigeria, the insurgent activities of Boko Haram in the past 6 years have forced over a million people to flee their homes. This has resulted in an unprecedented humanitarian crisis in the North-eastern part of the country and the Lake Chad region (Norwegian Refugee Council., 2016). Furthermore, inter-communal clashes resulting from ethno-religious disputes, tensions between Fulani herdsmen and farmers have resulted in over 700,000 people being displaced from the Middle Belt region of Nigeria (Norwegian Refugee Council., 2016). In Central Africa, conflict and violence have resulted in over a million displacements of people in the Democratic Republic of Congo. Other African countries which have had

large numbers of IDPs in the past decade are Somalia, Sudan, Uganda, Kenya and Sudan (Ferris,2012).

Internal displacement has significant effects on public health and the well-being of the affected populations. These impacts may be categorised as direct due to violence and injury or indirect such as increased rates of infectious diseases and malnutrition (Lam, 2015). Several risk factors, which promote communicable diseases, work in synergy during displacement. These factors include movement of mass populations and resettlement in temporary locations, overcrowding, economic and environmental degradation, poverty, inadequacy of safe water, poor sanitation and waste management. These conditions are further compounded by the absence of shelter, food shortages and poor access to healthcare (Connolly, 2004). Depending on the location in Sub-Saharan Africa, the combined effects of these factors result in increased risk of diseases such as acute respiratory infections (ARI) (4%), diarrhoeal diseases (18%-22%) and scabies (77%-86%) (Getanda, 2015). Furthermore, malnutrition has been reported among under-five children. In the region, the spectrum includes stunting (38.6%), underweight (28.4%) and wasting (7.2%) (Turnip, 2010). Diarrhoeal diseases are major causes of morbidity and mortality among IDPs and mainly result from substandard or inadequate sanitation facilities, poor hygiene and scarcity of soap (Kim, 2007).

The disruption in public health services also hinders prevention and control programmes consequently resulting in the rise of vector-borne diseases such as malaria and yellow fever (Connolly, 2004). Epidemics of infectious diseases are quite common in IDP camp settings due to inadequate water and sanitation facilities combined with overcrowding (Siriwardhana, 2014).

Women and children constitute over 70% of internally displaced populations, and they experience a wide range of health risks. They are extremely vulnerable to physical and mental health problems, and they also have unique health needs (Mooney, 2005).

1.2 STATEMENT OF PROBLEM

Each year, thousands of people are forcibly displaced from their homes and have caused them to move within or between countries without having a permanent place of residence. Some displaced persons will return home quickly but the world is increasingly seeing more and more long-term displacement. Most of today's displacements have resulted from intense and long-standing conflicts that remain largely unresolved. Underlying causes for these conflicts are a complex interplay of political, economic, ethnic and environmental pressures (Loescher, 2003; UNHCR, 2003). Estimates of the numbers of forcibily displaced persons and refugees by the United Nations High Commissioner for Refugees (UNHCR) are 65.3 million and 21.3 million respectively in 2015 and over half of them are below 5 years of age (UNHCR, 2015). Europe accounts for 6% of the displace persons, Americas 12%, Middle East and North Africa 39%, Asia and Pacific 14% and Africa 29% (UNHCR, 2015). In Nigeria, the north-east conflict provoked by Boko Haram have resulted in widespread displacement, violations of international humanitarian and human rights law, protection risks and a growing humanitarian crisis. Since the start of the conflict in 2009, more than 20,000 women and children have been killed. Up to 2.1 million people fled their homes at the height of the conflict, 1.8 million of whom are currently internally displaced and 0.2 million in neighbouring countries of Cameroon, Chad and Niger (UN, 2015). According to reports from United Nations (2016), in the three most affected states of Adamawa, Borno and Yobe almost 7 million people are in need of humanitarian assistance, more than 50 per cent

of whom are children. In newly accessible areas vulnerable host populations are in critical need of humanitarian interventions including food, water, sanitation, protection, education, shelter and health services, because survival have been difficult for the affected population, which are majorly children. These children are however vulnerable to malnutrition and other childhood diseases. This study therefore seeks for examine the health of under 5 children in Mutum Biyu IDP camp in Taraba State.

1.3 RESEARCH QUESTIONS

1. Does sociodemographic characteristics of parents affect child health in Mutum Biyu Internally displaced persons' camp in Taraba state.

2. Does other factors such like exposure to malaria, malnutrition, anaemia and other child related disease affect the wellbeing of children in Mutum Biyu Internally displaced person's camp in Taraba state.

3. Does intervention by government affect the livelihood of children at the IDP camp.

1.4 RESEARCH OBJECTIVES

1.4.1 GENERAL OBJECTIVES

The general objective of this study is to determine the factors associated with child health among internally displaced persons in Mutum Biyu IDP camp in Taraba State

1.4.2 SPECIFIC OBJECTIVES

1. To examine if sociodemographic characteristics of parents affect child health in Mutum Biyu Internally displaced persons' camp in Taraba state.

2. To examine other factors such like exposure to malaria, malnutrition, anaemia and other child related disease affect the wellbeing of children in Mutum Biyu Internally displaced person's camp in Taraba state.

3. To investigate if intervention by government affect the livelihood of children at the IDP camp.

1.5 JUSTIFICATION

Despite the increasing numbers of IDPs in African countries and the burden of various health problems in these populations, most studies thus far have focused on specific health problems such as depression, malnutrition and infectious diseases (Hamid, and Musa, 2010) These prior studies have, however, not really provided a complete picture of the health problems of IDPs in the region. This information is essential for the planning and delivery of comprehensive healthcare to cater for the full complement of health problems of IDPs rather than instituting fragmented vertical programmes. The objective of this review was to provide evidence of the health problems of IDPs in Africa.

This study therefore aims at determining the factors affecting child health in Northern Nigeria, considering their risk to attacks by the Boko Haram sect and religious conflict in the area, using the Mutum Biyu IDP camp in Taraba state as a case study.

CHAPTER TWO

LITERATURE REVIEW

2.1 The concept of Health and Child Health

The most commonly quoted definition of health is that which was formalized by the World Health Organization (WHO) over half a century ago. According to WHO (1948), Health is a state of complete physical, mental and social well-being and not merely absence of diseases or infirmity.

Ottawa Chapter for Health Promotion (1986), proposed that children's health is the extent to which individual children or group of children are able or enabled to develop and realize their potentials, satisfy their needs and develop capacities that allows them to interact successfully with their biological, physical and social environment. Child health refers to the period between birth and five years old when children are particularly vulnerable to disease, illness and death. From one month to five years of age, the main causes of death are pneumonia, diarrhea, malaria, measles and HIV. Children's health encompasses the physical, mental, emotional and social well-being of children from infancy through adolescence. Malnutrition is estimated to contribute to more than one third of all child deaths.

Early childhood health and nutrition is a true reflection of countries' level of development. These health indicators are directly linked through existing policies, plans and programmes to countries' investment in early childhood and respect for children's rights. Analysis of health and nutrition indicators should include the environmental and social determinants of disease, mortality, poor population groups' quality of life and the yawning inequality gaps between and within countries.

Social determinants of health and nutrition are factors that characterize environments to which individuals and the population are "exposed" and which can influence lifelong

developmental and health outcomes. Social determinants act at different levels of influence, interact with each another and represent a broad array of characteristics that are not biologically or genetically based but rather are entrenched in interactions between individuals and socio-physical environments. Examples of the most important social determinants of child health, nutrition and development include living conditions, childparents-peers interpersonal relations, family socio-demographics, learning environments in day care centres and schools, access to premises, neighbourhood safety and socio-political context.

The first few years of life are a critical period during which lifelong patterns of health vulnerability are determined by the complex interplay of social determinants. As action can be taken on environmental conditions in order to improve the people's health outcomes, researchers, governments and policy makers have increasingly been attempting to improve their understanding of the conditions under which children achieve optimal health and developmental outcomes. (Stefania, 2003).

