

**NURSES' KNOWLEDGE AND ATTITUDE TOWARDS EXCLUSIVE
BREAST FEEDING IN KABOMPO DISTRICT**

BY

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ZRN (LUSAKA) 2003

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THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POSTBASIC NURSING

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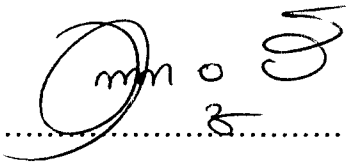
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LIST OF ABBREVIATIONS

| | |
|---------|--|
| AFASS | Affordable, Feasible, Acceptable, Safe and Sustainable |
| AIDS | Acquired Immune Deficiency Syndrome |
| BFHI | Baby Friendly Hospital Initiatives |
| CBoH | Central Board of Health |
| CSO | Central Statistical Office |
| D.H.M.T | District Health Management Team |
| EBF | Exclusive Breast Feeding |
| FP | Family Planning |
| GDP | Gross Domestic Product |
| HIV | Human Immunodeficiency Syndrome |
| HMIS | Health Management Information System |
| HRH | Human Resources for Health |
| IBFN | International Baby Food Action Net work |
| JAR | Joint Annual Review meeting |
| MCH | Maternal and Child Health |
| MDGs | Millennium Development Goals |
| MTCT | Mother to Child Transmission |
| NGO | Non-Governmental Organization |
| NICU | Neonatal Intensive Care Unit |
| NIYCF | National Infant Young Child Feeding |
| PHC | Primary Health Care |
| UN | United Nations |
| UNICEF | United Nations International Children's Fund |
| WABA | World Alliance for Breastfeeding |
| WHA | World Health Assembly |
| WHO | World Health Organization |
| ZFDS | Zambia Flying Doctor Service |

STATEMENT

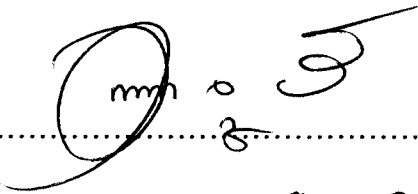
I Starcion S. Kamanga hereby certify that this study is entirely the result of my own independent investigations. The various sources of information to which I am indebted are indicated in the text and references.

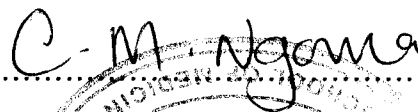
Signed..... 


Date..... 08.09.09

DECLARATION

I Kamanga S. Starcion hereby declare that the work presented in this study for the Bachelor of Science Degree in Nursing has neither been presented wholly or partly for in any other degree nor being submitted for any other degree.

Signed.....  (Candidate)
Date..... 08.09.09

Signed.....  (Supervising Lecturer)
Date..... 08/09/09



DEDICATION

This study is dedicated to my beloved wife Melody Kalipenta for patience, love, support, encouragement and endurance during my absence from home for three years.

My children; Starcion, Milgrace, Memory and Martha who were denied fatherly love and care that they needed most

My mother for her care, love and prayers that have seen me this far

ABSTRACT

The nurse, by virtue of her/his role as patient/client educator, can greatly influence a mother's decision on exclusive breastfeeding by teaching the mother about breastfeeding during the antenatal period, immediate after delivery, and during the postnatal period. Therefore, it is important to study nurses' knowledge and attitude towards exclusive breastfeeding so that knowledge gaps can be bridged to enable them to perform this function adequately.

The purpose of the study was to determine the knowledge and attitudes towards exclusive breastfeeding among nurses. A pilot study was conducted at Kabompo district hospital and the actual study was conducted in Kabompo District at two selected hospitals (Kabompo district and Loloma Mission Hospitals respectively). Literature review was based on studies conducted globally, regionally and nationally. It is evident from the previous researches or studies done on this topic that adequate knowledge plays a major role in the dissemination of information. The literature review showed that breastfeeding lacked credibility among nurses. It also revealed a knowledge deficit on exclusive breastfeeding topic. However, no literature on knowledge and attitudes of nurses toward exclusive breastfeeding in Zambia were found.

An exploratory descriptive study design was used because it involves systematic collection and analysis of data. Data was collected using a self administered questionnaire. A convenient sample of 46 nurses was drawn from both registered and enrolled nurses. Before the analysis, data was checked for consistency and completeness. Data was entered on a data master sheet and analyzed manually with the help of a scientific calculator. The findings have been presented in frequency tables, figures and cross-tabulation tables.

The study revealed that the majority (36.9%) of the respondents were in the age group between 25-34 years. Most (60.9%) of the respondents were married, 28.3% were single and 43.5% were formerly employed. The finding show that 50% of the respondents belonged to other religious denominations other than the Roman Catholic and Brethren in Christ while 21.7% belonged to

Seventh Day Adventist and 50% belonged to other tribes other than those from North-Western Province. Most (43.4%) of the respondents had children ranging from 1-3. Of those who breastfed, 36.7% had few children (1-3) while those who had 4 and above did not.

Thirty percent (30.4%) had been in the service between 1-4 years, 13% had served between 11-20 years while those who worked for 21 years and above were 28.3%. The findings also showed that 17.4% of the respondents attended a workshop on exclusive breastfeeding while 82.6% did not. The respondents stated that their Health Institutions held symposiums on exclusive breastfeeding (84.8%) while 15.2% disagreed. However, a small percentage (41.3%) included exclusive breastfeeding topics in their symposiums. The study revealed that 65.2% of the health Institutions had a policy on exclusive breastfeeding while 34.8% disagreed but many (52.2%) nurses did not have access to it. The majority (89.1%) of the respondents said that their departments/units were understaffed and 10.9% stated otherwise. The study also showed that 47.8% of the respondents said that salaries and conditions of service were fair. A large percentage (60.9%) of the respondents received unfair treatment from the senior nurses while 39.1% were fairly treated. The study has revealed that the health institutions (58.7%) in this study did not conduct symposiums on exclusive breastfeeding despite holding the clinical meetings.

The study has revealed that most (95.6%) of the respondents had heard about exclusive breastfeeding mainly from training colleges (41.3%), HIV related workshops (32.6%) and a few (17.4%) from maternal and child health department. The finding revealed that some nurses (37%) observed cultural and traditional beliefs regarding exclusive breastfeeding. The nurses feared breastfeeding in public because some mothers carried with them charms that could be used to kill the child.

The major recommendations of the researcher include:

- The need for Ministry of Health to mobilize funds to enable hospitals to hold workshops on exclusive breastfeeding and information should be disseminated and practiced accordingly.

- The need for Ministry of Health to ensure Hospitals have a policy on exclusive breastfeeding and that it is implemented by continued supervision of the hospitals.

Key words: Nurses, Attitude, Knowledge, Exclusive Breastfeeding.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Nurses play a major role in the promotion and implementation of Primary Health care (www.paho.org/English/DD/DIN/alma-ata_declaration.htm). Since nurses are a backbone in the delivery of health care, they constantly need to be updated with adequate knowledge so that they in turn disseminate adequate information and skills to mothers and the community as a whole. However, the health and nutritional status of children and mothers are intimately linked. This means that mothers and infants form a biological and social unit; the health and nutrition of one can not be divorced from another. Therefore, children have the right to access safe and nutritious food. These factors are essential for achieving full potential growth and development. Women also have the right to adequate food and the right to decide how to feed their children and to have correct information and conditions that will enable them carry their decisions. They also have the right to maternity protection and nutrition (NIYCF, 2006-2010).

Breastfeeding provides the healthiest beginning for the infant. With the risk of Mother to Child Transmission of HIV through breast feeding, health workers need guidance on how to address issues of optimal infant feeding on one hand whilst minimizing the risk of MTCT and the risk of infants dying from improper feeding practices on the other hand (NIYCF, 2006-2010). In the recent past with the unfolding detail about HIV/AIDS and MTCT, the need for consistent and clear messages in relation to optimal infant and young child feeding practices has become more apparent.

The National Infant Young Child Feeding (NIYCF) operational Strategy builds on the past and continuing achievements in promoting optimal infant and young child feeding. These include exclusive breast feeding for six months and continued breastfeeding up to 2 years with introduction of appropriate timely complementary feeding, the implementation and monitoring of the International Code of Marketing of breast milk substitutes and the rights of working women to maternity protection. In the past decade, the government has implemented programmes aimed at improving the welfare of infants and young children. The government has

also enacted a legislation to reduce the marketing of breast-milk substitutes. Currently, various community based initiatives (HIV positive living support groups, Home based Care support groups, etc), do not adequately include infant feeding issues in their agenda. However, recognition of these structures is cardinal for the implementation of various chosen successful breastfeeding initiatives in the Baby Friendly Hospital Initiative (BFHI). These include breast feeding and child survival and Baby Friendly Hospital Initiatives. Additionally, the effective referral system between health facilities and community needs to be strengthened where they do not exist.

1.1.1. Breastfeeding and Child Survival

Reproductive health is a broad concept which embraces among other issues Family Planning (FP), Maternal and Child Health (MCH). Reproductive health is concerned with the health of all the people especially the vulnerable in society, for example, children and women. Safe motherhood is one of the concepts of FP/MCH which is more concerned with the mother and child issues. It encompasses antenatal care, safe and clean delivery, family planning and breastfeeding (www.paho.org/English/DD/DIN/ailma-ata_declaration.htm).

Exclusive breastfeeding is being recommended through out the world because of its health benefits both for the mother and the baby especially with HIV pandemic. According to Chen, et al (1995), exclusive breastfeeding for six (6) months and continuing breastfeeding up to two (2) years and beyond, have proved that it can save for about four thousand (4000) babies a day from deaths due to diarrhoea and acute respiratory infections caused by early introduction of milk formulas and other food substitutes to a baby. This fact is supported by a NICEF Statement (1994), which states that “exclusively breastfed children are at a lower risk of infection than infants who receive complementary feeds earlier than six months”. Babies who have complementary food prepared under unhygienic conditions and poor sanitary conditions will be more prone to diarrhoeal diseases. Breast milk has many advantages compared to alternatives to breast milk. It has been said that breast milk provides unique protection against infections and allergies and it also contains many anti-inflammatory properties. According to Arkre, J. (1992), breast milk enhances the baby’s immune system and it also satisfies both the baby’s nutritional and fluid needs. Offering of complementary

feeds to infants below six (6) months reduces breast milk intake, interferes with full absorption of the nutrients and exposes the infant to the danger of contamination.

1.1.2. Baby Friendly Hospital Initiatives

This is another initiative which promotes child survival. Baby Friendly Hospital Initiative (BFHI) strategies are based on the ten (10) steps to successful breastfeeding. The initiative was implemented in Zambia following the Innocent Declaration (1990), a WHO/UNICEF joint statement on protecting, promotion and supporting breastfeeding as cited by (NIYCF, 2006-2010). The strategies are aimed at increasing exclusive breastfeeding rates and continued breastfeeding among others by encouraging early bonding of the baby and the mother, reducing unnecessary separation by encouraging 'rooming' concept. The strategies also aim at improving the health care providers' knowledge and skill by training them in breastfeeding management.

Community breastfeeding support groups and social mobilization activities have been incorporated to promote breastfeeding practices so as to reduce childhood problems. To facilitate the BFHI activities in Zambia, the Nutrition Commission has a national policy on breastfeeding. The goal of the policy is to facilitate child survival, growth development and psychosocial wellbeing. This can be achieved through exclusive breastfeeding for the first food supplements for two (2) years and beyond.

Since the introduction of BFHI guidelines in 1993, UNICEF/WHO introduced guidelines on implementation of BFHI activities to address breastfeeding issues fifty four (54) health facilities have attained the status of BFHI in Zambia (Food and Drug Act, Marketing of Breastfeeding milk Substitutes, 2006 Legislation). These strategies aim at facilitating child survival and growth development through exclusive breastfeeding with appropriate supplements.

The research is based on the knowledge and attitude of Nurses towards exclusive breastfeeding. This is very cardinal because if nurses who are the first contact in the delivery of primary health care are not well equipped with knowledge, then achievement or rather maintaining health infants and young children and mothers would be a dream and not a reality.

1.0. STATEMENT OF THE PROBLEM

According to the Central Statistical Office (2008), Maternal Mortality Rate (MMR) is estimated at 449 per 100 000 live births. Infant and Child Mortality rates stand as follows: Neo-natal mortality at 34.5 per 1000 live births; Post-neonatal mortality rate at 51 per 1000 live births; Infant Mortality Rate at 70 per 1000 and Under-five at 119 per 1 000 live births respectively.

The HIV/AIDS prevalence in the age group between 15 - 49 years is estimated at 14.3 %. This has had an adverse impact on the health status of the Zambian population in particular, that of women and children (CSO, 2008). According to the Health Management Information Systems (HMIS) data, (CBoH, 2004) the incidence per 1000 population of key diseases affecting children under five years of age includes malaria (203.6), respiratory infections (non- pneumonia) (85) diarrhoea (30.8) and pneumonia (21.3)

A relationship exists between feeding practices, infection and nutritional status. Inadequate nutrient intake leads to poor nutritional status which leads to immune impairment that worsens the effect of infection. Infection increases the need for nutrients but at the same time compromises food intake.

WHO and UNICEF recommends that infants and young children be exclusively breastfed for the first six months of life and that complementary feeding be started at 6 months with continued breastfeeding up to at least two years. In the event of HIV, the AFASS (Affordable, Feasible, Acceptable, Safe and Sustainable) criteria should be used during counseling in order to assist a mother who is HIV positive to make an informed infant feeding decision.

In Zambia, exclusive breastfeeding rates from zero up to six months are at 41 %, an indication that the majority of the mothers do not undertake recommended practices. During the period 1996 - 2002, exclusive breastfeeding rates increased from 26 percent in 1996 to 41 percent in 2002. The increase was due to extra efforts made by government and collaborating partners in the promotion, protection and support of breastfeeding following the 'Innocent declaration' and the World Health Assembly in 1992. The current status of other recommended feeding practices in Zambia are indicated below according to CSO, 2001-2002.

