

**Effect of Child Feeding Practices on Childhood Nutritional Status among Under-Five  
Children in Nahuche, Zamfara State, Nigeria.**

**A DISSERTATION**

**By**

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**Submitted to**

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(M.P.H)**

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EFFECT OF CHILD FEEDING PRACTICES ON CHILDHOOD  
NUTRITIONAL STATUS AMONG UNDER-FIVE CHILDREN  
IN NAHUCHE, ZAMFARA STATE, NIGERIA.

**DEGREE****MASTER OF PUBLIC HEALTH****YEAR****2014**

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I hereby declare that this submission is my own work towards the Master of Public Health (MPH) and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

**OWOLAWI ADEOLA BASHIRAT**

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**SIGNED**

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**DATE**

### CERTIFICATION

This is to certify that this project work was carried out by OwolawiAdeolaBashirat (Miss), under the supervision of Prof. A.A Onayade.

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**Supervisor**

**Prof. A.A Onayade**

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**Date**

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## DEDICATION

This project work is dedicated to Almighty GOD and My Family.

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## ABSTRACT

Malnutrition is a global crisis, an underlying cause of more than 2.6 million child deaths every year while 60 million are stunted globally with Nigeria accounting for 11 million. This study described child feeding practices among under-fives and determined the factors influencing the practices. It further assessed the nutritional status of under-fives and also determined the effect of child feeding practices on nutritional status of under-five children. This was with a view to providing baseline information on the effect of child feeding practices on nutritional status of under-five children and possible follow up interventions on childhood nutritional issues.

The study employed a cross-sectional, descriptive community-based design in which three hundred and ninety-seven primary caregiver/child pairs (Under-5) were selected from Nahuche Health and Demographic Surveillance System (NHDSS) area, Bungudu local government of Zamfara state using multistage sampling technique. Data were collected with the aid of interviewer administered semi-structured questionnaires that elicited information on respondents' socio-economic and demographic characteristics, nutritional knowledge (which was evaluated on a scale), feeding practices, respondents' spouse personal data, index child characteristics and anthropometric measurements of the children. Data were analyzed using STATA 10, Chi square test was used to determine association between categorical variables while binary logistic regression was used to assess the determinants of good feeding practice at  $p < 0.05$  level of significance. Ethical approval was obtained from the Operation Research Advisory Committee (ORAC) in Zamfara State.

The results showed that education, knowledge on nutrition, occupation, and household size were independently associated with child feeding practices at the bivariate level of analysis while at multivariate level, mother's knowledge of child feeding practices was the only statistically significant determinant of positive feeding practices ( $OR=40.08$ ,  $p<0.05$ ). Assessment of nutritional status of children showed that 277 (70%) of children were stunted, 59 (15%) wasted and 147 (37%) underweight. Wasting and underweight were more common among female under-fives (18.3% and 37.7% respectively) compared to males (11.6% and 36.3% respectively) at ( $\chi^2=3.4915$  and  $\chi^2=0.6893$  respectively). However, more male under-fives than females were stunted (72% and 67.6% respectively) at  $\chi^2=1.0024$ . The study also revealed a significant relationship between wasting and child feeding practices ( $p\text{-value}=0.011$ ).

The present nutritional status results suggest the under-five children in the study area are living in appalling conditions which underline the great need for nutritional intervention.

## CHAPTER ONE

### INTRODUCTION

“Nutritional status is a major indicator of quality of life and a determinant of morbidity” (Jeffrey, 2011). Malnutrition is defined as, “A pathologic state resulting from a relative or absolute deficiency or excess of one or more essential nutrients sufficient to produce disease.” Malnutrition is both under-nutrition and over nutrition, ranging from severe nutrient deficiencies to extreme obesity (Scrimshaw, Taylor and Gordon, 1968). Under-nutrition is a deficiency of kilocalories and/or nutrients and often presents as slow growth and development. Acute under-nutrition is protein-energy malnutrition or low weight for height. Chronic under-nutrition results in low height for age. The term malnutrition will be used to signify under nutrition with a focus on childhood malnutrition for this research work.