Variables relating to birth and early childhood are particularly sensitive to policy changes and the state of well-being. Child health indicators are strongly related to economic and political indicators (Chung H., 2006). It is difficult to separate health from nutrition, as both are intrinsically linked and have common social determinants.

Unfortunately, most indicators concern mortality rates, vaccine coverage and coverage of other types of services such as antenatal care. There is little systematized information on morbidity, that is to say, the diseases that afflict children. It is difficult to compile records on these matters. The diseases that raise mortality rates and have the greatest impact on the quality of life are malaria, diarrhoea and acute infectious respiratory diseases. It is very difficult to separate health from nutrition because the two are intimately linked to each other.

Malnutrition affects health significantly by raising the frequency and severity of diseases while, concomitantly, diseases affect the child's nutrition status directly during the critical early-childhood period, taking their toll on growth, maturation and development.

One area of significance to the selection of indicators, since it is a powerful determinant of the quality of life and of the frequency of primarily gastrointestinal diseases, is basic sanitation. The availability of safe drinking water is of the essence in morbid-mortality caused by acute diarrhoea in small children (mainly under one year of age), while greater access to potable water is associated with a sharp fall in infant mortality.

Pneumonia and diarrhoeal diseases are the two major killers of children under five years of age, accounting for 18% and 15% respectively of all deaths in 2008. These rates include neonatal deaths (WHO, 2011).

The burden of mortality due to pneumonia and diarrhoea is heaviest in the WHO African Region and the WHO South-East Asia Region. The provision of crucial child health care against often fatal diseases remains inadequate. Such care includes oral rehydration therapy for diarrhoea and case management with antibiotics for pneumonia. Most child deaths due to pneumonia could be avoided if effective care were provided on a large scale and reached the most vulnerable population groups (WHO, 2011).

Cost-effective care can save the lives of millions of children yearly. Immunization campaigns still fail to reach 30 million children, despite success in in reducing polio, tetanus and measles through immunization. Measles and tetanus still kill more than 1 million children under five years of age each year. Vitamin A supplementation costs only $0.02 cents per capsule and, if administered twice or thrice yearly, prevents blindness and death. Yet, although vitamin A supplementation saved an estimated 2.3 million lives between 1999 and 2004, only half of young children in poor countries receive such treatments. Between 250,000 and 500,000 children become blind every year, with 70% of them dying within 12 months.

Oral rehydration therapy (ORT) has helped to halve diarrhoea deaths, saving an estimated 1 million lives annually; yet more than 2 million children still die yearly from diarrhoea-related causes.

Basic newborn care include immunizing mothers against tetanus, ensuring clean delivery practices in a hygienic birthing environment, drying and wrapping the baby immediately after birth, thus providing the necessary warmth: The promotion of immediate and continuous breastfeeding, immunization and treatment of infections with antibiotics could save the lives of 3 million newborns annually. Improved sanitation and access to clean drinking water can reduce childhood infections and diarrhoea. More than 40% of the world's population do not have access to basic sanitation, and more than one billion people use unsafe sources of drinking water (WHO, 2008).

Hunger and malnutrition are an unfortunate reality of the world. While people in industrialized societies live in plenty, malnutrition contributes yearly to the death of 5.6 million children under five years of age in non-industrialized societies. In the developing world, millions of children develop too slowly and millions of people cannot develop their potential to the fullest. Malnutrition has particularly serious effects on children, above all, infectious secondary immune deficiency, learning deficits and, subsequently, school drop-out.

Furthermore, malnutrition threatens girls' ability to have healthy children in the future and perpetuates the generational cycle of poverty. (World health organization, 2011).

Good nutrition, in turn, is the cornerstone of survival, health and development—not only for current but also future generations. Well-nourished women face fewer risks during pregnancy and labour, and their children develop much better physically and mentally.

2.2 Child health in Internally Displace Person's Camp

Conflicts and disasters often cause large-scale displacement of people due to destruction of homes and environment, religious or political persecution or economic necessity (Kett, 2005). These internally displaced persons (IDPs) are 'persons or groups of people who have been forced or obliged to flee or leave their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflicts, situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognised state border (UNCHR, 2008). They are distinct from refugees who are displaced outside their national borders. Furthermore, IDPs are often more disadvantaged than refugees because they do not benefit from assistance provided by international agencies unless the national government requests such assistance (Mooney, 2005).

Global estimates indicate that the number of people displaced annually by conflict and violence has increased since 2003 (Norwegian Refugee Council, 2016). On the average, 5.2 million have been displaced annually in the past 13 years due to insurgency, political instability and terrorist activities of groups such as ISIS and Boko Haram, particularly in the Middle East and Sub-Saharan Africa. As of December 2015, the global estimate of IDPs due to the conflict was 40.8 million (Norwegian Refugee Council, 2016).

Three-quarters of these IDPs reside in ten countries of the world, and five of these are located in Sub-Saharan Africa. The total number of people displaced by conflict in the region is almost 12 million (Norwegian Refugee Council, 2016). In Nigeria, the insurgent activities of Boko Haram in the past 6 years have forced over a million people to flee their homes. This has resulted in an unprecedented humanitarian crisis in the North-eastern part of the country and the Lake Chad region (Norwegian Refugee Council, 2016).Furthermore, inter-communal clashes resulting from ethno-religious disputes, tensions between Fulani herdsmen and

farmers have resulted in over 700,000 people being displaced from the Middle Belt region of Nigeria (Norwegian Refugee Council, 2016). In Central Africa, conflict and violence have resulted in over a million displacements of people in the Democratic Republic of Congo (Norwegian Refugee Council, 2016). Other African countries which have had large numbers of IDPs in the past decade are Somalia, Sudan, Uganda, Kenya and Sudan (Ferris, 2012).

Apart from conflicts and violence, natural disasters resulting from floods, storms, wildfire, earthquakes and droughts have caused the displacement of 203.4 million people globally in the past 8 years. In 2015, 19.2 million people in 113 countries were displaced by natural disasters. Most of these displacements occurred in South and Eastern Asian countries while slightly over a million occurred in Sub-Saharan Africa (Norwegian Refugee Council, 2016). Internal displacement has significant effects on public health and the well-being of the affected populations. These impacts may be categorised as direct due to violence and injury or indirect such as increased rates of infectious diseases and malnutrition (Guerrier, 2009). Several risk factors, which promote communicable diseases, work in synergy during displacement.

These factors include movement of mass populations and resettlement in temporary locations, overcrowding, economic and environmental degradation, poverty, inadequacy of safe water, poor sanitation and waste management (Olwedo, 2008). These conditions are further compounded by the absence of shelter, food shortages and poor access to healthcare (Norwegian Refugee Council, 2016). Depending on the location in Sub-Saharan Africa, the combined effects of these factors result in increased risk of diseases such as acute respiratory infections (ARI) (4%) (Kim et.al, 2007), diarrhoeal diseases (18% 22%) and scabies (77%–86%) (WHO, 2008). Furthermore, malnutrition has been reported among under-five children. In the region, the spectrum includes stunting (38.6%), underweight (28.4%) and wasting (7.2%) (Turnip, 2010). Diarrhoeal diseases are major causes of morbidity and mortality

among IDPs and mainly result from substandard or inadequate sanitation facilities, poor hygiene and scarcity of soap (Cornolly, 2004).

The disruption in public health services also hinders prevention and control programmes consequently resulting in the rise of vector-borne diseases such as malaria and yellow fever (Cornolly, 2004). Similarly, routine immunisation services are disrupted, thus increasing the number of individuals susceptible to diseases and the risk of epidemics of vaccine-preventable diseases (VPDs). Depending on the geographical location, outbreaks of VPDs which have been reported among IDPs include measles (20%–30%) and meningococcal meningitis (0.3%). Similarly, epidemics of cholera, yellow fever and recently discovered hepatitis E have been reported in IDP and refugee camps across Africa (WHO, 2008). Furthermore, global polio eradication activities have been hampered in three countries in three conflict-torn countries which have large numbers of refugees and IDPs in Afghanistan, Pakistan and Nigeria (Lam, 2015). Epidemics of infectious diseases are quite common in IDP camp settings due to inadequate water and sanitation facilities combined with overcrowding (Siriwardhana, and Wickramage, 2014).