- Initiation of breastfeeding within one hour of delivery-51%
- Exclusive breast feeding at 4 months-53%
- Exclusive breast feeding at 6 months-41%
- breast feeding at 23 months-82%

The Nutritional status of infants and young children below the age of 2 years in Zambia poses a greater challenge. According to the CSO 2001-2002, the malnutrition rates in the children under 2 years indicate that this is a vulnerable period during which appropriate feeding practices are cardinal.

In a complementary feeding practice study in Zambia, an estimate of 87% of infants aged 6 to 9 months are fed on solid foods in addition to breast milk as stated below. However, despite this high proportion of mothers and caretakers practicing the recommended actions in this age group, there are areas that need improvement. The complementary food given to infants is often of limited variety. In addition, the food in most cases is also given less frequently than the recommended 2-5 meals per day including snacks (CSO 2001-2002):

- Breast milk only-3% ,
- Breast milk and water only-6%,
- Breast milk and liquids-3%,
- Breast milk and solid foods-87%
- Fully weaned-1%.

On the other hand, critical shortage and inadequate distribution of qualified human resources for health (HRM) has been identified as one of the major challenges facing the health sector in Zambia. It is also considered as a major constraint to improving health service delivery and achieving the Millennium Development Goals (MDGs). The crisis include: the restrictions by the Ministry of Finance on the MoH staffing levels to ensure that the sector does not exceed the Gross Domestic

Product (GDP) ratio of 8.04; limitations in the capacities of health training institutions to produce adequate numbers of graduates, commensurate with demand for the such personnel, due to inadequate infrastructure and financial support; and inequitable distribution of the available staff, resulting into an imbalance in staff distribution in favour of urban areas (Health sector joint annual review report, 2006).

According to the HRH Strategic Plan 2006/10, the total number of health workers is 23,176, against the recommended staff establishment of 49,360, representing 47% of the needs. These critical shortages of staff have meant that most of the health facilities are understaffed, with approximately 23% of Rural Health Centres operating without any qualified health worker, and more than 50% of rural health centres operating with only one qualified health worker. Currently, due to the lack of a reliable and appropriate Human Resource Management Information System (HRMIS), there are no definitive statistics on health worker attrition levels in Zambia. However, according to an analysis, based on the 1999-2004 attrition and graduation rates, attrition rates were estimated at 9.8% for doctors, 5.3% for nurses and pharmacists at 4.2% (Human Resource Crisis in the Zambian Health System: A Call for Urgent Action; Kombe, K., Galaty, D., Mtonga, V. and Banda, P (2005). Human Resource for Health (HRH) was one of the key focus areas of the Joint Annual Report, 2006 (JAR).

Health care delivery services in Kabompo are equally affected, starting from human resource crisis, hard to reach areas and inadequate transport among other factors. Most women in Kabompo breast feed their babies up to 2 years. However, according to the assessment that was done in the clinics between November and December, 2007, by Maternal and Child Health Department (MCH), it was reported that 55% of the mothers were practicing exclusive breastfeeding, 5% started complementary feeding at 3 months, 10% started complementary feeding at 4 months and 30% started at 5% months (Sandala, 2008).

This means that between 3 and 5 months mothers practice mixed feeding. However, the district recorded some improvement in 2007 compared to 2006 in exclusive breast feeding. To be specific, it scored 35% in 2006 and 55% in 2007 respectively. There is still much that needs to be done in terms of exclusive breastfeeding (Sandala, 2008). Nurses have a duty to educate the community on the importance of exclusive breast feeding and the tool that is being used to disseminate the information and other services is through Primary Health Care (PHC) (CBOH,

2004). This is in line with the MoH vision which has put emphasis on promoting health care to all Zambians with equity of access to quality, cost effective health care as close to the family as possible. From the information (data) above, it is imperative for nurses, being the first contact in the delivery of primary health care to have adequate knowledge and positive attitude towards exclusive breastfeeding.

1.1. FACTORS AFFECTING KNOWLEDGE AND ATTITUDE OF NURSES TOWARDS EXCLUSIVE BREASTFEEDING

There are several factors that may affect nurses' knowledge and attitude towards exclusive feeding. These will be discussed under the following headings:-

1.3.1. SOCIO-CULTURAL AND ECONOMIC FACTORS

1.3.1.1. CULTURAL BELIEFS

Traditional beliefs play a major role in influencing nurses' behaviour towards exclusive breastfeeding. It does not matter whether one is educated or not but they do succumb to such pressures. Traditionally, women are told not to breast feed their babies in public places lest their babies die of diseases e.g. "Kibele" or "Icibele". This deprives babies from the needed nutrients (breast milk) subjecting them to diseases like malnutrition.

Traditionally, males have no role in reinforcing breastfeeding. Despite having male nurses who are married, they may not put much influence on their wives to exclusively breastfeed. However, in affluent societies some husbands are able to support their spouses to breastfeed. These factors may hinder the implementation of exclusive breastfeeding.

1.3.1.2. AGE/ PARITY

Nurses who are young in age may not know how to instruct mothers to breast feed or how to breastfeed as they may lack experience. In addition, those with parity in the sense that those with many children may ignore the importance of exclusive breastfeeding, making them fail to exclusively breastfeed or to give correct information to mothers. Others may cite having brought up their children without practicing exclusive breastfeeding.

1.3.1.3. PERSONAL EXPERIENCE

This is very critical. Personal experience plays a major role in people's lives. In the same way, nurses with no children may lack the actual experience that mothers have despite not having the much needed knowledge on exclusive breastfeeding. Therefore, may not give appropriate advice to mothers.

1.3.1.4. MARITAL STATUS

Nurses who are not married and do not have children might lack the practical part of bringing up any child this is because theory is different from practice. They say, "Experience is the best teacher". This may have an influence on their work and may not be able to advise mothers appropriately.

1.3.1.5. CLINICAL EXPERIENCE

At times lack of experience by nurses in work place may affect practice and the skills which may also result in failure to give proper information while those with experience may be able to influence mothers or rather provide good health education on exclusive breastfeeding, based on their experience. Newly qualified nurses may not have the adequate information and skill compared to the old in the service.

1.3.1.6. RELIGION

Religions denominations do not believe in exclusive breast feeding because they believe that God is the creator who takes care of everyone. Since nurses belong to different religious denominations with different doctrines and beliefs and they may be influenced by such doctrines.

1.3.1.7 FINANCIAL STATUS

Some Nurses who are economically sound can afford to buy milk formulas may substitute exclusive breastfeeding with bottle feeding. On the other hand, nurses who are working may just resort to milk formulas due to work. Others may want to maintain the breast structure or

shape and may not breastfeed for a long time. They may only breastfeed for 3-4 months and resort to bottle feeding ignoring exclusive breast feeding principles.

1.3.2. SERVICE RELATED FACTORS

1.3.2.1. STAFFING LEVELS

Inadequate staffing in the health sector has not spared Kabompo district hospital. This compromises the quality of nursing care. The shortage of nurses may also contribute to ineffective health.

1.3.2.2. LACK OF IN-SERVICE TRAINING

Learning is a continuous process. There are may be situations where nurses who graduated many years ago and have never gone for in-service training of any kind or even a workshop to equip them with new knowledge and skills. The world (Zambia in particular) is faced with many diseases which needs update of knowledge by nurses so that they can know how to manage these conditions hence in-service training being an important tool to knowledge acquisition. For example, the coming of HIV/AIDS has intensified exclusive breastfeeding practices to reduce chances of Mother to Child Transmission of which this information on the prevention of HIV transmission might need some training.

1.3.2.3. LACK OF GUIDING POLICY

Although there is a National Policy on Exclusive Breastfeeding, most of the health institutions in Zambia do not follow this policy. This is affecting exclusive breastfeeding practice.

1.3.2.4. LACK OF SUPERVISION

Subordinates need to be supervised for them to produce quality work. If nurses are not supervised, may not be committed to their work. This means that managers' reluctance to supervise their subordinates may affect the quality of work by their subordinates (nurses).

1.3.2.5. POOR SALARIES AND CONDITIONS OF SERVICE

This has become like a song by nurses and other health workers in the health sector. Nurses feel doctors are more favoured than themselves while doctors also still think Government is not paying them enough. No matter how educated or knowledgeable they may be, their performance may be affected as they may feel that working hard is wasting time since government is not addressing their plight. Many workers believe that a good salary and better conditions of service is a motivator to hard working and vice versa. Poor salaries may affect the nutritional status of nurses which could lead to low production of milk in the breasts if they are lactating. This could also make them stop exclusive breastfeeding.

1.3.2.6. KNOWLEDGE

Lack of capacity building on nurses might create a gap in knowledge and the new strategies in breast feeding especially with the coming of HIV/AIDS. It is said that “medicine is dynamic”, therefore needs constant updates of health workers on the new trends in the health sector. Therefore, speciality courses are very important in the delivery of services. For example, non midwives, public health nurses and family health nurses may not have the adequate knowledge compared to those trained in these fields. Most of the departments may be run by nurses with no specialties which influences the quality of exclusive breastfeeding messages to mothers.

1.3.2.7. INADEQUATE INFORMATION, EDUCATION AND COMMUNICATION

Lack of in-service training through seminars and workshops on exclusive breastfeeding may lead to inadequate knowledge among nurses which may also result in inadequate health education to mothers on exclusive breastfeeding.

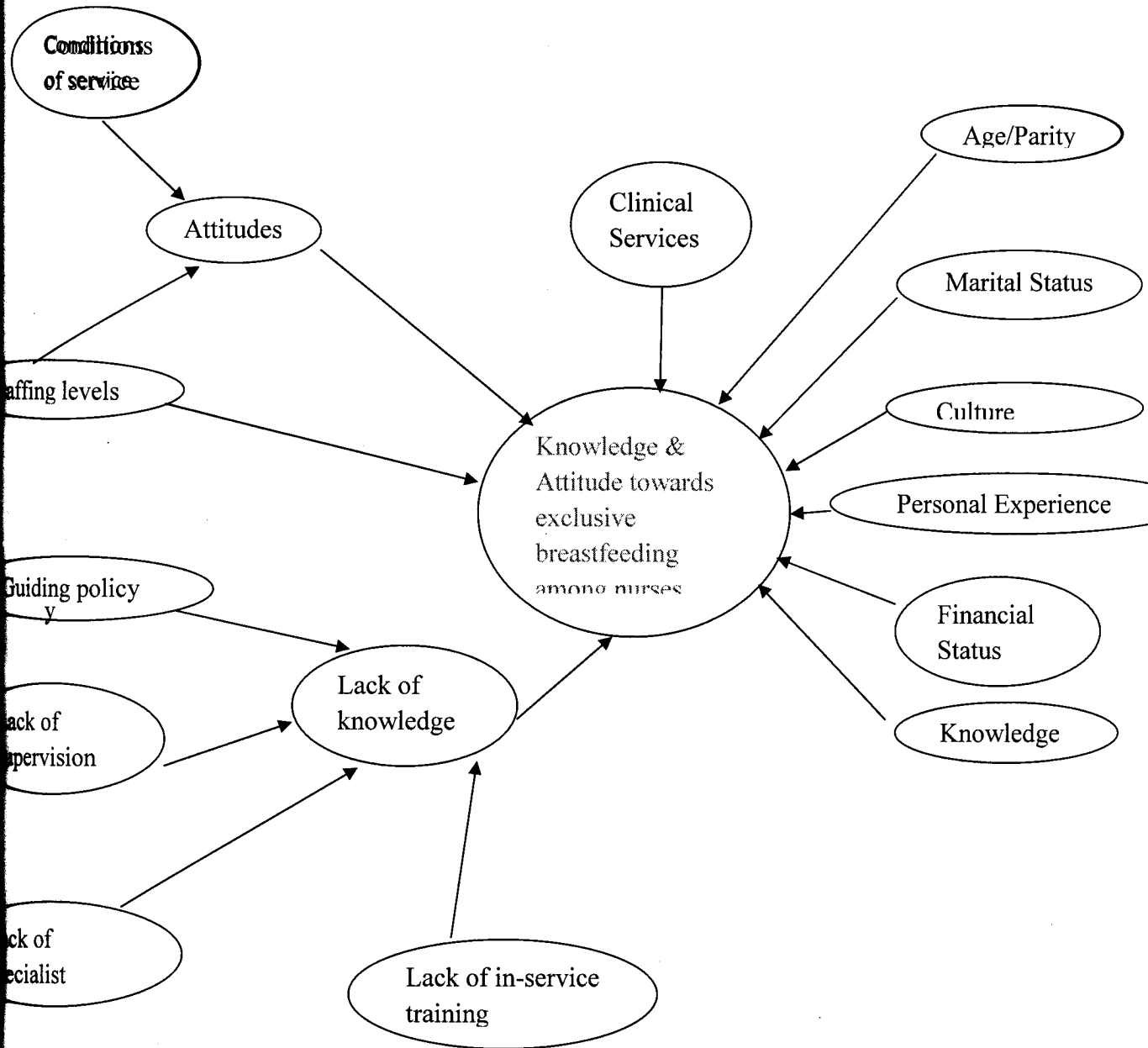
1.3.2.89. POOR ATTITUDE

Nurses may just have a negative attitude or behaviour towards exclusive breast feeding despite acquiring the necessary knowledge and skills or rather being educated. This can lead to failure by nurses to deliver quality health care services to mothers.

FIGURE 1: DIAGRAM ANALYSIS OF FACTORS ASSOCIATED WITH EXCLUSIVE BREAST FEEDING AMONG NURSES.

SERVICE RELATED FACTORS

SOCIO-CULTURAL & ECONOMIC FACTORS



1.4. JUSTIFICATION

The benefits of breastfeeding for both the mother and infant are well documented and cannot be over emphasized .WHO/UNICEF (1993) states that breastfeeding provides protection to the infants from various infections and helps to reduce morbidity rates caused by early weaning and bottle feeding especially below 6 months of age. The insight into the factors contributing or affecting knowledge and attitude towards exclusive breast feeding among nurses will help greatly in planning new strategies in empowering nurses. Nurses, by virtue of their role as patient/client educator, can greatly influence a mother's decision on exclusive breastfeeding by informing, teaching, encouraging and supporting the mother during the antenatal period, immediately after birth and during the postnatal period. Therefore, it is important to study nurses' knowledge and attitude towards exclusive breastfeeding so that knowledge gaps can be identified and addressed so that they will be able to provide adequate information to mothers. Additionally, not many studies have been conducted on this topic in this country.

