

**PATTERN OF NEONATAL CARE PRACTICES IN URBAN AND RURAL AREAS
OF IFE-IJESHA ZONE OF OSUN STATE**

A DISSERTATION SUBMITTED BY

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TO

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SCIENCES, OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA**

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CERTIFICATION

This is to certify that FASOGBON OLASOJI carried out this research work during the course of his study in the Department of Community Health, Faculty of Clinical Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria.

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DEDICATION

This project is dedicated to God Almighty and my late mother, Mrs. Elizabeth Fasogbon, may her gentle soul rest in perfect peace.

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ABBREVIATIONS

WHO -	WORLD HEALTH ORGANISATION
NPC -	NATIONAL POPULATION COMMISSION
MDG -	MILLENNIUM DEVELOPMENT GOAL
UNICEF -	UNITED NATIONS CHILDREN'S FUND
ENC -	ESSENTIAL NEONATAL CARE
LWB -	LOW BIRTH WEIGHT
FMH -	FEDERAL MINISTRY OF HEALTH
BCC -	BEHAVIOUR CHANGE COMMUNICATION
NMR -	NEONATAL MORTALITY RATE
IMR -	INFANT MORTALITY RATE
STS -	SKIN-TO-SKIN
PHC -	PRIMARY HEALTH CARE
DHS -	DEMOGRAPHIC AND HEALTH SURVEY
NBW -	NORMAL BIRTH WEIGHT
TBA -	TRADITIONAL BIRTH ATTENDANT
OR -	ODDS RATIO
FGD -	FOCUS GROUP DISCUSSION
LGA -	LOCAL GOVERNMENT AREA

ABSTRACT

The study investigated factors influencing care and treatment preferences for newborns in rural and urban areas of Ife-Ijesha zone of Osun State with a view to providing information that may aid the design of relevant health promotive interventions targeted at reducing newborn deaths in the study area.

The study employed a descriptive cross-sectional design. Sample size was determined using the formula for comparing two independent proportions. A multistage sampling method was employed with the local government areas in Ife-Ijesha zone forming the primary sampling units. The first stage involved the use of simple random sampling technique to select two urban and two rural local governments each from the list of LGAs in the zone. At the second stage, simple random sampling was also used to select twenty-five percent of political wards in each LGA. In the third stage, systematic sampling technique was used to select eligible households (households that produced nursing mothers with index children (0-6) months old) in the selected wards. Quantitative and qualitative data collection methods were used to collect information for mothers in the household. Quantitative data were analysed using appropriate descriptive and inferential statistical techniques while qualitative data was analysed using detailed content analysis.

Generally, 68% of nursing mothers in the rural area compared with 67.8% in urban area delivered the index child in health facility/Hospital. In spite of easy access to health facilities in the urban area than rural area, some proportion of deliveries took place at home (urban 10.6% and rural 10.1%) and church (urban 19.4% and rural 14.8%). The greater proportion of deliveries that took place at home in urban area (78.9%) were delivered by skilled birth attendants in contrast to 52.9% in the rural area. A higher proportion of nursing mothers in urban area

compared with nursing mothers in rural area recognized hypothermia/hyperthermia (urban 88% and rural 62%), refusal to breast feed (urban 75% and rural 61%) and floppy/ weakness (urban 48% and rural 32%) as danger signs during neonatal period. However, danger signs like overly sleepy (urban 11.1% and rural 32.5%), palor (urban 11.7% and rural 24.9%), convulsions (urban 6.1% and rural 18.9%), weak cry (urban 40.0% and rural 41.4%), stiff limbs (urban 2.8% and rural 4.7%) and bulging fontanel (rural 3.6% and urban 4.8%) were less likely recognized in urban area compared with rural area. In both areas, practice of newborn care indices of optimal thermal care (rural 14.2% and urban 22.2%) and good cord care (rural 14.2% and urban 10%) are very low. Even though newborn care index of good neonatal feeding (rural 81.7% and urban 82.8%) was very high in both areas, yet equal proportion of nursing mothers in both areas (16.6%) reported that breast-feeding was initiated more than thirty minutes after delivery life against the recommendation of WHO. Socio-demographic factors and knowledge of neonatal health problems did not influence treatment preferences for newborns in both areas ($P>0.05$). However, age was the only predictor of care practices in urban area (OR 4.358, 1.812-10.481) unlike in rural area where neither socio-demographic factors nor knowledge of neonatal health problems predicted care practices.

The study concluded that most mothers had poor knowledge of neonatal danger signs and many unsafe practices such as early bathing, application of harmful substances to umbilical stump and use of home remedies before seeking medical care for sick neonates were prevalent in both areas. Nursing mothers in rural area were less likely to observe optimal thermal care and good cord care practices compared with urban respondents. Age was the only predictor of good care practices in urban area.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Despite recent achievements in reducing child mortality, neonatal deaths continue to remain high, accounting for 41% of all deaths in children under five years of age worldwide; ninety-nine percent of these deaths occur in low and middle-income countries (Lawn, Cousens and Zupan, 2005). Many industrialised nations have a neonatal mortality rate of less than five per 1000 live births, yet sub-Saharan African countries have rates of over 100 per 1000 live births, a 20-fold difference (Lawn, McCarthy and Ross, 2001). In low-income countries, progress towards achieving Millennium Development Goal 4- to reduce by two-thirds under-five mortality from the 1990 baseline - is being hampered by slow progress in reducing neonatal deaths (Bryce *et al.*, 2008). The neonatal period contributes 41% of the estimated 10.5 million under-five deaths which occur every year (Lawn, Cousens and Zupan, 2005). It is estimated that each year more than four million neonatal deaths occur, and almost exclusively in low-income countries (Black, Morris and Bryce, 2003). In 2006, the global number of children dying before fifth birthday was estimated to have dropped to 9.7 million (UNICEF, 2008). However, the global neonatal mortality rate is estimated to be 31 per 1000 live births (Stanton & Langsten, 2006).