Women and children constitute over 70% of internally displaced populations (WHO, 2008), and they experience a wide range of health risks. They are extremely vulnerable to physical and mental health problems, and they also have unique health needs (Lam, 2015). A number of studies have also reported that women and girls were victims of physical and sexual violence in IDP camps (Stark and Wheaton, 2010). Women are at higher risk of unwanted pregnancies, unsafe abortions, maternal morbidity and mortality (Austin, Guy, Lee Jones and McGim, 2008). The negative impacts of sexual violence are significant and long term. These may include physical injuries, sexually transmitted infections including HIV, unwanted pregnancies and mental health effects (Austin, Guy, Lee Jones and McGim, 2008).

Moreover, IDPs, particularly those affected by conflict, are at a high risk of mental health problems. The commonly reported psychological reactions are post-traumatic stress disorders (PTSDs) in reaction to violence and depression as a reaction to loss (Asad, 2016). Other types of mental health problems which have been reported are panic attacks and anxiety disorders (Saxon, 2016). The psychological distress occurring in the post-conflict environment also contributes to harmful health behaviours such as hazardous drinking and increased smoking. These behaviours are linked to an increased burden of non-communicable diseases such as hypertension, chronic obstructive pulmonary disease and cancers (Roberts, Patel and McKee, 2012).

Despite the increasing numbers of IDPs in African countries and the burden of various health problems in these populations, most studies thus far have focused on specific health problems such as PTSD, depression, malnutrition and infectious diseases (Austin, Guy, Lee Jones and McGim, 2008). These prior studies have, however, not really provided a complete picture of the child health problems of IDPs in the region. This information is essential for the planning and delivery of comprehensive healthcare to cater for the full complement of health problems of IDPs rather than instituting fragmented vertical programmes.

2.3 The Northern Nigeria situation

No doubt, Nigeria is today faced with the challenge of insecurity across the country from North to the South, East and West, the magnitude of insecurity resulting from the consistent activities of the insurgency in the north is the one that has captured the attention of foreign and domestic authorities. In Nigeria, the incidence of internal displacement occurred solely because it has ethnic, religious and political undertones. Muhammed (2012) submits that the volume and spread of Internally Displaced Persons (IDPs) in Nigeria reveals that about 1.4million displaced persons are been hosted across the country, for example, Akwa-Ibom (200,000); Cross-River (115,000); Ebonyi (80,000); Bauchi (45,000); Kebbi (50,000); Jigawa

(200,000); Plateau (250,000); Taraba (250,000); Benue (480,000); Gombe (100,000); Edo (250,000); and Borno States (16,000). It is pertinent to note that the number of Internally Displaced Persons (IDPs) between 2013 and 2015 has increased to about 5million within and outside Nigeria. Most of these Internally Displaced Persons are from the northern region of the country. Boko Haram insurgency in the north has most times, unleashed mayhem and terrorised almost all the states in the north east of Nigeria where schools and homes were set ablaze and razed down, markets and other public places were burnt, innocent people were maimed, many students were adopted, kidnapped and were taken to unknown destinations. Northern Nigeria consists of 19 out of 36 states clustered into 3 geo-political zones of North West, North-East and North-Central. The region characterised years by violent, ethno-religious and political conflicts, rising violent crimes and widespread corruption resulting into internal displacement of population largely due to bad governance, socio-economic imbalances, injustice and inequalities, as well as insensitivity to the plight of their citizens. In terms of absolute poverty line by geopolitical zone, the North-East has retained the title of the poorest zone in Nigeria since 1985, with the highest incidence of poverty (ranging between 54.9% and 72.2%) followed by the North-West and North-Central (Muhammed, 2012:4). He captured the situation as follows:

Recently, the North-East is reported to be the home of state with highest unemployment rate in the federation, that is, Yobe State at 60.6%, as at the end of 2011. It is the zone with highest number of Internally Displaced Persons (IDPs) totalling 11, 360 in the 1st quarter of 2012and in 2010-2011 with highest number of forced displaced persons of Internally Displaced Persons (IDPs) (about 22% or 82%, North-West with 31% or 116, 207 and North-Central with highest of 42% or 162, 281 out of 377,701) due to Identity-Based Conflicts such as ethno-religious and political conflicts and violent clashes between the religious militia/armed group (Boko Haram) and government forces. Hence, within this period of

coverage, the North account for 95% of IDPs in paradox of Boko Haram, an armed group that promotes sectarian violence of a different dimension that has engulfed the entire zone in the history of Nigeria, that is neither inter or intra-religious but essentially against the western educated Muslim elite and government.

It is a paradox that such a situation should emanate from the minds of those who believe that they are asserting their religious identity, reforming Islam and restoring it to its pristine purity by maiming and killing innocent residents, destroying property and rupturing peace.

The north-east conflict provoked by Boko Haram have resulted in widespread displacement, violations of international humanitarian and human rights law, protection risks and a growing humanitarian crisis. Since the start of the conflict in 2009, more than 20,000 women and children have been killed. Up to 2.1 million people fled their homes at the height of the conflict, 1.8 million of whom are currently internally displaced and 0.2 million in neighbouring countries of Cameroon, Chad and Niger (UN, 2015). According to reports from United Nations (2016), in the three most affected states of Adamawa, Borno and Yobe almost 7 million people are in need of humanitarian assistance, more than 50 per cent of whom are children. In newly accessible areas vulnerable host populations are in critical need of humanitarian interventions including food, water, sanitation, protection, education, shelter and health services, because survival have been difficult for the affected population, which are majorly children.

2.4 Malnutrition as a component of child health

Children are operationally defined as a baby between 0 and 5 years. They are otherwise referred to as under-5s and constitute one of the vulnerable groups in any given population. The peculiar feeding processes include breastfeeding (usually exclusive between 0-6 months), complementary feeding (6-9 months) and introduction of normal adult family diets. It should be added at this point that any default in the feeding pattern at this stage in

life may jeopardize subsequent nutritional status in later life, with high risk of developing any of the non-communicable diseases including obesity and its other attendant problems. Nutrition is a fundamental pillar of human life, health and development across the entire life span. From the earliest stages of foetus development, at birth, through infancy, childhood, adolescence, and into adulthood and old age, proper food and good nutrition are essential for survival, physical growth, mental development, performance and productivity, health and well-being (FAO/WHO, 1992 and WHO, 2000). Thus, being nutritionally vulnerable, under-5 children's nutritional status is generally accepted as an indicator of the nutritional status of any particular community (Davidson et al., 1975). This is due to their easy susceptibility to malnutrition and infection (Akinlosotu and Hussain, 1985; Uppal et al., 2005). Children in this age group require a high supply of nutrients since they are usually very active and their growth is rapid. Also during this period, under-nutrition in the form of kwashiorkor, marasmus, anaemia and xerophthalmia are not uncommon (Ene-Obong, 2001).

It has been estimated that approximately one out of every three Under-5 children is chronically malnourished and thereby subjected to a pattern of ill health and poor development in early life (UNICEF, 1998), with malnutrition being associated with more than half of all deaths of children worldwide (Sobo and Oguntona, 2006).

Early childhood starts from foetus to new birth and then through postnatal life. In intrauterine life, the nutritional status of the unborn foetus depends largely on the adequacy of the dietary intake of the mother and this determines the outcome of birth of the new born. Postnatal life is a continuum in human development. Normal growth and development depend largely upon the nutritional status of the new born which is in turn related directly to the nutrition of the mother and inherited characteristics, and to the dietary intake of the infant (Krauss and Mahan, 1982). In early childhood, nutritional status is of paramount importance

for a child's later physical, mental and social development. From birth to 4-6 months of life, breast milk is the sole or prime source of nutrients and optimal breastfeeding practice becomes a critical factor in child survival and development (Onyesili, 2000). Breast milk contains all nutrients, antibodies, hormones and antioxidants that an infant needs to thrive UNICEF (1998). Early initiation within half an hour of birth will ensure that the protective antibodies in the colostrums are available rapidly to the infant, because after 24 to 48 hours, the level of antibodies in breast milk diminishes.