1.5. OBJECTIVES

1.5.1. GENERAL OBJECTIVE

To determine knowledge levels and attitude towards exclusive breastfeeding among nurses at Kabompo District Hospital.

1.5.1. SPECIFIC OBJECTIVES

1. To determine the level of knowledge among nurses towards exclusive breastfeeding
2. To determine the attitude of nurses towards exclusive breastfeeding
3. To determine if attitude influences knowledge among nurses towards exclusive breastfeeding
4. To determine the actual factors affecting nurses' knowledge and attitudes towards exclusive breastfeeding

1.6. RESEARCH QUESTION

- What factors influence knowledge and attitude among nurses towards exclusive breastfeeding?

1.7. HYPOTHESIS

This is a statement of the predicted relationship between two or more variables, an educated or calculated guess by the researcher (Basavanthappa, 2006).

- Nurses with a negative attitude towards exclusive breast feeding (EBF) would have less knowledge on EBF.
- Nurses with high knowledge levels on EBF would have a positive attitude on exclusive breast feeding.

1.8. OPERATIONAL DEFINITIONS

- **Exclusive breastfeeding** - This means giving a baby only breast milk, and no other liquids or solids, not even water unless medically indicated. This should be for the first 6 months (NIYCF, 2007).
- **Exclusive replacement feeding** - This is the process of feeding a child who is not breastfeeding with a diet that provides all the nutrients the child needs until the child is fully fed on family foods. Infant formula is recommended for exclusive replacement feeding when AFASS (Acceptable, feasible, affordable, sustainable and safe) is met (NIYCF, 2007).
- **Heat Treated Expressed Breast milk** - This means that a mother expresses breast milk and heats it so that the HIV present in breast milk is destroyed making it safe to feed the infant (NIYCF, 2007).
- **Wet Nursing** -This refers to breastfeeding by another woman, who is HIV-negative. This may only be considered in special situations such as in case of an orphaned infant and

the family can not meet AFASS. The wet nurse should be tested every three months (NIYCF, 2007).

- **Infant** - A baby under one year of age or from birth to 12 months of age (NIYCF, 2007).
- **Knowledge** - To have information in one's mind as a result of experience or because you have learned or been told (Oxford Advanced Learner's Dictionary, 2005).
- **Attitude** – The way one thinks, feels or behaves about somebody or something (Oxford Advanced Learner's Dictionary, 2005).
- **Bottle feeding** – Feeding an infant from a bottle, whatever is in the bottle including expressed milk (NIYCF, 2007).
- **Breast milk substitute** - Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not suitable for that purpose (NIYCF, 2007).
- **Complementary feeding** – Child receives both breast milk or a breast substitute and solid (or semi-solid) food, recommended from the time the baby is 6 months old (NIYCF, 2007).
- **Complementary food** – Any food, whether manufactured or locally prepared; suitable as a complement to breast milk or to infant formula when either becomes insufficient to satisfy the nutritional requirements of the infant (NIYCF, 2007).
- **Mixed feeding** – Partial breast feeding and giving some other milk (NIYCF, 2007).

1.9. VARIABLES

These are the qualities, properties or characteristics of persons, things or situations that change or vary. In research, variables are characterized by degrees, amounts and differences (Burns and Grove, 1993). The variables that are going to be investigated in this study include:-

1.9.1. Dependant variables

The dependent variable is a phenomenon in the experimental study used to test the hypothesis. It is not manipulated, but is accepted as it occurs (Basavanthappa, 2006).

- Knowledge
- Attitude

1.9.2. Independent variables

The Independent variable is that phenomenon in the experimental study used to test the hypothesis, and is manipulated by the investigator to determine their relationship to observed phenomena (Basavanthappa, 2006).

- Cultural beliefs
- Age/ Parity
- Personal experience
- Marital Status
- Clinical experience
- Religion
- Education level
- Staffing levels
- In-service training
- Guiding policy
- Supervision
- Salaries and conditions of service

TABLE 1: INDICATORS AND CUT OF POINTS FOR THE VARIABLES

| DEPENDENT VARIABLES | INDICATORS | CUT OF POINTS | QUESTIONS |
|----------------------------|-------------------|----------------------|--|
| Knowledge | Knowledgeable | 8 - 16 | 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 |
| | Not knowledgeable | 0 - 7 | |
| Attitude | Positive | 5- 11 | 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45 |
| | Negative | 0 - 4 | |

CHAPTER TWO

2.0. LITERATURE REVIEW

2.1. INTRODUCTION

This chapter focuses on literature review on nurses' knowledge and attitude towards exclusive breast feeding. The purpose of literature review is to look at some studies already conducted on the topic. It also points out the gaps between what was done and the current situation and gives recognition to authors of the previous studies to avoid plagiarism. Several studies have been conducted on nurse knowledge and attitudes.

Throughout the world breastfeeding has been accepted as perfect food for infants. Breastfeeding is being recommended because of its benefits. The International Baby Food Action Network (IBFAN) is a worldwide coalition of Non Governmental Organization Committee for the improvement of mother and child through better infant nutrition and promotion, protection and support of breastfeeding. The World Alliance for Breastfeeding Action (WABA) brings all breastfeeding advocates together throughout the world. WABA monitors and assesses the impact of breastfeeding at the national level. WHO/UNICEF supports breastfeeding through financing programmes which could result in positive changes in breastfeeding, for example the annual breastfeeding week. It is for this reason that WHO and many governments including Zambia adopted the Innocent Declaration at the WHO/UNICEF policy makers meeting on breastfeeding in 1990. This was a global initiative on the promotion, protection and support of breastfeeding.

In Zambia in order to promote, protect and support breastfeeding, guidelines were initiated and developed. This is a guide to private sectors and Non Governmental Organizations (NGO) in support of breastfeeding. The goal of these guidelines is to facilitate child survival, growth development and psychosocial wellbeing through exclusive breastfeeding for the first six (6) months and continue thereafter with appropriate food supplements for two (2) years and beyond.

In this chapter, literature review is arranged according to global, regional and national perspectives respectively.

2.2. GLOBAL PERSPECTIVE

Appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere. In this light, the optimal duration of exclusive breastfeeding is one of the crucial public health issues that WHO keep under continual review. There has long been consensus on the need for exclusive breastfeeding; however, there has been considerable debate on its optimal duration (2000, WHO).

Davies-Adetugbo (1997), in his study (Nigeria) on socio-cultural factors and the promotion of exclusive breastfeeding in rural communities, concluded that exclusive breastfeeding totally lacked credibility among the locals, with even health workers not believing that it was possible or feasible. Therefore promotion of optimal breastfeeding practices, including exclusive breastfeeding, cannot be successful if the cultural barrier is not adequately addressed.

In another development, the effect of breastfeeding education on breastfeeding knowledge and attitudes of nurses in a Neonatal Intensive Care Unit (NICU) was evaluated. NICU nurses (intervention) and pediatric nurses (untreated control) working at a northeastern US children's hospital participated in the pretest/posttest design study. Both groups answered the same breastfeeding questionnaire on 2 occasions. NICU nurses completed the questionnaire the second time after attending the education session. Outcome measures evaluated by questionnaire items were (1) breastfeeding knowledge, (2) pro-breastfeeding attitudes, (3) baby-focused care attitudes, and (4) nurse-focused care attitudes. Comparison groups were similar at pretest on demographic variables and remained so despite attrition between pretesting and post testing. A significant increase ($P < .001$) occurred in NICU nurses' breastfeeding knowledge after the education session. Findings suggested that an educational intervention had potential for improving NICU nurses' knowledge and certain attitudes about breastfeeding but might not alter other attitudes of interest in the desired direction (Siddell et al, 2003).

Another study was done in North Carolina on the nursing staff of 27 private paediatrics practices (<http://jhl.sagepub.com/cgi/content/abstract/16/3/210>). This was a descriptive study that

documented nurses' breastfeeding knowledge and attitudes. Data was collected using a questionnaire. The 42-item questionnaire included questions about who was responsible for breastfeeding support, what staff nurses knew and believed about breastfeeding, and where their breastfeeding education was obtained. The response rate was 59% (134 out of 227). Only 5% responded that a breastfeeding patient experiencing problems would be referred to a physician, whereas 81 % selected a lactation consultant, and 38% selected a member of the nursing staff. Knowledge scores ranged from 19 to 33 (out of 33). Attitude scores ranged from 10 to 30 (out of 30). Only 46% of respondents reported having received breastfeeding education in their training programs; 85% had received on-the-job training. The nurses surveyed were involved in breastfeeding support, yet many had incorrect information and negative attitudes toward breastfeeding. This trend should be reviewed as quickly as possible as nurses at grassroots should be well equipped with information on exclusive breastfeeding.

In an American study on breastfeeding practices among resident female physicians conducted by Miller, Miller and Chism in 1996, cited by Stevens, a high rate of breast feeding initiation (80%) was seen. The researchers attributed this high rate of initiation to age, socioeconomic status, and education. This clearly indicates the need to train nurses in Exclusive Breastfeeding.

In a study by Beshgetoor, Larson, and La Master (1999), it was reported that those healthcare professionals who had chosen to breastfeed their own infants usually recommend breastfeeding to others as the preferred method of infant feeding. In addition, Schanler and his colleagues (1999) also examined the role of personal experience in breastfeeding, and found that pediatricians with personal involvement with breastfeeding were more prepared to assist mothers with breastfeeding. This means that it is not easy for healthcare professionals to exclusively breastfeed probably due to pressure of work but easy to assist or rather educate others (mothers).

2.3. REGIONAL PERSPECTIVE

In Zimbabwe, a mother's decisions about replacement feeding involve the baby's father, her mother-in-law, and often her own mother. This did not allow the mother the autonomy of free choice (UNAIDS, HIV and infant feeding, 1997). In the 1% of births where a mother did not breastfeed, questions about her HIV status was raised and she risked being stigmatized. Many

HIV-infected mothers compromised by artificially feeding their babies at home, and breastfeeding in public, thus probably increasing the risk of transmission of HIV through mixed feeding.

The possibility that uninfected mothers would consider it desirable to use breast-milk substitutes intended only for their HIV-positive counterparts was known as the spillover effect. When a pregnant woman does not want to be tested but the health worker suspects she is HIV positive, the health worker gives her information about replacement feeding, just in case. Counselors find themselves knowingly violating the provisions of the International Code of Marketing of Breast-milk Substitutes by talking about artificial feeding to groups of mothers because they do not have the time to give individual counseling.

A study was done in Nigeria Nassarawa State to assess the knowledge, attitude and practices of health workers towards Baby Friendly Hospital Initiative (BFHI) practices (Okolo and Ogbanna, 2002). The staff in these areas did not receive training in BFHI although breastfeeding was a norm in this population; exclusive breast feeding was almost zero. A total of 250 health workers (6 doctors, 160 nurses and 84 auxiliary staff) were interviewed. The results showed that fifty-two (20.8%) were aware of the need for initiating breastfeeding within 30 minutes of birth and 92 (36.8%) were aware of breastfeeding support groups. However, there were significant in the level of awareness among the doctors compared to the other categories of health staff ($p < 0.05$). The study revealed that there was general lack of awareness of some major recommended practices in the hospitals that would promote and sustain breast feeding. It was imperative therefore the need for policy changes and BFHI training for the staff of these health facilities to respond to the concern and growing need for proper infant/ young child feeding. This gap can not be over emphasized today also. There is need to carry a survey to determine how much nurses are aware about proper infant feeding.

Another study carried out in rural Uganda by Nankunda et al, (2006) accessed at the website; <http://creativecommons.org/licenses/by/2.0> used several initiatives to improve exclusive breastfeeding but with varying success. The purpose of BFHI was to actively protect, promote, encourage and support breastfeeding through education of health care workers in maternity and neonatal services. However, using health workers to give early support for exclusive

breastfeeding in Italian women was reported as ineffective. This called for further research to identify reasons for this finding since it contrasts the findings reported in the Cochrane review of breastfeeding support using 13 trials where provision of extra support to mothers by professionals with special skills in breastfeeding led to increase in the number of mothers exclusively breastfeeding up to two months.

Piwoz et al, (2006) conducted a study on breastfeeding among health workers in Lilongwe, Malawi. This was an in-depth qualitative study of the attitudes, beliefs, and counseling messages of 19 health workers. Although none of the workers had received formal training, several reported having counseled HIV-positive mothers about infant feeding while health workers with counseling experience believed that HIV-infected mothers should breastfeed exclusively, rather than infant formula feed, citing poverty as the primary reason. Because of high levels of malnutrition, all the workers had concerns about early cessation of breastfeeding which indicated important differences observed between the WHO recommendations and the attitudes and practices of the health workers. Understanding these differences is important for designing effective interventions in hospitals to improve nurses' knowledge, attitudes and practices.

2.4. NATIONAL PERSPECTIVE

Zambia has 40 Baby Friendly Hospitals (BFHI). The Baby Friendly Hospital initiative was launched in 1992 and has been embraced by 171 countries in the world, with a number of hospitals designated as Baby Friendly. The BFHI is a UNICEF/WHO joint endeavour that encourages hospitals to promote exclusive breastfeeding through specific practices such as rooming-in and the prohibition of free and low cost supplies of breast milk substitutes.

Kavindele et al, (1991), high-lighted some causes of decline in breastfeeding to include medical mismanagement of birth and lactation, commercial and promotion of artificial feeding, urbanization and subsequent changes of family structures, and the changing roles of women. Breastfeeding has been shown to be steadily declining in many countries although there are some women who are still breastfeeding. However, it seems infants are given additional foods and drinks well before 4 months, many as early as at birth.

Zambia adopted the relevant World Health Assembly resolutions that call on governments to invest in Infant and Young Child Feeding. These resolutions include the adoption of the Global strategy on IYCF by all member states and agencies at the 55th World Health Assembly (Resolution WHA55.25 of May, 2002). In addition, there exists a UN framework for priority action for HIV and Infant Feeding with the aim of recommending key actions to governments related to IYCF to cover the exceptionally difficult circumstances associated with HIV and AIDS. Finally the adoption and adaptation of the Millennium Development Goals to suit local situations offers an opportunity to strengthen IYCF programmes.