Child malnutrition is one of the most serious health issues (Nguyen& Sin, 2008). Worldwide, over 10 million children under the age of 5 years die every year from preventable and treatable illness despite effective health interventions (Ahmad, Lopez and Inoue, 2000; WHO, 2003a). Malnutrition is associated directly or indirectly with 60% of the 10.9 million of the deaths annually (WHO, 2003b). Over two-thirds of the malnutrition deaths, often associated with inappropriate feeding practices, occur during the first year of life (WHO, 2003b). Malnourished children have lowered resistance to infection; therefore, they are more likely to die from common childhood ailments such as diarrheal diseases and respiratory infections (Cameron & Hofyander, 1983). In addition, malnourished children are likely to suffer from frequent illness, which adversely worsen their nutritional status and locks them into a vicious cycle of recurring sickness, faltering growth and diminishing learning ability (Cameron & Hofyander, 1983).

In developing countries, malnutrition is still a major health problem (Caulfield, de-onis, & Black, 2004). There were reported cases of child malnutrition in developing countries like Haiti, Sierra Leone, Egypt, Tanzania, China where more than one quarter of all children under the age of five in those countries were underweight, many to a life-threatening degree (UNICEF, 2006). However, there were reported drop in the malnutrition rate for under 5 children in developing countries from 28% in 1990 to 17 % in 2011 and most developing countries except sub-Saharan African countries are on track to reduce child malnutrition by half by the year 2015 (World Bank, 2013).

Feeding practices—which affects child nutritional status—are based in part on a woman's philosophy, ethnicity, religion, age and lifestyle. These feeding practices range from an omnivorous diet that combines animal and plant-based products to a purely raw plant-based herbivorous diet (Jeffrey, 2011). Therefore, child's growth and development, learning, and overall well-being are dependent on household feeding practices (Madoka Inoue, 2012). Ensuring good infant and young child nutritional status is dependent on a continuum of critical nutrition and health practices that begin during pregnancy and lactation. This is a period when children depend on their mothers for essential energy, protein, fats, and micronutrients for at least the first two years of life (USAID, 2009).

For the first six months after delivery, breast milk has been found to be the perfect food for infants (USAID, 2009). It has all of the energy, nutrients, fluids, and antibodies that an infant needs to thrive during the first six months of life without adding any other food or liquid, including water—a process usually referred to as exclusive breastfeeding (Duke, Bryson, Hammer & Agras, 2004). From 6 to 24 months, children need complementary foods in addition to breast milk to ensure that they continue to grow and thrive. Children above 24 months of age should be



placed on permanent adequate family diet. Therefore, maternal/child feeding practices determine the child nutritional status from pregnancy to maturity.

## 1.2 Statement of the Problem

Malnutrition is a global crisis. It is the underlying cause of more than 2.6 million child deaths every year (*A life free from hunger*, 2012). Globally, 60 million children that have stunted growth are due to malnutrition. “Although the world has enough food for everyone, but millions of children face a life sentence of hunger and malnutrition – the hidden reason so many die” (*A life free from hunger*, 2012).

Millions of children, lack access to nutritious food which stymie their physical and cognitive development (*A life free from hunger*, 2012). In addition, these nutritional deficiencies results in part for poor future school enrollment and performance, absenteeism and early dropout for school-age children. This results to consequent losses in productivity during adulthood (Akinyele, 2009). One child in three in developing countries is growing up stunted as a result of malnutrition (*A life free from hunger*, 2012).

Nigeria-one of the developing countries-accounts for 11 million stunted children in 2012 and this might increase by additional 2.4 million stunted children by year 2020 if adequate care is not taken (Ehikioya & Adanikin, 2012). At the national level, health outcomes in Nigeria are among the worst in the world. For case in point, the figures in the Nigeria Demographic and Health Survey (NDHS), reported the trend in nutritional status of Nigerian children to have worsened with regard to stunting and wasting (from 36% in 1990 to 46% in 1999 and 53% in 2008 for stunting and 11% in 1990 to 12% in 1999 and 20% in 2008 for wasting), respectively (NDHS, 1990; NDHS, 1999; NDHS, 2008).

Childhood nutrition has received little attention in comparison to the magnitude of the problem (UNICEF, 2006). For instance, the Food and Nutrition Policy, approved in 1998 was not launched until 2002, missing infants that would have been captured and prevented from being malnourished to severely malnourished within the period of 4 years were not captured

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