Nutritional status during childhood is crucial for human development as it affects every phase of human life, the elevation of childhood nutrition therefore assist in the goal to reduce child mortality considering the report by WHO (2005) and (Pelletier et al., 1995) that malnutrition is an underlying cause of an estimated more than a half of all deaths of under five children.

Malnutrition currently gives accounts of about half of the 10 million deaths each year among under-five children in the developing world. Malnutrition is strongly associated with poverty because levels of malnutrition are higher in poor countries than in better-off countries (World Bank, 2000).

Malnutrition arises from a complex of nutritional, social and biological deprivation and is manifested in various forms such as stunting (short stature), underweight, muscle wasting, growth retardation, diminished fat and ill health with high mortality rate (Onimawo et al., 2006). Growth is an increase in size, its progress is mainly structural, and can be measured with some degree of reliability in terms of height, weight, age etc. (Apley, 1979). There are wide variations in the rates at which the height and weight of children are subsequently attained. This is as a result of several factors such as quality and quantity of food, family income, family size and genetic constitution which may contribute to these

variations (Beaton et al., 1990). Growth assessment has been identified as the most important measure for evaluating the health and nutritional status of Under-5 children through anthropometric measurements (Apley, 1979). The reason for this is that anthropometric indicators of growth not only provide information on health and nutritional status, but is also an indirect measure of the quality of life of an entire population (Shetty and James, 1994).

Malnutrition is a pathological condition brought about by the inadequacy or over consumption of one or more of the essential nutrients necessary for survival, growth, reproduction as well as productivity at work (UNICEF and FGN, 2001).

The inadequate or excessive intake of nutrients may result from disease factors that affect digestion, absorption, transport, and utilization of nutrients (UNICEF, 1990). Malabsorption of nutrients may result from genetic cum environmental conditions or illness. The most critically vulnerable groups are the developing foetus, preschool children, women before and during pregnancy, and lactating women (UNICEF, 1998).

Malnutrition affects all levels of development physically, mentally, socially, psychologically and physiologically. It thus multiplies the effect of prevailing disease or mortality in children and infants (Huffman and Marlin, 1994). In the developing nations, malnutrition usually makes its greatest impact on preschoolers. Under-5 children mortality accounts for nearly 50% of total deaths, and careful examination has shown malnutrition as the major underlying factor (Whitehead and Rowland, 2002). Studies by many researchers have shown that it is during the preschool years that under-nutrition in the form of kwashiorkor and marasmus are most prevalent. This is because these children are in the state of life when growth is rapid, nutrient requirements are high and the diets likely to be given are inadequate. Also, at this stage of life, there is continuous stress from bacterial, viral and parasitic infections which contribute to malnutrition. The presence of malnutrition reduces

the resistance of the child to infections and infectious diseases, resulting in reduced food intake and poor nutrient absorption, which in turn result in stunted growth depending on the severity of the malnutrition.

Children below 5 years of age have been specifically studied because their health status is a sensitive indicator of overall community health, particularly among the disadvantaged group in the population. The preschoolers especially those at the second year of life are 'transitional' as regards diet, immunity to infections and psychological dependency (Pyke, 1979). This period which is characterized by a high nutrient need, particularly that of protein for swiftly increasing muscle tissue, Is also a period when several meals a day are required and when food should be easily masticable and digestible.

Malnutrition does not often exert equal impact on all population groups. Certain factors and circumstances dictate the target of occurrence (Keke, 1990). The causes of malnutrition are multidimensional and include both food and non food factors such as low income, uneven household food distribution, poor sanitation, infection, inadequate food production, marketing and preservation as well as poor knowledge of nutrition (Chen and Dseusa, 1981). Some of the reported effects of malnutrition and its various manifestations include stunted physical growth, retarded mental achievement, and low productivity, low resistance to diseases and infections with high morbidity and mortality rates especially in children (Nnayelugo, 1992).

Malnutrition is an umbrella term which covers under- and over-nutrition. Under nutrition can manifest itself in different forms and affect the physical and mental development of children in different ways (Arifeen, Black, Caulfield, Antelman and Baqui, 2001). Each type of under nutrition depends on age, duration and nutrient composition of diet.

- The most basic kind is called 'protein energy under nutrition' caused by a diet lacking in energy and protein due to a deficit of all major macronutrients, such as carbohydrates, fats and proteins. Marasmus is caused by a lack of protein and energy with sufferers appearing skeletally thin. In extreme cases, it can lead to kwashiorkor.
- Other forms of under nutrition are usually the result of vitamin and mineral deficiencies (micronutrients), which can lead to anemia, scurvy, pellagra, beriberi and xeropthalmia and, ultimately, death (Arimond and Ruel, 2014).

Malnutrition is most commonly identified through measurement of growth and body composition, known as anthropometric indicators. Underweight, stunting, and wasting, are the nutritional status conditions measured in an anthropometric assessment. Stunting (Height for age) is a measure of linear growth. Stunting refers to shortness, and reflects linear growth achieved pre and postnatal with its deficits. It is generally assumed to indicate long-term, cumulative effects of inadequate nutrition and poor health status. Height for age (HFA) is considered a measure of past nutrition, because a child, who is short today, maybe did not have adequate nutritional intake at some point in the past.

Underweight (Weight for age) is the most common assessment of child nutrition status. It is routinely collected in growth promotion programmes, and is a good indicator for children under 24 months because of the need to do precise measurements of weight for these age groups. Weight for age (WFA) is a simple index, but this index does not take height into account. Children who are taller would be expected to weigh more than other children, just as children who are shorter would be expected to weigh a little less and still be healthy.

Wasting (Weight for Height) is a measure of acute or short-term exposure to a negative environment. It is sensitive to changes in calorie intake or the effects of disease. Wasting can be calculated without knowing the age of a child. Weight for height (WFH) is a measure of

current body mass. It is the best index to use to reflect wasting malnutrition, when it is difficult to determine the exact ages of the children being measured. A child is considered malnourished or severely undernourished if any of these indices fall below the accepted median values set by the World Health Organization international reference (De Onis, Onyango, Borghi, Garza, C. 2006).

Malnutrition prevalence; height for age of children under 5 in sub-Saharan Africa was last measured at 35.74 in 2014, according to the World Bank. Prevalence of child malnutrition is the percentage of children under age 5 whose height for age (stunting) is more than two standard deviations below the median for the international reference population ages 0-59 months. For children up to two years old height is measured by recumbent length. For older children height is measured by stature while standing. The data are based on the WHO's new child growth standards released in 2006. Many countries, including Malawi, Rwanda, Senegal and the United Republic of Tanzania, have made considerable and encouraging progress. With external support, and interventions for preventing malnutrition and improving nutrition, Niger made remarkable progress though, 44% of children suffer from stunting. The percentage of stunted children in sub-Saharan Africa fell from 48% to 38% between 1990 and 2013. Many countries, including Lesotho, Mali and Niger, have made noticeably strong progress since 2000, but still report 39%, 28% and 44% of under-5 children suffering from stunting in Sierra Leone and Zimbabwe, where the stunting rate has worsened, (UNESCO, 2013).

In the past two decades, child and maternal malnutrition has declined almost by half, child malnutrition still imposes the greatest nutrition-related health burden at global level, 161 million children are stunted due to chronic malnutrition, 99 million children are underweight, and 45% of child deaths are caused by child and maternal malnutrition. Developing regions

have the highest prevalence of stunting in children under the age of five with 34% in western Africa, 32% in central Africa, 41% in eastern Africa, and 30% in southern Africa (FAO, 2014).

2.5 Determinants of Child Health

The followings are the factors determining the health of the child at the IDP camp.