2.4.1. CONCLUSION

Literature review is very important in research because it is usually referred to in most of the other chapters of research. It is evident from the previous researches or studies done on this topic that adequate knowledge plays a major role in disseminating information. The literature review showed that breast feeding lacked credibility among nurses and other workers and it revealed a knowledge deficit on the topic. Negative attitudes, cultural background and personal experiences influenced nurses' behaviour regardless of exclusive breastfeeding. Nurses must be educated and continually updated on breastfeeding standards.

However, no literature on knowledge and attitudes of nurses toward exclusive breastfeeding were found. This gap can not be over looked because from other researchers done elsewhere, have shown some gaps in attitudes and knowledge among nurses exclusive breastfeeding. It is therefore, important that nurses knowledge and attitudes towards exclusive breastfeeding are evaluated in order to improve the uptake of exclusive breastfeeding in the country.

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

3.1. Introduction

This chapter discusses research design, research setting, study population, sample size, data collection, data analysis method and dissemination of information and results.

This study aims at assessing attitudes and knowledge among nurses towards exclusive breast feeding in Kabompo district.

3.2. Research design

A research design is the overall plan or blue print the researcher uses to carry out their study (Basavanhappa, 2007). The research design helps the researcher to find strategies to be used in answering the research question. It also helps the researcher gain control and improves the validity of the study in examining the research problem.

In this study, the investigator used an exploratory descriptive non-interventional research design. A descriptive research design involves a body of data collected, recorded and analyzed while a descriptive study involves the systematic collection and presentation of data to describe or refine characteristics of phenomena or person as they naturally occur (Polit and Hungler, 1997). Descriptive method is preferred because through systematic collection and analysis of data, the attitudes and knowledge among nurses toward exclusive breast feeding was arrived at systematically. On the other hand, exploratory study was used as it was done on a small scale and of short duration. Further more, the study was both quantitative and qualitative because the information which was collected was quantified in numerical values and percentages. It was also categorized on some life experiences or behaviours of nurses, based on their knowledge and attitudes towards exclusive breastfeeding upon which a definition was made to give a precise meaning. However, little is known about attitudes and knowledge among nurses towards exclusive breast feeding in Zambia

3.3. Study Setting

Kabompo District is one of the 7 districts in North-Western Province and it covers about 14,532 square kilometres and an estimated population of 87,857 inhabitants of which about a third live in compounds. The district is 376 km from the provincial Capital Solwezi. Transport to and from

the provincial Capital-Solwezi is mostly by road. There is an air strip about 4 kilometres away from Kabompo town centre, mostly used by government officials and Zambia Flying Doctor Service (Z.F.D.S.) Kabompo District has an altitude of 1200m above sea level which is almost moderate tropical climate with an annual average rainfall of 1200mm to 1300mm per annum. The district hospital has a bed capacity of 80, with 10 cot beds. The district has 11 rural health centers and 2 mission hospitals with a few health posts. This site was selected for the study because it is where the researcher works from and hence, it is convenient and cost effective.

3.4. Study Population

Basavanthappa, 2007 defined study population as the category of persons and objects that meet the criteria for study established by the researcher, any set of persons, objects or measurements having an observable characteristics in common. In this study, the target population comprised all nurses with or without any speciality of any kind in Kabompo district. The study population refers to target population and has an accessible population.

3.5. Target Population

The study populations in this study are nurses with or without any speciality of any kind. According to Polit and Hungler (2001), they defined target population as the entire population in which the researcher is interested and to which he/she would like to generalize the results of the study.

3.6. Accessible Population

Accessible population is the number of people available for a particular study, often a non - random subject of the target population (Polit and Hungler, 2001).

3.7 Sample Selection

Sample selection is a process of selecting a sample from the population by using appropriate sampling method (Polar, 1991). This is where the study subjects are chosen from a large population and the sample drawn or selected should be large enough to represent the entire units under study, otherwise the results may not be reliable if the drawn sample is not large enough.

The investigator used convenience/accidental sampling method to select the sample. In this method, the investigator included all nurses who were found at the time of the study. The selection was entirely objective and free from personal prejudice. The nurses were drawn from two (2) hospitals in Kabompo district (i.e. Kabompo District Hospital and Loloma Mission Hospital).

3.8. Sample Size

A sample size is the total number of subjects to represent the population under study (Polit and Hungler, 2001). A total of forty-five (46) nurses (respondents) comprised the sample. The sample size selected was preferred by the investigator because it served time when it came to data analysis. The other reason was that it was conducive especially where resources are inadequate to conduct the study. The sample size comprised twenty-five (26) and twenty (20) nurses selected from each of the two hospitals.

3.9. Data Collection Tool

Data collection is a precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of a study (Burns and Groove, 1993). Polit and Hungler (2001) defined data collection tool as a measuring device used in gathering of information needed to address a research problem. In this study, data was collected by the use of a self-administered questionnaire where a pencil and paper was used by the subjects to complete the designed series of questions about their knowledge, attitudes, beliefs and feelings as prepared by the researcher (Basavanthappa, 2007).

The questions were divided into three (3) sections. Section A consisted of questions on demographic data, section B consisted of questions measuring the level of knowledge about the study while section C consisted of questions measuring attitudes. The questionnaire comprised both open ended and closed ended questions.

3.10. Data Collection Techniques

Polit and Hungler (2001) defined data collection technique as the actual method on how data is going to be collected. It also allows for systematic collection of information from respondents (Polit

and Hungler, 2001). In this study, the researcher collected data by using a self-administered questionnaire. This technique was preferred because it served time by simply distributing the well structured questionnaires from which subjects would complete the questionnaires at their own time. It was also appropriate because it could be used by literate people like nurses. The nurses were found in the hospital (Kabompo and Loloma Mission Hospitals) and I explained to them about filling the questionnaires voluntarily and assured them that the information would be kept secret from other members of staff and the general public. Then the questionnaires were distributed and discussed when to collect the questionnaires. The questionnaires were distributed in September 2008 and collected them in the same month.

3.9. Validity

Validity refers to determination of whether a measurement actually measures what is purposed to measure (Basavanthappa, 2007). It is the ability of the data gathering instrument to measure what it is supposed to measure. Validity was looked at two levels i.e. external and internal validity. Internal validity concerns the extent to which conclusions can be drawn about the causal effects of one variable on another. This can be achieved by properly framing questions very concise and brief with simple language which is self explanatory.

External validity is concerned with the extent to which research findings can be generalized beyond the sample of research participants tested. In this study, validity was measured by a pilot study that was conducted to probe further the attributes of subjects such as attitudes, anxiety, personality, intelligence, interest, and motivation etc, to understand the human behaviour. The instrument was subjected to a pre- test to determine if the desired information was to be achieved. In this case, unnecessary questions, emotions and personal feelings were addressed adequately. Furthermore, questionnaire was reviewed by the research supervisor who analyzed and approved its validity.

3.9. Reliability

Reliability is the extent to which instrument yields the same results on repeated measures (Basavanthappa, 2007). This was proved by conducting a pilot study which measured the reliability of the instruments.

3.10. Pilot Study

A pilot study is the study carried out at the end of the planning phase of research, in order to explore and test the research elements (Basavanthappa, 2007). The reasons for the pilot study are to learn the strengths and weaknesses of the study design, sample size, data collection instruments and variables. The pitfalls and errors that were identified were corrected while the foreseen problems were avoided. The study tested the variables operationally defined whether or not they were observable and measurable. The pilot study was carried out at Kabompo District Hospital in North-Western Province. The sample for my pilot study was 10% of the total sample (10% of 50 = 5). However, the actual study was conducted on 45 nurses because some of the nurses were not in the district at the time of data collection.

3.11. Ethical and Cultural Considerations

The researcher sought the consent from the District Health Office before collection of data for the pilot study. Similarly, permission was sought for the main research as well. This is critical in research because it facilitates cooperation from authorities and respondents themselves. Written and verbal consent was obtained from the respondents after explaining to them on how they are selected, the purpose and nature of the study and how the findings were to be utilized. My subjects were assured of confidentiality of the collected data and by not using their names but codes, numbers or letters on the questionnaire. Furthermore, the questionnaires were kept under lock and key and only the researcher had access to the information. Usually, the information may be kept for a period not less than five years.

CHAPTER 4

4.0. ANALYSIS OF DATA AND PRESENTATION OF FINDINGS

4.1. INTRODUCTION

The purpose of the study was to determine knowledge and attitudes among Nurses in Kabompo District in the North-Western Province. The study findings are presented in this chapter.

Forty-six Nurses who were drawn from both Kabompo District and Loloma Mission Hospitals participated in the study.

4.2. ANALYSIS OF DATA

The data that was collected from the respondents was analyzed manually using the data master sheet. Quantitative data was analyzed by first ordering the responses according to the research objectives and hypotheses. The data was then categorized and summarized so that interpretation could be made. After data was collected, it was checked for inconsistencies and completeness. Then it was entered on a data master sheet. Data from closed ended questions was entered directly on the data master sheet while data from open ended questions was coded and categorized before entering it on the data master sheet. Analysis was done manually with the help of a scientific calculator.

4.3. PRESENTATION OF FINDINGS

The study findings were presented in table form, using frequency tables and cross-tabulations according to variables. This was found appropriate because the tables summarized the results in a meaningful way which eventually facilitated understanding of the study findings. Apart from tables, pie charts, doughnuts and stacked cones were used to interpret the findings. All results were rounded off to the nearest one decimal place by use of a scientific calculator.

TABLE 2: AGE OF RESPONDENTS (n=46)

| AGE GROUP | FREQUENCIES | PERCENTAGES |
|--------------------|-------------|-------------|
| 15 – 24 years | 5 | 10.9 |
| 25 – 34 years | 17 | 36.9 |
| 35 -44 years | 6 | 13.0 |
| 45 – 49 years | 9 | 19.6 |
| 50 years and above | 9 | 19.6 |
| TOTAL | 46 | 100 |

36.9% of the respondents were in the age group between 25-34 years while those in the age group between 15-24 years were the least (10.9%).

TABLE 3: MARITAL STATUS OF THE RESPONDENTS (n=46)

| MARITAL STATUS | FREQUENCIES | PERCENTAGES |
|----------------|-------------|-------------|
| Single | 13 | 28.3 |
| Married | 28 | 60.9 |
| Divorced | 2 | 4.3 |
| Widowed | 3 | 6.5 |
| TOTAL | 46 | 100 |

60.9% of the respondents were married and 28.3% were single.

TABLE 4: RESPONDENT'S OCCUPATION OF PARTNER (n=46)

| OCCUPATION OF PARTNER | FREQUENCIES | PERCENTAGES |
|------------------------------|--------------------|--------------------|
| House wife | 8 | 17.4 |
| Business | 1 | 2.2 |
| Formerly Employed | 20 | 43.5 |
| No response | 17 | 36.9 |
| TOTAL | 46 | 100 |

43.5% of the respondent's partners were in formal employment while 2.2% were businessmen.

TABLE 5: RESPONDENTS' RELIGIOUS DENOMINATIONS (n=46)

| RELIGIOUS DENOMINATION | FREQUENCIES | PERCENTAGES |
|-------------------------------|--------------------|--------------------|
| Roman Catholic | 5 | 10.9 |
| Brethren in Christ | 8 | 17.4 |
| Seventh Day Adventist | 10 | 21.7 |
| Other | 23 | 50 |
| TOTAL | 46 | 100 |

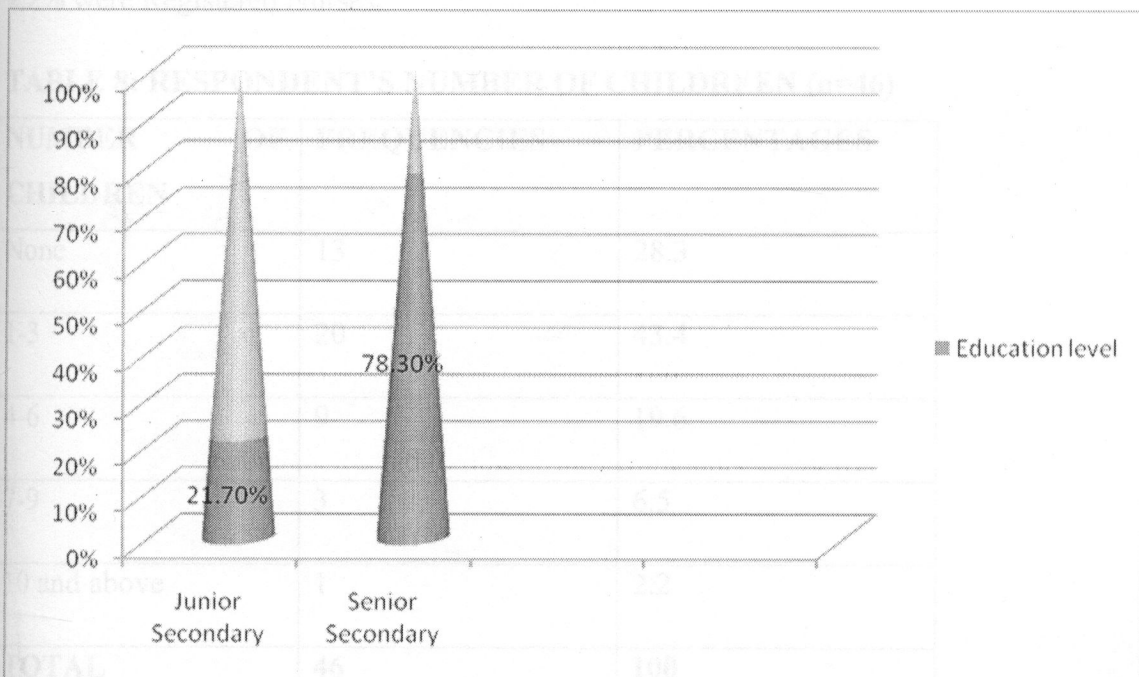
50% of the respondents belonged to other denominations other than the above stated denominations and 21.7% belonged to Seventh Day Adventist.