Sub-Saharan Africa alone accounts for 1.16 million newborn deaths each year in the first 28 days of life, though six low-income African countries viz: Burkina Faso, Eritrea, Madagascar, Malawi, Uganda and the United Republic of Tanzania have made significant progress in reducing deaths among newborn babies (WHO, 2006). Half of these deaths occur on the first day

of life, and up to three-quarters occur within first seven days, most at home and uncounted (Lawn, Cousens and Zupan 2005). In addition, half of sub-Saharan Africa's 1.16 million newborn deaths occur in just three countries which include Nigeria, Democratic Republic of Congo and Ethiopia. Nigeria alone has 241,000 newborn deaths occurrences each year (Save the Children Nigeria, 2011). In this country, about 700 babies die on a daily basis and about 30 of them die every hour (Save the Children Nigeria, 2011). This is the highest number of newborn deaths rate in Africa and the second highest in the world.

In order to reduce high rate of neonatal mortality, especially in developing countries, a continuum in elements of care is needed between the maternal & child health programmes. World Health Organisation recommends improving care practices at birth. These practices have been described as essential newborn care (ENC) practices (Marsh *et al.*, 2002) which include clean cord care, optimal thermal care and initiation of breast-feeding immediately or within the first hour of birth. For a mother and her family, this means preparing for birth, choosing a safe place for delivery, keeping the process clean, avoiding cold, breast-feeding early and exclusively, and understanding and reacting to potential danger signs (WHO, 1998). These simple practices are critical for all babies in order to save lives, but also need to be fitted into a comprehensive newborn care package, which includes skilled care at birth, care-seeking, extra care for sick and small babies, and resuscitation. Effective promotion of ENC at scale could significantly contribute to reduction in the leading causes of newborn deaths in low-income countries, especially those due to sepsis/pneumonia, preterm births and tetanus [Darmstadt *et al.*, 2005].

Unfortunately, in many developing countries, health care during & after childbirth is non-existent (Puri *et al.*, 2008). Home births are very common without taking into consideration

the importance of first days of life, as the most critical moment for newborn survival. In developing countries, nearly half of all mothers and newborns do not receive skilled care during and immediately after birth (WHO, 2012). Up to two-thirds of newborn deaths could be prevented if known and effective health measures are provided at birth and during the first week of life. Nevertheless, home births are very common in developing countries. To make the matter worse, only 13% of women in developing countries receive postnatal care in the first 24 hours (WHO, 2012). In addition, most mothers who give birth in health facilities could not return for postnatal care because of financial, social or other barriers (WHO, 2012). Previous studies in the study area reported home deliveries to be 67% while proportion of institutional deliveries was as low as four percent (Ogunniyi *et al.*, 2000). Poor maternal education, multi-parity, and low socioeconomic status are the predictors of home deliveries in the study area (Ogunniyi *et al.*, 2000).

Global estimates from year 2000 of the distribution of direct causes of neonatal death indicate that preterm birth (28%), severe infections (36%) including sepsis/pneumonia [26%], tetanus [7%], and diarrhea [3%], and complications of asphyxia (23%) account for most neonatal deaths (WHO, 2005). The underlying determinants of these deaths are poverty, low levels of maternal education, poor status of women, low use of antenatal care & other health services and large number of deliveries by untrained personnel (Manson, 2007).

Since care and nurturing of the newborns are the primary responsibilities of the mothers, mother's behaviour in seeking healthcare services either, as a preventive or curative treatment is an important factor in determining child survival. Such seeking behaviour most times does not take place unless the mother recognises signs and symptoms of illness, waits and observes the condition, interprets the possible severity of the conditions before taking action to seek care (Hill

et al., 2003). Igun (1982) explored health-seeking behaviour in Nigeria from two perspectives, viz: those that utilise mainly psychological process and variables to explain decision and those that utilise individual demographic characters and healthcare delivery systems to explain decision. These patterns of care seeking behaviour largely influence newborn survival and this forms the crux of this study.

1.2 Statement of the Problem

The level of the World neonatal mortality rate has remained unchanged for the past 50 years (Lawn, Cousens and Zupan, 2005). Globally, progress towards reducing neonatal death has been slow despite the fact that it accounts for a greater proportion of child deaths. It has also been noted that issues of neonatal morbidity and mortality fall into relative obscurity due to lack of accurate data and a misconception that neonatal care requires a high cost in many developing countries (Murray, 1997).

Previous analysis shows that the loss of healthy life from newborn deaths represented 8.2% of the burden of diseases in sub-Saharan Africa, or 27 millions of year's life lost in this region alone (Hyder *et al.*, 2001). This analysis, however, highlighted the dearth of information available on neonatal outcomes in developing countries particularly at the community level, and the potential for currently available figures to underestimate the magnitude of the problem.

Sub-Saharan Africa has the highest rate of neonatal mortality in the world, but showing the slowest progress in reducing newborn deaths, especially deaths in the first week of life. As pointed out by Lawn *et al* (2006), each year, at least 1.16 million African babies die in the first 28 days of life and 850,000 of these babies do not live past the week they are born. Thirty-eight percent of babies in sub-Saharan Africa die of infections, mainly after the first week of life (Lawn, Wilczynska-Ketende and Cousens, 2000). The majority of these deaths are products of low birth weight (LBW) babies while many are due to preterm.

In Nigeria, mortality during the first 28 days of life accounts for two-thirds of deaths in children less than one year of age, and nearly four-tenths of all deaths in children less than five

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