2.5.1 Vaccination

General routine child vaccinations after displacement is an important factor in determining the health status of the child. In most cases, the common practice is that women taking their children for postnatal check-ups and immunization often report that there were no vaccines in stock (Rodriguez, 2014). The reasons seemed to be mostly associated with a lack/rupture of stocks due to the poor economic state of the country following the conflict.

2.5.2. Breastfeeding Practices

If children are not properly breastfed, or if breastfeeding is disrupted due to conflict that led to displacement, then this will have a serious implication on the health status of the children. Exclusive breastfeeding of six months (as per WHO guidelines) is necessary before the introduction of solid food afterwards.

2.5.3 Nutrition

Significant changes in diet after displacement is often common among displaced people due to lower income while displaced, and affected people will be forced to cut consumption of meat, fish, fruits and vegetables, this significantly affect the health of children.

2.5.4 Access to Health Care Services

Access to basic health care is a major determinant of child health, women who were pregnant at the moment of displacement and those who got pregnant after displacement will most

likely find it difficult because of the poor medical facilities at the IDP camp. Obligatory medical check-ups and tests during pregnancy will be difficult

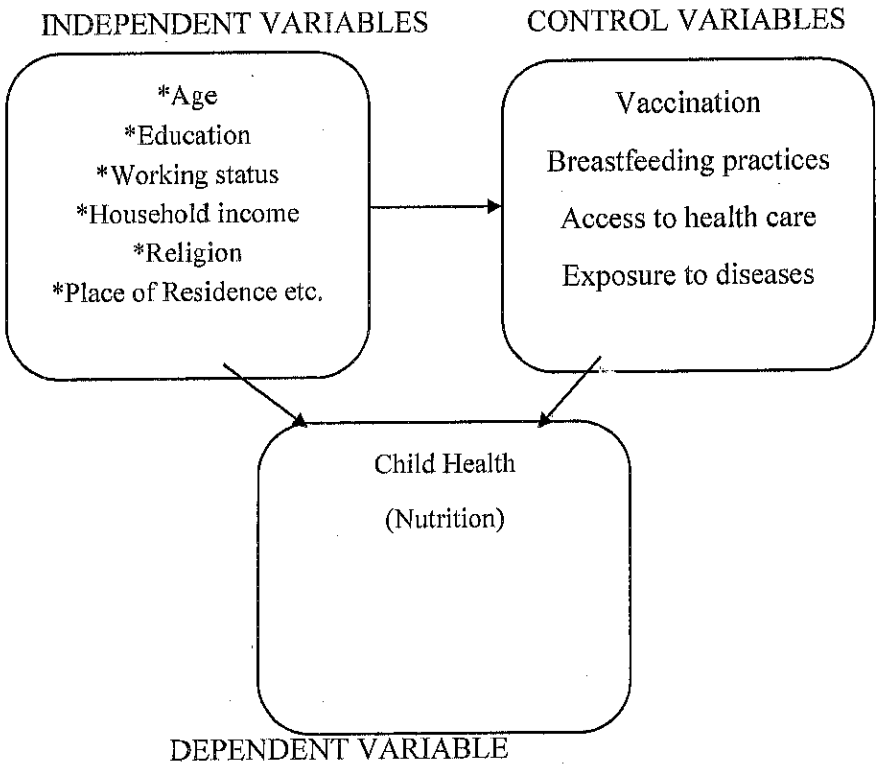
2.5.5 Household Income Status

How much the family earns also determine in great extent the access to health facilities, households who earns more have the opportunity to get good health care, this improves the health of the child

2.5.6 Exposure to diseases

Exposure to diseases like malaria, anaemia, typhoid, fever and so on affects the health of the child. If the child does not get good health care it might lead to mortality.

2.6 Conceptual Framework



Source: Author's Construct, 2017

2.7 Hypotheses Statement

1. H_0 : There is no significant relationship between sociodemographic status of mothers and child health among internally displaced person's camp in Mutum Biyu camp in Taraba State.

2. H_0 : There is no relationship between exposure to diseases like malaria, anaemia and other child related diseases and child health in Mutum Biyu camp in Taraba State.

3. H_0 : There is no significant relationship between government intervention to influence livelihood of children and child health in IDP camp in Taraba State.

CHAPTER THREE

METHODOLOGY

This chapter is concerned with the aim of stating the manner in which the research was conducted. It is perhaps the crux of this study because it is the background against which the findings and conclusions were evaluated.

3.0 Data Collection

Sets of questionnaires were administered at the study area to know the socio-economic status of respondent, factors determining child health, such as exposure to malnutrition and childhood diseases like malaria, anemia, typhoid, fever and other deadly diseases affecting child health at the mutum biyu internally displaced persons' camp in Taraba state. Focus Group Discussion method will also be employed to allow triangulation.

3.1 Sample Size and Sampling Technique

Sample size is the number of respondents included in the research. A total of two hundred (200) questionnaires were administered to respondents who were randomly selected from among the residents of the camp. Random selection of the respondents enables all respondents to have equal chance of been selected.

3.2 Research Instrument

Self-administered survey was used to distribute the questionnaires personally to the respondents for the collection of primary data. An interview guide was also used to elicit information from the respondents. The researcher deemed it prudent to combine both structured and unstructured questionnaire in the course of the study.

3.3 Method of Analysis

Primary data was collected for this research due to the need for direct responses from the respondents directly involved. In obtaining primary data, questionnaire and personal interview were used, the Stata statistical package was employed for the analysis (STATA 14) Three levels of analysis were employed in the course of this study, Univariate, Bivariate and Multivariate Analysis.

The Univariate analysis was conducted with frequency counts and summary statistics of relevant variables, The Bivariate analysis employed the use of Chi-Square the test the relationship between the dependent variables and the independent variables in categorical forms. The simple linear regression analysis was also employed.

The multivariate analysis employed binary logistic regression.

3.4 Variable description and measurement

The variables to be used are classified into independent and dependent variables, they are briefly discussed below:

3.4.1 Independent variables: The variables selected in this study are as follows:

Age: it is a continuous variable.

Sex: Is a categorical variable divided into two; Male and Female.

Place of Residence: It is divided into two (2) categories; Rural and Urban.

Level of Education: Is a categorical variable divided into four categories; No Education, Primary Education, Secondary Education and Higher Education.

Religion: Is measured in four categories; Catholic, Other Christians, Islam, Traditional.

Employment status: it is divided into 5 categories.

Income status: Is a continuous variable.

Reason for displacement: A categorical variable.

Year of displacement: Continuous variable.

3.4.2 DEPENDENT VARIABLE

Child health: This is measure by the combination of childhood diseases and malnutrition.

CHAPTER FOUR

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency (N = 200)	Percentage (%)
Age Group		
<=20	19	9.5
21 – 30	66	33.0
31 – 40	81	40.5
41 – 50	34	17.0
Mean ± SD	32.7 ± 7.9	
Marital Status		
Married	141	70.5
Single	2	1.0
Widowed	45	22.5
Separated	12	6.0
Ethnicity		
Yoruba	12	6.0
Igbo	14	7.0
Hausa	149	74.5
Fulani	25	12.5
Family type		
Monogamy	63	31.5
Polygamy	137	68.5

Majority of the women in the sample (40.4%) , are between the ages 31-40 years' old, with the mean age of 32.7, while (70.5%) of the women are married, and (74.5%) of them belonged to the Hausa ethnic group, while(68.5%) are in a polygamous family.