TABLE 6: RESPONDENTS' TRIBE (n=46)

| TRIBE | FREQUENCIES | PERCENTAGES |
|--------------|-------------|-------------|
| Luvale | 9 | 19.6 |
| Lunda | 9 | 19.6 |
| Luchazi | 4 | 8.7 |
| Chokwe | 1 | 2.2 |
| Other | 23 | 50 |
| TOTAL | 46 | 100 |

50% of the respondents belonged to other tribes while only 2.2% were Chokwe.

FIGURE 2: EDUCATIONAL LEVEL (n=46)



Most (78.3%) of the respondents' attained senior secondary education while 21.7% had attained junior secondary school education.

TABLE 7: PROFESSIONAL QUALIFICATION (n=46)

| PROFESSIONAL QUALIFICATION | FREQUENCIES | PERCENTAGES |
|----------------------------|-------------|-------------|
| Enrolled Nurse | 34 | 73.9 |
| Registered Midwife | 3 | 6.5 |
| Enrolled Midwife | 7 | 15.2 |
| Family Health | 1 | 2.2 |
| Registered Nurses | 1 | 2.2 |
| TOTAL | 46 | 100 |

Most (73.9%) of the respondents were Enrolled Nurses, 15.2% were Enrolled Midwives and 2.2% were Registered Nurses.

TABLE 8: RESPONDENT'S NUMBER OF CHILDREN (n=46)

| NUMBER OF CHILDREN | FREQUENCIES | PERCENTAGES |
|--------------------|-------------|-------------|
| None | 13 | 28.3 |
| 1-3 | 20 | 43.4 |
| 4-6 | 9 | 19.6 |
| 7-9 | 3 | 6.5 |
| 10 and above | 1 | 2.2 |
| TOTAL | 46 | 100 |

43.4% of the respondents had children ranging from 1-3, 28.3% had no children and 2.2% had 10 children and above.

TABLE 9: RESPONDENT'S AGE OF THE YOUNGEST CHILD (n=46)

| AGE OF YOUNGEST CHILD | FREQUENCIES | PERCENTAGES |
|------------------------------|--------------------|--------------------|
| 0-12 Months | 5 | 10.9 |
| 13-24 Months | 13 | 28.3 |
| 25-36 Months | 7 | 15.2 |
| Other | 11 | 23.9 |
| TOTAL | 46 | 100 |

28.3% of the respondent's youngest children were aged between 13-24 months and 10.9% had children between 0-12 months of age.

TABLE 10: RESPONDENT'S NUMBER OF YEARS IN THE SERVICE (n=46)

| NO. OF YEARS IN SERVICE | FREQUENCIES | PERCENTAGES |
|--------------------------------|--------------------|--------------------|
| 1-4 years | 14 | 30.4 |
| 5-10 years | 13 | 28.3 |
| 11-20 years | 6 | 13.0 |
| Other | 13 | 28.3 |
| TOTAL | 46 | 100 |

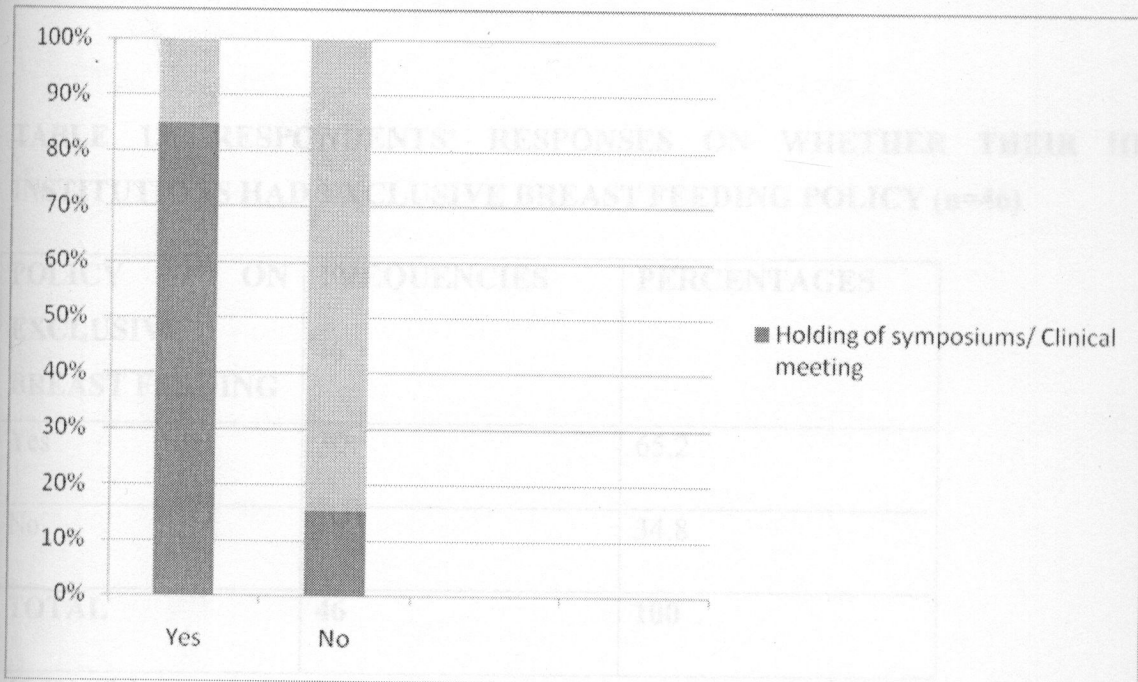
30.4% of the respondents had been in service for a period between 1-4 years while those who served between 11-20 years were 13%.

TABLE 11: RESPONDENT'S RESPONSES ON WORKSHOPS ATTENDED ON EXCLUSIVE BREAST FEEDING (n=46)

| ATTENDANCE OF WORKSHOPS ON EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|---|-------------|-------------|
| Yes | 8 | 17.4 |
| No | 38 | 82.6 |
| TOTAL | 46 | 100 |

82.6% of the nurses did not attend any workshop on exclusive breast feeding.

FIGURE 3: HOLDING OF SYMPOSIUMS/CLINICAL MEETINGS (n=46)



84.8% of the respondents agreed to the fact that symposiums/ clinical meetings were held in their Institutions while 15.2% disagreed.

TABLE 12: INCLUSION OF EXCLUSIVE BREASTFEEDING TOPICS IN SYMPOSIUMS (n=46)

| INCLUSION OF EXCLUSIVE BREAST FEEDING TOPICS IN SYMPOSIUMS | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Yes | 19 | 41.3 |
| No | 27 | 58.7 |
| TOTAL | 46 | 100 |

Majority (58.7%) of the respondents stated that breast feeding topics were not included in the symposiums held at their health institutions, 41.3% stated otherwise.

TABLE 13: RESPONDENTS' RESPONSES ON WHETHER THEIR HEALTH INSTITUTIONS HAD EXCLUSIVE BREAST FEEDING POLICY (n=46)

| POLICY ON EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Yes | 30 | 65.2 |
| No | 16 | 34.8 |
| TOTAL | 46 | 100 |

65.2% of the respondents agreed having a policy regarding exclusive breast feeding while 34.4% disagreed.

TABLE 14: RESPONDENTS' RESPONSES ON ACCESSIBILITY TO EXCLUSIVE BREAST FEEDING POLICY (n=46)

| ACCESSIBILITY TO EXCLUSIVE BREAST FEEDING POLICY | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Yes | 22 | 47.8 |
| No | 24 | 52.2 |
| TOTAL | 46 | 100 |

52.2% of the respondents had no access to the exclusive breast feeding policy while 47.8% had access.

TABLE 15: RESPONDENTS' RESPONSES ON STAFFING LEVELS (n=46)

| STAFFING LEVEL | FREQUENCIES | PERCENTAGES |
|-----------------------|--------------------|--------------------|
| Adequate | 5 | 10.9 |
| Inadequate | 41 | 89.1 |
| TOTAL | 46 | 100 |

89.1% of the respondents said that their departments/units were understaffed and 10.9% stated otherwise.

TABLE 16: RESPONDENTS' RESPONSES ON SALARIES AND CONDITIONS OF SERVICE (n=46)

| SALARIES & CONDITIONS OF SERVICE | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Very good | 1 | 2.2 |
| Good | 5 | 10.9 |
| Fair | 22 | 47.8 |
| Poor | 18 | 39.1 |
| TOTAL | 46 | 100 |

47.8% of the respondents said that their salaries and conditions of service were fair. 39.1% stated that their salaries and conditions of service were poor and 2.2% said that they were very good.

TABLE 17: RESPONDENTS' RESPONSES ON THEIR TREATMENT BY SENIOR NURSES (n=46)

| TREATMENT BY SENIOR NURSES | FREQUENCIES | PERCENTAGES |
|-----------------------------------|--------------------|--------------------|
| Fair treatment | 18 | 39.1 |
| Unfair treatment | 28 | 60.9 |
| TOTAL | 46 | 100 |

60.9% of the respondents stated that they received unfair treatment from the senior nursing staff and 39.1% stated the opposite.

TABLE 18: RESPONDENTS' RESPONSES ON WHETHER THEY HEARD ABOUT EXCLUSIVE BREAST FEEDING (n=46)

| HEARD ABOUT EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Yes | 44 | 95.6 |
| No | 2 | 4.4 |
| TOTAL | 46 | 100 |

The table shows that majority (95.6%) had heard about exclusive breast feeding.

TABLE 19: RESPONDENTS' SOURCE OF INFORMATION ON EXCLUSIVE BREAST FEEDING (n=46)

| SOURCE OF INFORMATION ON EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Workshop | 15 | 32.6 |
| Hospital MCH /Symposiums | 8 | 17.4 |
| Training School | 19 | 41.3 |
| T.V. Radio, Books, Magazines etc | 2 | 4.3 |
| No response | 2 | 4.3 |
| TOTAL | 46 | 100 |

41.3% of the respondents had heard about exclusive breast feeding from their training schools while 4.3% each got the information through reading magazines, listening to the radio and watching Television programs while the other 4.3% gave no response.

TABLE 20: RESPONDENTS' DEFINITION OF EXCLUSIVE BREAST FEEDING (n=46)

| DEFINITION OF EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Knowledgeable | 30 | 65.2 |
| Not Knowledgeable | 16 | 34.8 |
| TOTAL | 46 | 100 |

65.2% of the respondents knew the definition of exclusive breast feeding while 34.8% did not.

TABLE 21: RESPONDENTS WITH CHILDREN WHO EXCLUSIVELY BREASTFED THEIR BABIES (n=46)

| EXCLUSIVELY BREAST FEED | FREQUENCIES | PERCENTAGES |
|--------------------------------|--------------------|--------------------|
| Yes | 18 | 60 |
| No | 12 | 40 |
| TOTAL | 30 | 100 |

Table shows that, of the respondents who had children, 60% exclusively breastfeed children and 40% did not.

TABLE 22: RESPONDENT'S RESPONSES ON THE MODE OF BREAST FEEDING TO THOSE WHO DID NOT EXCLUSIVELY BREASTFEED THEIR BABIES (n=46)

| MODE OF BREAST FEEDING TO THOSE WHO DID NOT EXCLUSIVELY BREASTFEED | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Mixed foods | 8 | 66.7 |
| Formula only | 4 | 33.3 |
| TOTAL | 12 | 100 |

Among the respondents who did not exclusively breast feed their babies, 66.7% gave mixed foods while 33.3% gave formula only.

TABLE 23: RESPONDENT'S RESPONSES ON WHETHER THEY EXCLUSIVELY BREASTFED OTHER CHILDREN (n=46)

| EXCLUSIVE BREAST FEEDING FOR OTHER CHILDREN | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Yes | 13 | 38.3 |
| No | 21 | 61.7 |
| TOTAL | 34 | 100 |

Among the respondents who had other children, 61.7% did not exclusive breast feed the children while 38.3% did breastfeed their children.

TABLE 24: RESPONDENT'S REASONS ON WHY THEY DID NOT EXCLUSIVELY BREASTFEED THEIR CHILDREN (n=46)

| REASONS FOR NOT WHY EXCLUSIVELY BREAST FEED OTHER CHILDREN | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Because of work | 5 | 15.2 |
| No child | 1 | 3.3 |
| Only 1 child | 1 | 3.3 |
| Only 1 set of twins | 1 | 3.3 |
| Fear of MTCT | 2 | 6.1 |
| No response | 23 | 69.7 |
| TOTAL | 33 | 100 |

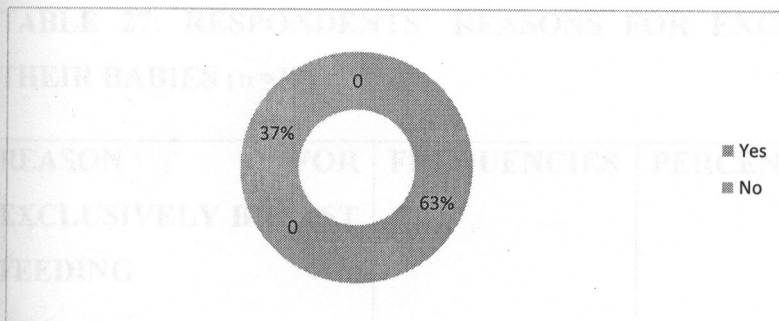
Most (69.7%) of the respondents gave no response as to why they did not exclusively breast feed the other children, 15.2% stated that they did not exclusively breast feed other children due to work.

TABLE 25: RECOMMENDED PERIOD FOR EXCLUSIVE BREAST FEEDING (n=46)

| EXCLUSIVE BREAST FEEDING PERIOD | FREQUENCIES | PERCENTAGES |
|---------------------------------|-------------|-------------|
| 4 months | 4 | 8.7 |
| 6 months | 42 | 91.3 |
| TOTAL | 46 | 100 |

91.3% of the respondents knew the period required or recommended for exclusive breast feeding. Only 8.7% did not know.

FIGURE 4: RESPONDENTS' RESPONSES ON WHETHER AN HIV POSITIVE MOTHER SHOULD EXCLUSIVELY BREAST FEED (n=46)



63 % of the respondents supported the idea that HIV positive mothers should exclusively breast feed their children.

TABLE 26: RESPONDENTS' REASONS FOR NOT EXCLUSIVELY BREAST FEEDING THEIR BABIES (n=17)

| REASON FOR NOT EXCLUSIVELY BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Milk formula is expensive compared to exclusive breast feeding | 1 | 5.9 |
| Fear of transmission of HIV | 16 | 94.1 |
| TOTAL | 17 | 100 |

94.1% of the respondents did not breast feed as they feared HIV transmission while 5.9% said that milk formula was expensive compared to exclusive breast feeding.

TABLE 27: RESPONDENTS' REASONS FOR EXCLUSIVELY BREASTFEEDING THEIR BABIES (n=29)

| REASON FOR EXCLUSIVELY BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Breast milk is nutritious & help in prevention of HIV transmission | 25 | 86.2 |
| Don't know | 4 | 13.8 |
| TOTAL | 29 | 100 |

86.2% of the respondents said that breast milk was nutritious and also helps in HIV prevention while 13.8% did not know.

TABLE 28: RESPONDENTS' RESPONSES ON THE DEFINITION OF COMPLEMENTARY FEEDING (n=46)

| COMPLEMENTARY FEEDING | FREQUENCIES | PERCENTAGES |
|-------------------------------------|--------------------|--------------------|
| Defined the term correctly | 3 | 6.5 |
| Failed to define the term correctly | 43 | 93.5 |
| TOTAL | 46 | 100 |

93.5% of the respondents were not able to define the term complementary feeding; only 6.5% defined it correctly.

TABLE 29: RESPONDENTS' RESPONSES ON WHETHER THEY SHOULD STOP BREAST FEEDING THEIR BABIES IF THEY DEVELOP DIARRHOEA (n=46)

| BREAST FEEDING IF BABY DEVELOPS DIARRHOEA | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Yes | 3 | 6.5 |
| No | 43 | 93.5 |
| TOTAL | 46 | 100 |

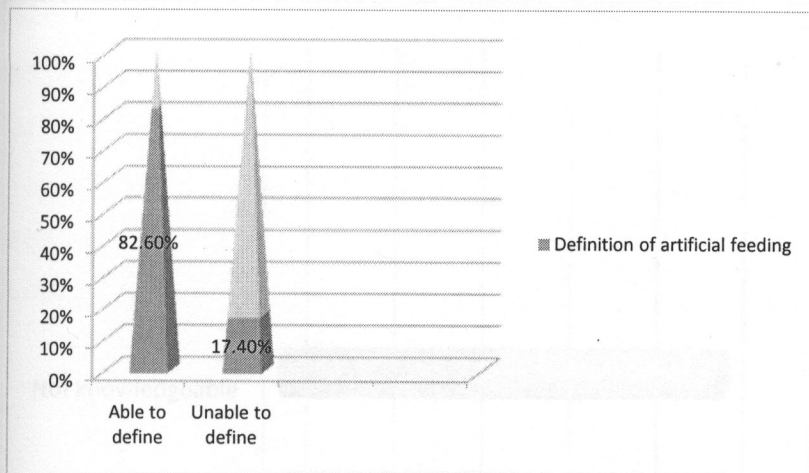
Majority (93.5%) of the respondents said that mothers should not stop breast feeding even if the child who is breast feeding developed diarrhoea, only 6.5% stated the opposite.

TABLE 30: RESPONDENTS' REASONS WHY ONE SHOULD NOT STOP BREAST FEEDING IF CHILD DEVELOPED DIARRHOEA WHILE BREASTFEEDING (n=46)

| REASON WHY MOTHERS SHOULD NOT STOP BREAST FEEDING IF CHILD DEVELOPS DIARRHOEA | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Breast milk has no harm, gives nutrients needed by the baby for its growth and prevents malnutrition | 38 | 82.6 |
| Don't know | 8 | 17.4 |
| TOTAL | 46 | 100 |

82.6% of the respondents supported the idea of continuing to breast feed babies despite the development of diarrhoea as breast milk is nutritious, as such can prevent malnutrition and other diseases. 17.4% did not give any reason despite not supporting the stoppage of breast feeding.

FIGURE 5: RESPONDENTS' RESPONSES ON THE DEFINITION OF ARTIFICIAL FEEDING (n=46)



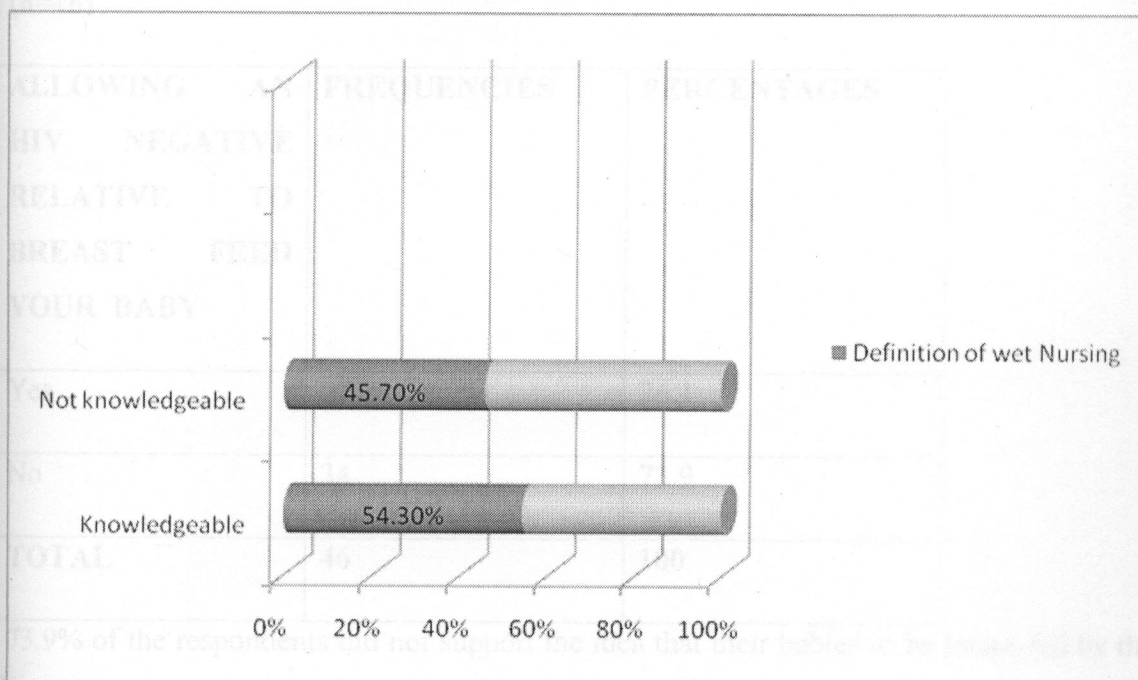
82.6% of the respondents knew the definition of artificial feeding while 17.4% did not.

TABLE 31: RESPONDENTS' RESPONSES ON THE DEFINITION OF MIXED FEEDING (n=46)

| DEFINITION OF MIXED FEEDING | FREQUENCIES | PERCENTAGES |
|-----------------------------|-------------|-------------|
| Knowledgeable | 41 | 89.1 |
| Not Knowledgeable | 5 | 10.9 |
| TOTAL | 46 | 100 |

89.1% of the respondents knew the definition of mixed feeding while 10.9% did not.

FIGURE 6: RESPONDENTS' RESPONSES ON THE DEFINITION OF WET NURSING (n=46)



54.3% of the respondents were knowledgeable about the definition of wet nursing and 45.7% were not knowledgeable.

TABLE 32: RESPONDENTS' RESPONSES ON WHETHER THEY WOULD BREAST FEED THEIR BABIES IN PUBLIC (n=46)

| BREAST FEEDING BABY IN PUBLIC | FREQUENCIES | PERCENTAGES |
|-------------------------------|-------------|-------------|
| Yes | 30 | 65.2 |
| No | 16 | 34.8 |
| TOTAL | 46 | 100 |

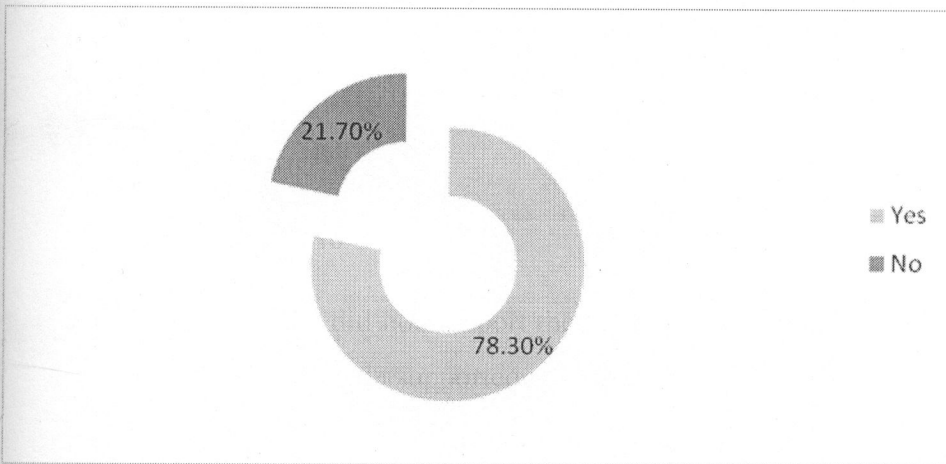
65.2% of the respondents stated that they would breast feed their babies in public while 34.8% stated otherwise.

TABLE 33: RESPONDENTS' RESPONSES WHETHER OR NOT THEY WOULD ALLOW THEIR HIV NEGATIVE RELATIVES TO BREASTFEED THEIR BABIES (n=46)

| ALLOWING AN HIV NEGATIVE RELATIVE TO BREAST FEED YOUR BABY | FREQUENCIES | PERCENTAGES |
|--|-------------|-------------|
| Yes | 12 | 26.1 |
| No | 34 | 73.9 |
| TOTAL | 46 | 100 |

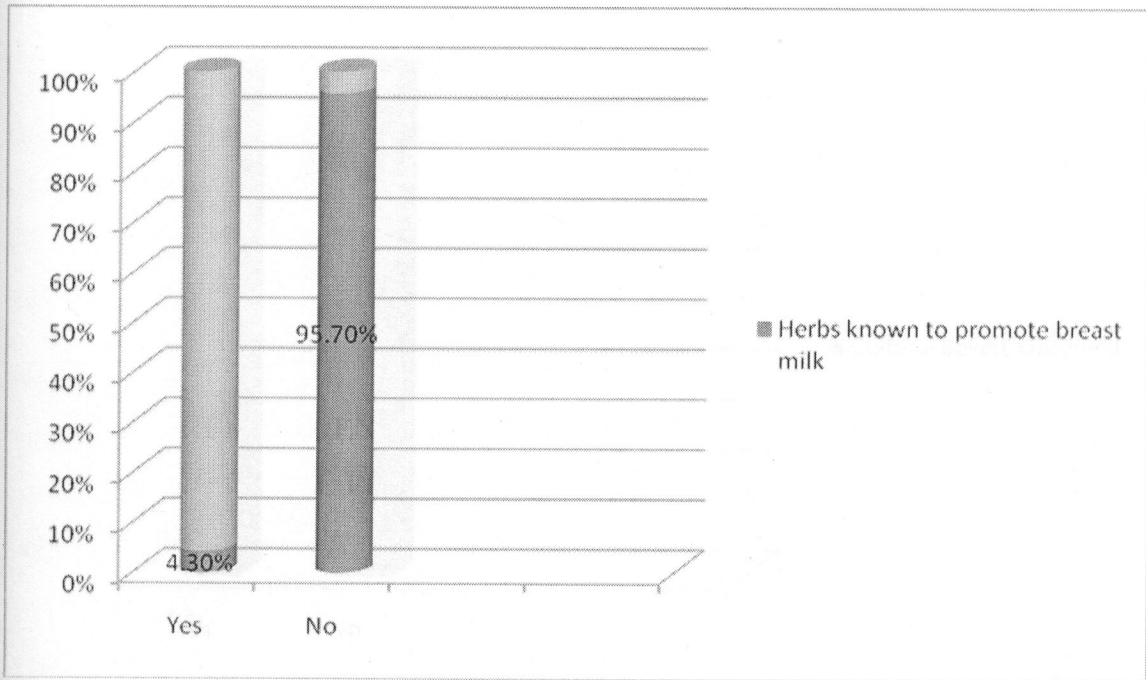
73.9% of the respondents did not support the idea that their babies to be breast fed by their HIV negative relatives while 26.1% supported the idea.

FIGURE 7: RESPONDENTS' RESPONSES WHETHER THEIR RELIGION ENCOURAGED EXCLUSIVE BREAST FEEDING (n=46)



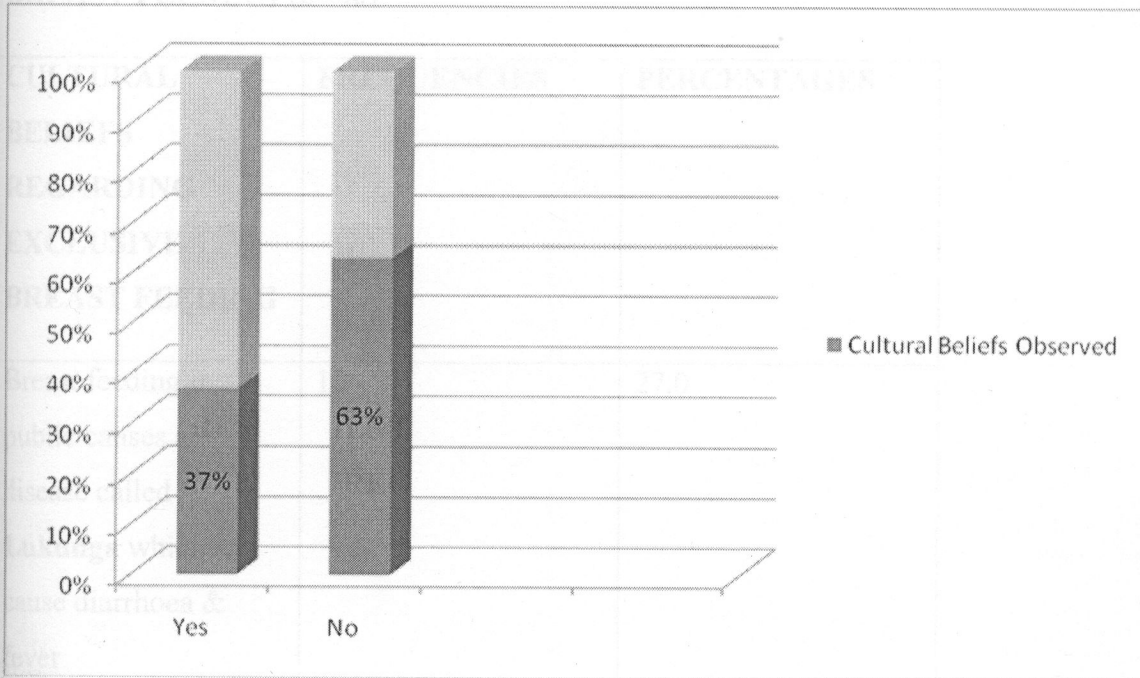
78.3% of the respondents said that their religion encouraged exclusive breast feeding while 21.7% stated otherwise.