Table 1b: Socio-demographic characteristics of respondents (cont'd)

Variable	Frequency (N = 200)	Percentage (%)
Religion		
Christianity	19	9.5
Islam	178	89.0
Others	3	1.5
Employment Status		
Employed	12	6.0
Self-Employed	71	35.5
Unemployed	117	58.5
Education		
None	116	58.0
Primary	53	26.5
Secondary	26	13.0
Post-Secondary	5	2.5
Children Ever Born		
<5	60	30.0
5 – 9	92	46.0
10+	48	24.0
Sex of last child		
Male	111	55.0
Female	89	44.0
Age at marriage		
<20	141	70.5
20-24	54	27.0
25+	5	2.5

The study also revealed that a large proportion of these women (89.0%) practice Islam, and (58.5%) are unemployed, while (58.0%) of the woman are not educated and (46.0%) have 5-9 children. It is also interesting to note that (70.5%) of these women married at ages less than 20 years and (77.5%) has no source of income, while (55.5%) were married to husbands with no education.

Table 2: Causes of Displacement and Health risk factors

Variable	Frequency (N = 200)	Percentage (%)
Cause of displacement?		
Boko Haram	6	3.0
Natural Disaster	9	4.5
Ethnic crisis	102	51.0
Religious crisis	83	41.5
What year did you leave your home for Wukari?		
2013	146	73.0
2014	46	23.0
2015	8	4.0
What type of toilet facility do you use?		
Latrine	45	22.5
Bush	155	77.5
Did you seek treatment in any health facility?		
Yes	157	78.5
No	43	21.5
Child ever given any vaccination?		
Yes	127	63.5
No	73	36.5
Source of drinking water		
Pipe-borne water	20	10.0
Deep well	155	77.5
Water vendor	25	12.5

72% of the women have been living in that camp since 4 years ago, while (51.0%) and (41.5%) were displaced due to Ethnic and Religious crisis respectively. Since arrival at the camp, 79.5% of the women attest that they live in a single room with 5-9 occupants, and (87.5%) of them cook basically with fire wood, getting their drinking water from the well.

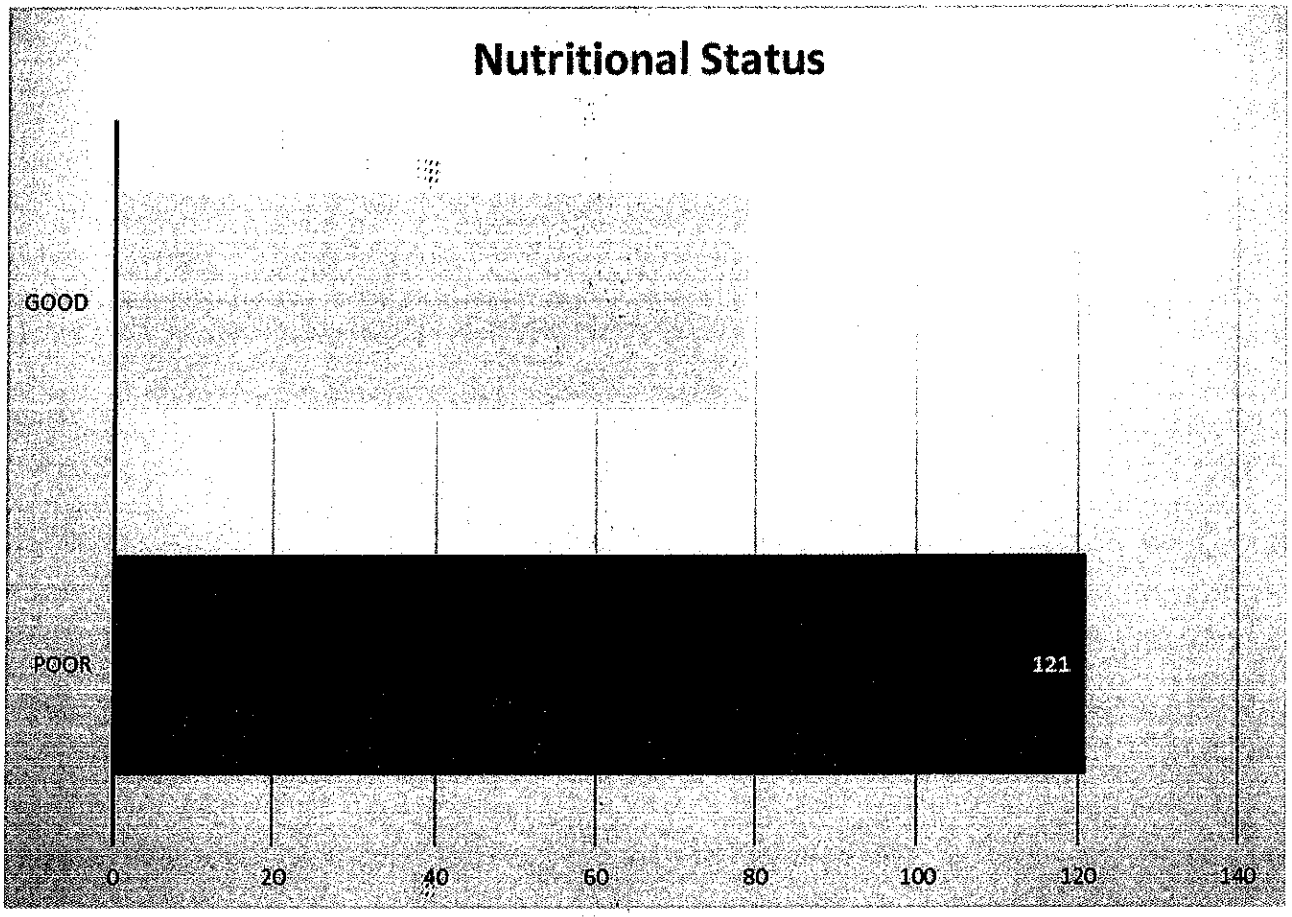
More so, with regards to their children's nutrition and health, (75.0%) of the women attest that they do not wash their hands before breastfeeding, and that they do not have any toilet facility while (77.5%) defecates in the surrounding bush.

Table 3: Government Intervention

Variable	Frequency (N = 200)	Percentage (%)
How regular do you get food from government		
Always	5	2.5
Sometimes	25	12.5
Rarely	81	40.5
Never	89	44.5
How regular do you get drugs or vaccinations from government		
Always	0	0.0
Sometimes	19	9.5
Rarely	81	40.0
Never	100	50.0
How regular do you get mosquito nets from government		
Always	154	77.0
Sometimes	16	8.0
Rarely	23	11.5
Never	7	3.5

The above table revealed the intervention of Government at the IDP camp. 44.5% of the women attest that the government have never supplied food stuff to the camp, while 50.0% affirmed that the government has never supplied them with any form of medication for their children.

Figure 1: Nutritional Status



The combined nutritional status of the children on the above graph shows that 121 (60.5%) of the children have poor nutrition, that is they were only able to give their children less than 4 categories of the food mentioned at the univariate level, and 79 (39.5%) of the children have good nutrition.

BIVARIATE ANALYSIS

Table 2. Relationship between Socio-demographic characteristics of respondents and child's nutrition

Variables	Nutritional Status			
	Poor n = 121 (%)	Good n = 79 (%)	χ^2	P value
Age Group				
<=20	15 (78.9)	4 (31.1)	13.802	0.003
21 – 30	49 (74.2)	17 (25.8)		
31 – 40	41 (50.6)	40 (49.4)		
41 – 50	16 (47.1)	18 (52.9)		
Marital Status				
Married	84 (59.6)	57 (40.4)	0.3896	0.942
Single	1 (50.0)	1 (50.0)		
Widowed	28 (62.2)	17 (37.8)		
Separated	8 (66.7)	4 (33.3)		
Ethnicity				
Yoruba	7 (58.3)	5 (41.7)	0.9806	0.806
Igbo	10 (71.4)	4 (28.6)		
Hausa	88 (59.1)	61 (40.9)		
Fulani	16 (64.0)	9 (36.0)		
Family type				
Monogamy	45 (71.4)	18 (28.6)	4.5965	0.032
Polygamy	76 (55.5)	61 (44.5)		
Religion				
Christianity	10 (52.6)	9 (47.4)	5.3447	0.069
Islam	111 (62.4)	67 (37.6)		
Others	0 (0.0)	3 (100.0)		

Table 2b. Relationship between Socio-demographic characteristics of respondents and child's nutrition

Variables	Nutritional Status			
	Poor n = 121 (%)	Good n = 79 (%)	χ^2	P value
Employment Status				
Employed	10 (83.3)	2 (16.7)	2.785	0.248
Self-Employed	42 (59.2)	29 (40.8)		
Unemployed	69 (59.0)	48 (41.0)		
Education				
None	65 (56.0)	51 (44.0)	4.9243	0.177
Primary	35 (66.0)	18 (34.0)		
Secondary	16 (61.5)	10 (38.5)		
Post-Secondary	5 (100.0)	0 (0.0)		
Children Ever Born				
<5	46 (76.7)	14 (23.3)	10.067	0.007
5 – 9	47 (51.1)	45 (48.9)		
10+	28 (58.3)	20 (41.7)		
Sex of last child				
Male	66 (59.5)	45 (40.5)	0.1134	0.737
Female	55 (61.8)	34 (38.2)		
Age at marriage				
<20	88 (62.4)	53 (37.6)	1.3109	0.519
20-24	31 (57.4)	23 (42.6)		
25+	2 (40.0)	3 (60.0)		

4.2 Bivariate Analysis

Table 2a and 2b above shows the relationship and the statistical extent to which respondents socio-demographic characteristics influences Child's health among internally displaced persons in Mutum Biyu camp. Showing the characteristics of the women by age, marital status, ethnicity, family type, religion, employment status, education, children ever born, sex of last child, and age at marriage. Study revealed that, the women's marital status, ethnicity, religion, employment status, education, sex of last child and age at marriage are inversely correlated with nutritional status of the children with p-value >0.05.

The results further revealed that age of the respondents is positively correlated with nutritional status of children since the p-value was less than 0.05 also, family type, and children ever of the respondents, displayed a p-value less than 0.05 thus denoting significant correlates with nutritional status of children.

MULTIVARIATE ANALYSIS

Table 3: Binary Logistics regression for predictors of child health among respondents

			95% CI		
Variable		OR	Lower	Upper	p - value
Age Group					
	<=20	1.0 (R.C)			
	21 – 30	0.94	0.25	3.55	0.055
	31 – 40	2.22	0.56	8.79	0.034
	41 – 50	2.45	0.52	11.57	0.000
Family Type					
	Polygamous	1.0 (R.C)			
	Monogamous	1.46	0.72	2.95	0.028
Children ever born					
	<5 years	1.0 (R.C)			
	5 – 9 years	0.97	0.79	4.46	0.001
	10+	0.45	0.43	3.34	0.042

RC= Reference Category

Binary Logistic Regression showing the association between child health and selected demographic characteristics.

The binary logistic table above revealed the extent of association between the dependent variable which was measured by child's nutritional status among the independents variables were the selected demographic which were statistical significant at bivariate level, variables such as age of respondents, family type and children ever born.

Women between the ages 21- 30 are 6% less likely to have children with good nutritional status, compared to women with ages less or equal to 20. (CI= 0.96, p=0.055). Women in age group 31-40 and 41- 50 are 2.2 time and 2.4 time more likely to have good nutrition, compared to women in age group less than 20 respectively.

Furthermore, women from monogamous family are 1.46 times more likely to have children with good nutritional status compared to women in polygamous family (CI= 1.46, p=0.028).

The study also revealed that women with 5-9 and 10+ children are less likely to have children to good nutritional status, compared to those with children less than 5 (3% and 55%) respectively.

CHAPTER FIVE

5.0: INTRODUCTION

This section consists of summary of all the findings, conclusions from the study and recommendations based on the findings.

5.1: SUMMARY

Majority of the women in the sample (40.4%) , are between the ages 31-40 years' old, with the mean age of 32.7, while (70.5%) of the women are married, and (74.5%) of them belonged to the Hausa ethnic group, while(68.5%) are in a polygamous family.

The study also revealed that a large proportion of these women (89.0%) practice Islam, and (58.5%) are unemployed, while (58.0%) of the woman are not educated and (46.0%) have 5-9 children. It is also interesting to note that (70.5%) of these women married at ages less than 20 years and (77.5%) has no source of income, while (55.5%) were married to husbands with no education.

Furthermore, 72% of the women have been living in that camp since 4 years ago, while (51.0% and 41.5%) were displaced due to Ethnic and Religious crisis respectively. Since arrival at the camp, 79.5% of the women attest that they live in a single room with 5-9 occupants, and (87.5%) of them cook basically with fire wood, getting their drinking water from the well.

More so, with regards to their children's nutrition and health, (75.0%) of the women attest that they do not wash their hands before breastfeeding, and that they do not have any toilet facility while (77.5%) defecates in the surrounding bush.

The study also revealed that (60.5%) of the children have poor nutrition due to lack of access to basic food.

Furthermore, with regards to child's health care at the camp, (78.5%) of the women have never seek treatment in any health facility and 63.5% of the children have not received vaccinations against polio, malaria, anemia, hepatitis etc in recent times. 44.5% of the women attest that the government have never sent food supplies, drugs and vaccinations.

The bivariate analysis showed that the characteristics of the women by age, marital status, ethnicity, family type, religion, employment status, education, children ever born, sex of last child, and age at marriage. Study revealed that, the women's marital status, ethnicity, religion, employment status, education, sex of last child and age at marriage are inversely correlated with nutritional status of the children with p-value >0.05.

The results further revealed that age of the respondents is positively correlated with nutritional status of children since the p-value was less than 0.05. Also, family type, and children ever born of the respondents, displayed a p-value less than 0.05 thus denoting significant correlates with nutritional status of children.

The binary logistic table revealed the extent of association between the dependent variable which was measured by child's nutritional status and the independents variables which were the selected socio-demographics that were statistical significant at bivariate level, variables such as age of respondents, family type and children ever born

Women between the ages 21- 30 are 6% less likely to have children with good nutritional status, compared to women with ages less or equal to 20. (CI= 0.96, p=0.055). Women in age group 31-40 and 41- 50 are 2.2 time and 2.4 time more likely to have good nutrition, compared to women in age group less than 20 respectively.

Furthermore, women from monogamous family are 1.46 times more likely to have children with good nutritional status compared to women in polygamous family (CI= 1.46, p=0.028).

The study also revealed that women with 5-9 and 10+ children are less likely to have children to good nutritional status, compared to those with children less than 5 (3% and 55%) respectively.

5.2: CONCLUSIONS

Understanding the relative importance of the various determinants of child health among Nigerian women is the key to designing evidence-based effective programs to address child's nutritional status. Women's age, family type and children ever born have statistically significant chi-square values in the bivariate analysis. Religion, employment status, ethnicity, education level, sex of last child have no significant relationship with child malnutrition.

The magnitude of the gap described in this study gives baseline information that will help programmers, researchers and policymakers in the management of malnutrition among children in Nigeria. On the average, child malnutrition is dominant among women within the age 21-40 and Hausa in polygamous family settings. The present study is important in that it documented women's status as an important determinant of child nutritional status, a major research question that was theoretically stated prior to these findings. In line with this the research has identified that women's age, family type and number of children ever born are the most important factors in child nutrition. Unless the obstacles that prevent women from practicing their potential are removed including through development and empowerments, it will be difficult if not impossible to avoid malnutrition and achieve intended national development goals. Improvements in children's nutritional status can only be seen when the needy are not exposed to the risks of poor nutrition.

5.3: RECOMMENDATION

The woman at the Internally Displaced Camps needs empowerment in all aspect of life.

But since empowerment sis a multi-dimensional phenomenon, with women relatively empowered in some spheres but not in others, further research might play a major role in identifying whether community or individual characteristics are better predicators of women's empowerment in their surroundings. Design and implement programs addressing the nutritional needs of children in south west Nigeria is also very necessary. The interventions could be continuous nutritional health promotion and education as part of maternal health care programs. Education on nutrition and health can stimulate demand for more or different foodstuffs, health services, or disease-prevention measures. Not to limit the effect of education or to see outcomes, there should be the means and opportunities to act on that knowledge as well. To curb the negative effect of large household size on child's nutritional status, one of the critical priorities should be the continuation of the intensive national family planning program.