FIGURE 8: RESPONDENTS' RESPONSES WHETHER THEY KNEW ANY HERBS THAT PROMOTE THE FLOW OF BREAST MILK (n=46)



The majority (95.7%) of the respondents stated that they did not know any herbs used to promote breast milk production, only 4.3% stated they knew of some herbs.

FIGURE 9: RESPONDENTS' RESPONSES WHETHER THEY OBSERVED ANY CULTURAL BELIEFS REGARDING EXCLUSIVE BREAST FEEDING IN PUBLIC (n=46)



The majority (63%) of the respondents did not observe any cultural beliefs regarding exclusive breast feeding while 37% did.

some mothers move
with charms.

| | | |
|------------|----|------|
| Don't know | 20 | 54.1 |
| TOTAL | 37 | 100 |

The majority (54.1%) of the respondents did not know of any cultural beliefs regarding breast feeding. 27% stated that breast feeding in public could cause diarrhoea and fever while 15.3% stated that breast feeding in public caused death to babies as some mothers carry with their charms.

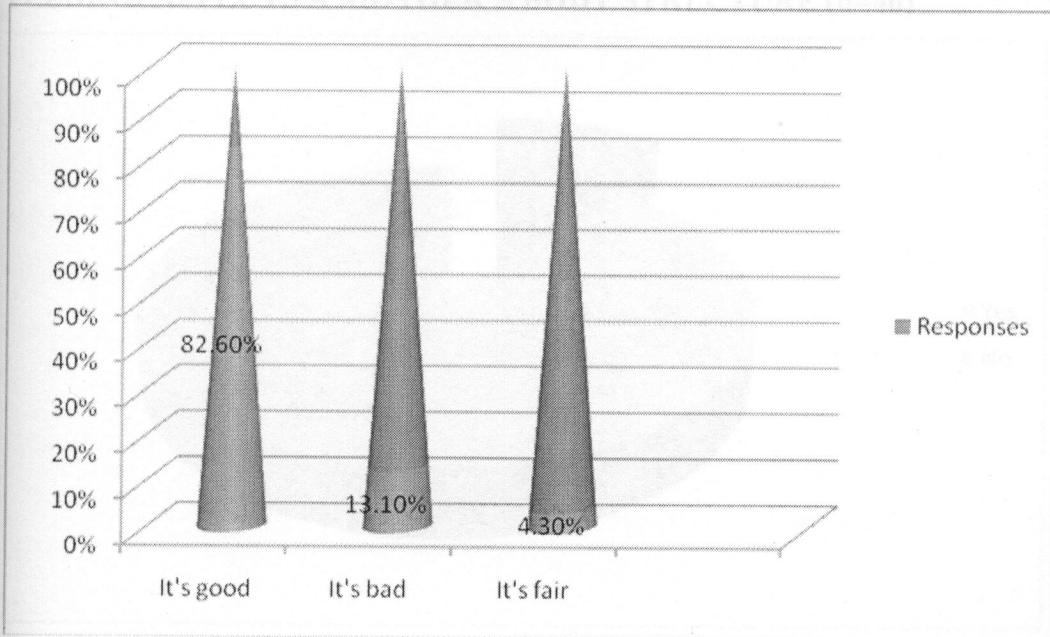
ATTITUDES TO EXCLUSIVE BREAST FEEDING

TABLE 34: RESPONDENTS' CULTURAL BELIEFS REGARDING EXCLUSIVE BREAST FEEDING (n=46)

| CULTURAL BELIEFS REGARDING EXCLUSIVE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|---|--------------------|--------------------|
| Breast feeding in public causes a disease called Lukungu which can cause diarrhoea & fever | 10 | 27.0 |
| Breast feeding in public can cause death to a baby because some mothers move with charms. | 7 | 18.9 |
| Don't know | 20 | 54.1 |
| TOTAL | 37 | 100 |

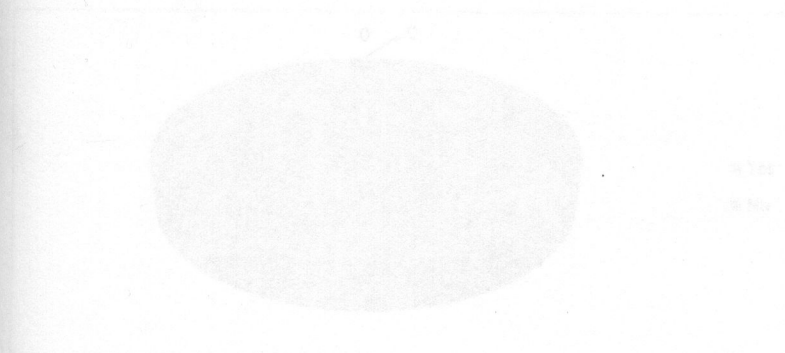
The majority (54.1%) of the respondents did not know of any cultural beliefs regarding breast feeding. 27% stated that breast feeding in public could cause diarrhoea and fever while 18.9% stated that breast feeding in public caused death to babies as some mothers carry with them charms.

FIGURE 10: RESPONDENTS' OPINION ON EXCLUSIVE BREAST FEEDING (n=46)



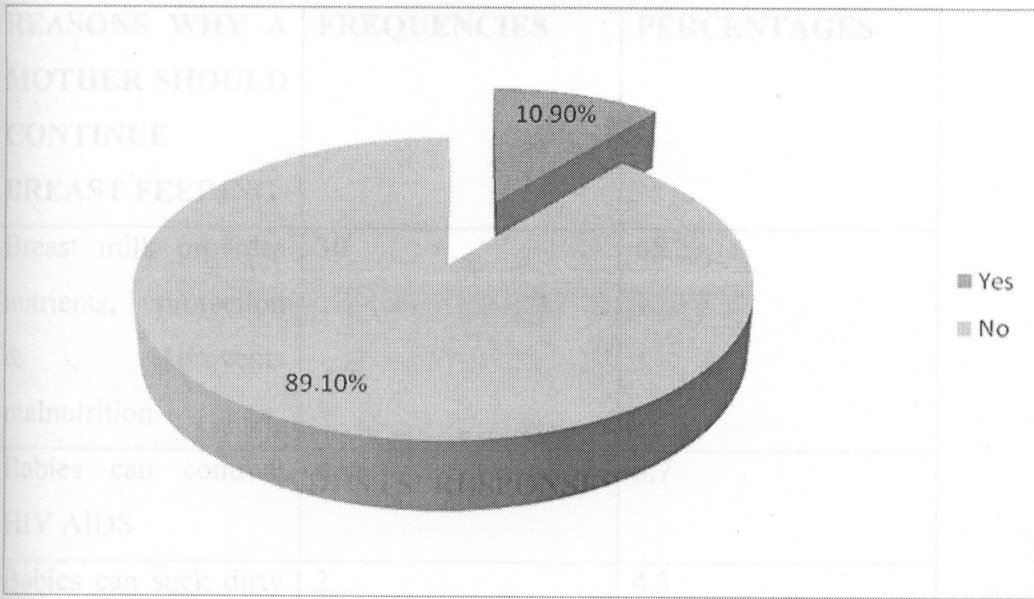
82.6% of the respondents stated that exclusive breast feeding was good and 13.1% stated that it was bad.

FIGURE 12: RESPONDENTS' RESPONSES ON WHETHER A MOTHER SHOULD STOP BREAST FEEDING WHEN PREGNANT (n=46)



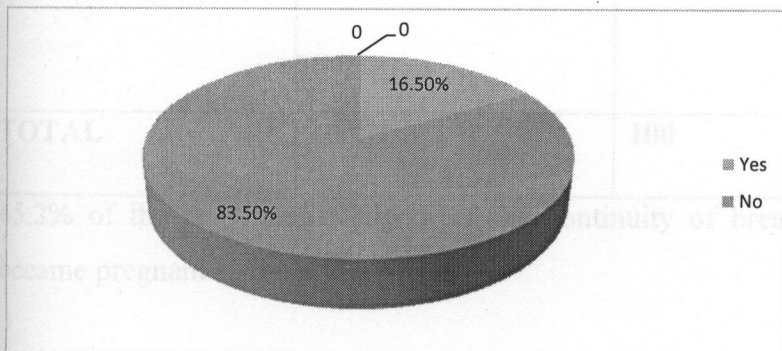
83.5% of the respondents said that they could not stop breast feeding even if they became pregnant while breast feeding and 16.5% said the opposite.

FIGURE 11: RESPONDENTS' RESPONSES ON WHETHER EXCLUSIVE BREAST FEEDING AFFECTS A MOTHER'S BODY STRUCTURE (n=46)



89.1% of the respondents said that exclusive breast feeding did not affect a mother's body structure and 10.9% said that it affected a mother's body structure.

FIGURE 12: RESPONDENTS' RESPONSES ON WHETHER A MOTHER SHOULD STOP BREAST FEEDING WHEN PREGNANT (n=46)



83.5% of the respondents said that they could not stop breast feeding even if they became pregnant while breast feeding and 16.5% said the opposite.

TABLE 35: REASONS WHY A MOTHER SHOULD CONTINUE BREAST FEEDING IN SPITE OF A PREGNANCY (n=46)

| REASONS WHY A MOTHER SHOULD CONTINUE BREAST FEEDING | FREQUENCIES | PERCENTAGES |
|--|--------------------|--------------------|
| Breast milk provides nutrients, protection & prevents malnutrition | 30 | 65.2 |
| Babies can contract HIV AIDS | 4 | 8.7 |
| Babies can suck dirty deposited by the father into the mother if allowed to breast feed while pregnant | 2 | 4.3 |
| No response | 10 | 21.8 |
| TOTAL | 46 | 100 |

65.2% of the respondents supported the continuity of breast milk feeding even if a mother became pregnant as there was no harm.

TABLE 36: RESPONDENTS' SUGGESTIONS ON HOW NURSES' ATTITUDES COULD BE IMPROVED (n=46)

| SUGGESTIONS IN IMPROVING ATTITUDES & KNOWLEDGE ON EXCLUSIVE BREAST FEEDING AMONG NURSES | | PERCENTAGES |
|--|-----------|--------------------|
| Workshops, seminars and symposiums | 24 | 52.2 |
| Nurses' interaction with community | 11 | 24.0 |
| Nurses to be allowed to bring their babies with them at work place and continue breastfeeding. | 3 | 6.5 |
| Nurses' maternity leave to be extended to 6 months | 2 | 4.4 |
| No response | 6 | 13.0 |
| TOTAL | 46 | 100 |

52.2% of the respondents suggested that workshops, seminars and symposiums be intensified in the health institutions in order to improve nurses' attitudes and knowledge on exclusive breast feeding. 24% stated that nurses' should have more interaction with the community and 13% gave no response.

CROSS TABULATION TABLES SHOWING RELATIONSHIPS BETWEEN VARIABLES

TABLE 37: NURSES' NUMBER OF CHILDREN IN RELATION TO THOSE WHO EXCLUSIVELY BREASTFEED THEIR BABIES (n=30)

| NUMBER OF CHILDREN | EXCLUSIVELY BREASTFED THEIR CHILDREN | | TOTAL |
|--------------------|--------------------------------------|-----------------|------------------|
| | YES | NO | |
| 1-3 | 11(36.7%) | 4 (13.3%) | 15 (50%) |
| 4-6 | 3 (10%) | 4 (13.3%) | 7(23.3%) |
| 7-9 | 3 (10%) | 4 (13.3%) | 7(23.3%) |
| 10 and above | 1 (3.3%) | 0 | 1(3.3%) |
| TOTAL | 18 (60%) | 12(40) % | 30 (100%) |

36.7% (11) of the respondents who had 1-3 children exclusively breast fed their babies and 13.3% who had the same number of children did not.

TABLE 38: LENGTH OF WORK IN THE SERVICE IN RELATION TO ATTENDING A WORKSHOP ON EXCLUSIVE REASTFEEDING (n=46)

| LENGTH OF WORK IN THE SERVICE | ATTENDED A WORKSHOP ON EXCLUSIVE BREASTFEEDING | | TOTAL |
|-------------------------------|--|------------------|------------------|
| | YES | NO | |
| 1-4 Years | 0 | 14(30.4%) | 14(30.4%) |
| 5-10 Years | 1(2.2%) | 12(26.1%) | 13(28.3%) |
| 11-20 Years | 2(4.3%) | 4(8.7%) | 6(13%) |
| 21 and above | 5(10.9%) | 8(17.4%) | 13(28.3%) |
| TOTAL | 8(17.4%) | 38(82.6%) | 46 (100%) |

10.9% (5) of the respondents who had worked for 21 years and above attended a workshop on exclusive breastfeeding while 30.4% of the respondents who had worked between 1-4 years did not attend a workshop on exclusively breastfeeding.

TABLE 39: NUMBER OF YEARS IN THE SERVICE IN RELATION TO STAFFING LEVELS (n=46)

| NUMBER OF YEARS IN THE SERVICE | STAFFING LEVELS | | TOTAL |
|--------------------------------|-----------------|------------------|------------------|
| | ADEQUATE | INADEQUATE | |
| 1-4 Years | 2(4.3%) | 12(26.1%) | 14(30.4%) |
| 5-10 Years | 1(2.2%) | 12(26.1%) | 13(28.3%) |
| 11-20 Years | 0 | 6(13%) | 6((13%) |
| 21 and above | 2(4.3%) | 11(23.9%) | 13(28.3%) |
| TOTAL | 5(10.9%) | 41(89.1%) | 46 (100%) |

26.1% (12) of the respondents who had worked for a period between 1-4 years stated that staffing levels were inadequate in the health institutions and 4.3% (2) in the same category stated the opposite.