Government and Policy makers should also ensure adequate provision of food supplies, drinkable water, good toilet and good medical facilities to enable proper child health in the Internally displaced person's camp.

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QUESTIONNAIRE CODE NUMBER: .....

TOPIC: DETERMINANTS OF CHILD HEALTH AMONG INTERNALLY DISPLACED PERSONS IN MUTUM BIYU IDP CAMP, TARABA STATE

Good morning/afternoon/evening. My name is ..... (Research Assistant's name), I am here with my colleagues in this city/ village..... to administer questionnaires. As this survey is going on, I would be grateful if you could participate by answering some questions for us. All information supplied to us in this study would be treated with utmost confidentiality. Eligible respondents are women of 15 years to 49 years.

(You are to proceed if she is qualified and has shown willingness to participate).

SECTION A: Sociodemographic Characteristics

Q1. How old are you as at the last birthday?.....

Q2. Marital Status (1) Married (2) Single (3) Widowed (4) Separated (5) Others specify.....

Q3. Ethnicity? (1) Yoruba.... (2) Igbo .... (3) Hausa .... (4) Fulani... (5) Others.....

Q4. Marriage Type? (1) Monogamy (2) Polygyny (3) Others specify

Q5. Religion? (1) Christianity (2) Islam (3)Traditional (4) Others Specify.....

Q6. What is your employment status?

1. Employed
2. Self-employed
3. Retired
4. Unemployed
5 Others specify.....

Q7. If employed, what is your occupation?. .....

Q8. What is your average income per month?.....

Q9. What is your highest level of education attainment?

1. None
2. Primary School
3. Secondary School
4. Post-Secondary
5. Others Specify.....

Q10. How many children do you have? .....

Q11. Sex of child(ren) (1) ..... Male (2) ..... Female

Q12. Age of your child(ren) .....

Q13. Age at first marriage? ....

Q14. Age at first birth? ....

Q15. Employment status of father:

1) Employed
2) Self Employed
3) Unemployed
4) Retired
5) Other, specify .....

Q16. What is the average income of your spouse per month? .....

Q17. What is your spouse's/partner's highest level of educational attainment?

1. None
2. Primary
3. Secondary
4. Post-Secondary
5. Others specified.....

Displacement

Q18. Aside from your homework, do you currently work outside of the home? 1. Yes 2. No

Q19. Where did you leave before you were displaced for the first time.....?

Q20. In what year did you first leave your home.....

Q21. How long have you lived here in..... .....(provide the name of current community)

Q22. In what year did you start to live continuously at this current place of residence.....

Q23. What is the causes of your displacement?

1. Boko Haram Insurgency
2. Natural disaster (flood, fire incidence)
3. Ethic Crisis
4. Religious Crisis
5. Others.....

Q24. What type of house do you live in?

(1) Detached (2) Flat (3) Room (4) Wood (5) Mud (6) Others, specify .....

Q25. How many occupants live inside your room? .....

SECTION B: Exposure to malnutrition and other childhood diseases

Q26. What do you usually cook with?

(1) Wood (2) Stove (3) Gas (4) Others, specify .....

Q27. What is the source of your drinking water?

1. Pipe borne water inside the house
2. Pipe borne water outside the house

3. Deep well
4. Water vendor
5. Stream

Q28. Do you was your hand before breastfeeding? (1) Yes (2) No

Q29. What type of toilet facility do you use? (1) Water closet (2) Latrine (3) Bush (4) Another house

Q30. Did you give your child plain water from borehole or other drinkable source in the past 4 weeks? (1) Yes (2) No

Q31. Did you give your child Juice or juice drinks in the past 12 weeks? (1) Yes (2) No

Q32. Did you give your child Fresh meat, vegetables and fish in the past 4 weeks? (1) Yes (2) No

Q33. Did you give your child infant formula (Nan, SMA, Gold, Frisco, Peak Milk, Cowbell, etc) in the past 4 weeks? (1) Yes (2) No

Q34. Did you give your child milk such as tinned, powdered, or fresh animal milk in the past 4 weeks? (1) Yes (2) No

Q35. Did you give your child Yogurt in the past 4 weeks? (1) Yes (2) No

Q36. Did you give your child Bread, rice, noodles, porridge, or other food made from grains (e.g, millet, sorghum, maize, wheat etc) in the past 4 weeks? (1) Yes (2) No

Q37. Did you give your child Pumpkins, carrot, squash or sweet potatoes in the past 4 weeks? (1) Yes (2) No

Q38. Did you give your child Yam, cassava, cocoyam, or any other food make from roots in the past 4 weeks? (1) Yes (2) No

Q39. Did you give your child Beans, peas, lentils, or nuts like moimoi and akara in the past 4 weeks? (1) Yes (2) No

Q40. Did you seek advice or treatment from any health facility? (1) Yes (2) No

Q41. Where did you seek advice or treatment?

i. Government Hospital
ii. Government Health center
iii. Mobile clinic
iv. Pharmacy
v. Other's specify.....

SECTION C: Vaccination

Q42. Have your child contracted any of these diseases since you migrated to this IDP camp in the last 6 months?

i.	Diarrhea	(1) Yes	(2) No
ii.	Fever	(1) Yes	(2) No
iii.	Measles	(1) Yes	(2) No
iv.	Respiratory illness	(1) Yes	(2) No
v.	Anemia	(1) Yes	(2) No
vi.	Tuberculosis	(1) Yes	(2) No
vii.	Hepatitis A	(1)Yes	(2) No

Q43. Have your child been vaccinated or treated for any of these diseases recently

i.	Diarrhea	(1) Yes	(2) No
ii.	Fever	(1) Yes	(2) No
iii.	Measles	(1) Yes	(2) No
iv.	Respiratory illness	(1) Yes	(2) No
v.	Anemia	(1) Yes	(2) No
vi.	Tuberculosis	(1) Yes	(2) No
vii.	Hepatitis A	(1)Yes	(2) No

Q44. Did (Name) ever have any vaccinations to prevent him/her from getting disease, including vaccinations received in a national immunization day campaign (1)Yes (2) No

Q45. Please tell me if (Name) had any of the following vaccination?

(a) A BCG vaccinations against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar. (1) Yes (2) No (3) Don't know

(b) Polio Vaccine, that is drops in the mouth? (1) Yes (2) No (3) Don't know

(c) Was the first Polio vaccine given in the first two weeks after birth or letters (1) First 2 weeks (2) Later

(d) How many times was the DPT vaccination given? .....

(f) A HEP B vaccination, that is, an injection given in the thigh or buttock sometimes at the same time as DPT? (1) Yes (2) No (3) Don't know

(g) How many times was the HEP B vaccination given? .....

(h) A measles injection or an MMR injection, that is, a shot in the arm at the age of 9 months or older to prevent him/her from getting measles? (1) Yes (2) No (3) Don't know

(i) A yellow fever injection, that is, a shot in the arm at the age of 9 months or older to prevent him/her from getting yellow fever? (1) Yes (2) No (3) Don't know

Q46. Has your child been given any vaccination since your arrival at the camp? (1) Yes (2) No

Q47. If yes, what type of vaccine? (1) BCG Vaccine (2) Polio Vaccine (3) DPT Vaccine (4) HEP B Vaccine (5) MMR injection (6) Others, Specify .....

SECTION D: Government Intervention

Q48. How regular do you get food supplement from the government?

(1) Always (2) Sometimes (3) Rarely (4) Never

Q49. How regular do you get drugs and vaccines from the government?

(1) Always (2) Sometimes (3) Rarely (4) Never

Q50. How regularly do you get mosquito nets from the government? (1) Always (2) Sometimes (3) Rarely (4) Never

Q51. How regularly do you get water supply from the government? (1) Always (2) Sometimes (3) Rarely (4) Never