TABLE 40: LENGTH OF WORK IN THE SERVICE IN RELATION TO SALARIES AND CONDITIONS OF SERVICE (n=46)

| LENGTH OF WORK IN THE SERVICE | SALARIES AND CONDITIONS OF SERVICE | | | | TOTAL |
|-------------------------------|------------------------------------|-----------------|------------------|-------------------|------------------|
| | VERY GOOD | GOOD | FAIR | POOR | |
| 1-4 Years | 1(2.2%) | 1(2.2%) | 9(19.6%) | 3(6.5%) | 14(30.4%) |
| 5-10 Years | 0 | 2(4.3%) | 3(6.5%) | 8(17.4%) | 13(28.3%) |
| 11-20 Years | 0 | 1(2.2%) | 2(4.3%) | 3(6.5%) | 6 (13%) |
| 21 and above | 0 | 1(2.2%) | 8 (17.4%) | 4(8.7%) | 13 (28.3%) |
| TOTAL | 1(2.2%) | 5(10.9%) | 22(47.8%) | 18 (39.1%) | 46 (100%) |

19.6 % (9) of the respondents who had been in service between 1-4 years said that their salaries and conditions of service were fair while those who had been in service between 5-10 years said that the salaries were poor (17.4%).

TABLE 41: HEARD ABOUT EXCLUSIVE BREAST FEEDING IN RELATION TO DEFINING EXCLUSIVE BREAST FEEDING (n=46)

| HEARD ABOUT EXCLUSIVE BREAST FEEDING | DEFINING EXCLUSIVE BREAST FEEDING | | TOTAL |
|--------------------------------------|-----------------------------------|-------------------|------------------|
| | KNOWLEDGEABLE | NOT KNOWLEDGEABLE | |
| YES | 29(63.0%) | 15(32.6%) | 44(95.7%) |
| NO | 1(2.2%) | 1(2.2%) | 2(4.3%) |
| TOTAL | 30(65.2%) | 16(34.8%) | 46 (100%) |

63% (29) of the respondents who had heard about exclusive breastfeeding were able to define exclusive breast feeding correctly in their own understanding while 32.6% (15) in the same category could not define it correctly.

TABLE 42: HEARD ABOUT EXCLUSIVE BREAST FEEDING IN RELATION TO DEFINING COMPLEMENTARY FEEDING (n=46)

| HEARD ABOUT EXCLUSIVE BREAST FEEDING | DEFINING COMPLEMENTARY FEEDING | | TOTAL |
|--------------------------------------|--------------------------------|-------------------------------------|------------------|
| | DEFINED THE TERM CORRECTLY | FAILED TO DEFINE THE TERM CORRECTLY | |
| YES | 2(4.3%) | 42(91.3%) | 44(95.7%) |
| NO | 1(2.2%) | 1(2.2%) | 2(4.3%) |
| TOTAL | 3(6.5%) | 43(93.5%) | 46 (100%) |

91.3% (42) of the respondents who had heard about exclusive breast feeding were unable to define it correctly in their own understanding and 4.3% (2) in the same category were able to define it correctly.

TABLE 43: THOSE WHO HAD SYMPOSIUMS IN RELATION TO HAVING A POLICY ON EXCLUSIVE BREAST FEEDING AT THEIR INSTITUTIONS (n=46)

| SYMPOSIUMS AT HOSPITAL INSTITUTIONS | POLICY ON EXCLUSIVE BREAST FEEDING AT THE INSTITUTION | | TOTAL |
|-------------------------------------|---|------------------|------------------|
| | YES | NO | |
| YES | 14(30.4%) | 5(10.9%) | 19(41.3%) |
| NO | 16(34.8%) | 11(23.9%) | 27(58.7%) |
| TOTAL | 30(65.2%) | 16(34.8%) | 46 (100%) |

34.8% (16) of the respondents who said that the hospitals where they were working did not hold any symposiums on exclusive breast feeding stated that the hospitals where they were working had a policy on exclusive breast feeding while 23.9% within the same category stated otherwise.

TABLE 44: HIV POSITIVE MOTHER EXCLUSIVELY BREASTFEEDING IN RELATION TO BREASTFEEDING BABY IN PUBLIC (n=46)

| HIV POSITIVE MOTHER EXCLUSIVELY BREASTFEEDING | BREASTFEEDING BABY IN PUBLIC | | TOTAL |
|---|------------------------------|------------------|------------------|
| | YES | NO | |
| YES | 20 (43.5%) | 9(19.6%) | 29 (63.1%) |
| NO | 10(21.7) | 7(15.2%) | 17(39.9%) |
| TOTAL | 30(65.2%) | 16(34.8%) | 46 (100%) |

43.5% (20) of the respondents who stated that the HIV positive mothers should exclusively breastfeed their babies were of the views that breast milk was nutritious for the growth and health of the child and 19.6% held opposing view.

TABLE 45: HEARD ABOUT EXCLUSIVE BREAST FEEDING IN RELATION TO THEIR OPINION ABOUT EXCLUSIVE BREASTFEEDING (n=46)

| HEARD ABOUT EXCLUSIVE BREAST FEEDING | OPINION ABOUT EXCLUSIVE BREASTFEEDING | | | TOTAL |
|---|--|-----------------|----------------|------------------|
| | GOOD | BAD | FAIR | |
| YES | 38(32.6) | 4(8.7%) | 2(4.3%) | 44(95.7%) |
| NO | 0 | 2(4.3%) | 0 | 2(4.3%) |
| TOTAL | 38(32.6) | 6(13.0%) | 2(4.3%) | 46 (100%) |

32.6% (38) of the respondents who had heard about exclusive breast feeding were of the opinion that exclusive breast feeding was good as it contributed to the growth of the child, strengthened the immune system and promoted the health of the child. 4.3% (2) of the respondents who had not heard about exclusive breastfeeding had a bad opinion about exclusive breast feeding.

TABLE 46: OPINION ABOUT EXCLUSIVE BREAST FEEDING IN RELATION TO EXCLUSIVE BREASTFEEDING AFFECTING MOTHER'S BODY STRUCTURE (n=46)

| OPINION ABOUT EXCLUSIVE BREASTFEEDING | E.B.F AFFECTING MOTHER'S BODY STRUTURE | | TOTAL |
|---------------------------------------|--|------------------|------------------|
| | YES | NO | |
| GOOD | 4(8.7%) | 34(73.9%) | 38(32.6%) |
| BAD | 0 | 6(13.0%) | 6(13.0%) |
| FAIR | 1(2.2%) | 1(2.2%) | 2(4.3%) |
| TOTAL | 5(10.9%) | 41(89.1%) | 46 (100%) |

73.9% (34) of the respondents who had a good opinion about exclusive breast feeding did not support the statement that exclusive breast feeding affects a mother's body structure while 8.7% (4) had fears that it could affect one's body structure supported the statement.

TABLE 47: HEARD ABOUT EXCLUSIVE BREAST FEEDING IN RELATION TO ALLOWING THEIR BABIES TO BE BREAST FED BY AN HIV NEGATIVE

RELATIVE (n=46)

| HEARD ABOUT EXCLUSIVE BREAST FEEDING | ALLOWING THEIR BABIES TO BE BREAST FED BY AN HIV NEGATIVE RELATIVE | | TOTAL |
|---|---|------------------|------------------|
| | YES | NO | |
| YES | 12 (26.1%) | 32(69.6%) | 44 (95.7%) |
| NO | 0 | 2 (4.3%) | 2 (4.3%) |
| TOTAL | 12(26.1%) | 34(73.9%) | 46 (100%) |

69.6% (32) of the respondents who had heard about exclusive breast feeding said that they would not allow their babies to be breast fed by an HIV negative relative while 26.1% (12) stated the opposite.

TABLE 48: MARITAL STATUS IN RELATION TO WHETHER A MOTHER SHOULD STOP BREASTFEEDING WHEN PREGNANT (n=46)

| MARITAL STATUS | WHETHER A MOTHER SHOULD STOP BREASTFEEDING WHEN PREGNANT | | TOTAL |
|----------------|--|------------------|------------------|
| | YES | NO | |
| SINGLE | 2(4.3%) | 11(23.9%) | 13(28.3%) |
| MARRIED | 1(2.2%) | 27(58.7%) | 28(60.9%) |
| DIVORCED | 0 | 2(4.3%) | 2(4.3%) |
| WIDOWED | 0 | 3(6.5%) | 3(6.5%) |
| TOTAL | 3 (6.5%) | 43(93.5%) | 46 (100%) |

58.7% (27) of the respondents who were married said that a mother who is pregnant should not stop breast feeding while 4.3% (2) of the single respondents said that a mother who is pregnant should stop.

TABLE 49: MARITAL STATUS IN RELATION TO NURSES WHO EXCLUSIVELY BREASTFED THEIR BABIES (n=46)

| MARITAL STATUS | NURSES WHO EXCLUSIVELY BREAST FED THEIR BABIES | | | TOTAL |
|----------------|--|------------------|------------------|------------------|
| | YES | NO | NOT APPLICABLE | |
| SINGLE | 8 (17.4%) | 2(4.3%) | 3(6.5%) | 13(28.3%) |
| MARRIED | 10 (21.7%) | 8(17.4%) | 10(21.7%) | 28(60.9%) |
| DIVORCED | 0 | 1(2.2%) | 1(2.2%) | 2(4.3%) |
| WIDOWED | 0 | 1(2.2%) | 2(4.3%) | 3(6.5%) |
| TOTAL | 18(39.1%) | 12(26.1%) | 16(34.8%) | 46 (100%) |

21.7% (10) of the respondents who were married said that they exclusively breastfed their babies and 17.4% (8) said that they did not.

TABLE 50: AGE OF NURSES IN RELATION TO NURSES WHO EXCLUSIVELY BREASTFED THEIR BABIES (n=46)

| AGE GROUP | NURSES WHO EXCLUSIVELY BREASTFED THEIR BABIES | | | TOTAL |
|--------------------|---|-------------------|-------------------|------------------|
| | YES | NO | NOT APPLICABLE | |
| 15 – 24 years | 2(4.3%) | 2(4.3%) | 1(2.2%) | 5(10.9%) |
| 25 – 34 years | 10(21.7%) | 2(4.3%) | 5(10.9%) | 17(36.9%) |
| 35 -44 years | 0 | 3(6.5%) | 3(6.5%) | 6(13%) |
| 45 – 49 years | 2(4.3%) | 3(6.5%) | 4(8.7%) | 9(19.6%) |
| 50 years and above | 4(8.7%) | 2(4.3%) | 3(6.5%) | 9(19.6%) |
| TOTAL | 18(39.1%) | 12 (26.1%) | 16 (34.8%) | 46 (100%) |

21.7% (10) of the respondents within the age group between 25 – 34 years said that they exclusively breastfeed their babies while 6.5% (3) of the respondents aged 45 – 49 years said that they did not.

CHAPTER FIVE

5.0. DISCUSSION OF FINDINGS

5.1. INTRODUCTION

Chapter 4 presents the discussion of findings. This study was aimed at determining nurses' knowledge and attitude towards exclusive breast feeding in Kabompo district in the north western province. A total of 46 respondents were interviewed using self administered questionnaires. The interviewed nurses came from two (2) Hospitals namely; Kabompo District Hospital and Loloma Mission Hospital respectively. The findings have been discussed under the following subheadings:

- Demographic characteristics sample
- Knowledge among nurses on exclusive breast feeding
- Attitude among nurses toward exclusive breastfeeding

5.2. DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Table 2 shows that the majority (36.9%) of the respondents were in the age group between 25-34 years because this is a productive age group employed in the formal sector including Ministry of Health. The majority (60.9%) of the respondents were married and 28.3% were single (table 3). There were more nurses who were married because marriage is universal in Zambia. The study revealed that 43.5% Nurses' partners were formerly employed, with 17.4% housewives, 2.2% businessmen and women and 36.9% did not give any response (table 4). The majority (43.5%) of the respondents' partners were in formal employment (table 4).

The findings show that 50% of the respondents belonged to other religious denominations other than the Roman Catholic and Brethren in Christ) while 21.7% belonged to Seventh Day Adventist (table 5). However, all the nurses were Christians. This is because Zambia is a Christian nation where there is freedom of association (table 5). This shows that most half of the nurses in this study were from other areas other than Kabompo district. On distribution of tribes,

50% of the respondents belonged to other tribes, 19.6% were both Lunda and Luvale while Luchazi and Chokwe were 8.7% and 2.2% respectively (table 6).

With regards to the educational level, the study revealed that most (78.3%) of the respondents attained senior secondary school while 21.7% attended junior secondary school (figure2). This implies that nurses who attained junior secondary school (21.7%) may not have a better understanding of issues due to their low level of education. Concerning professional qualification, the study revealed that 73.9% of the respondents were enrolled nurses, 15.2% Enrolled Midwives, 6.5% Registered Midwives, 2.2% Family Health Nurses and 2.2% Registered Nurses respectively (table 7). The results show that the two institutions (Kabompo District Hospital and Loloma Mission Hospitals) had many enrolled nurses compared to Registered Nurses because currently, the Ministry of Health is not employing the registered nurses immediately they complete and this makes them look for employment elsewhere creating a shortage of nurses in the hospitals. Others have migrated to other countries in search of employment.

In terms of the number of children, 43.4% of the respondents had children ranging from 1-3, 28.3% had no children and 2.2% had 10 and above (table 8). There were more nurses who had few children because many of them were young adults. Of those who breastfed, many (36.7%) had few children (1-3) while those who had 4 and above did not breast feed. This result confirms the hypothesis which stated that those with many children may ignore the importance of exclusive breast feeding and fail to give correct information on exclusive breast feeding, citing examples of having brought up their children without practicing exclusive breastfeeding. However, in a study by Beshgetoor, Larson, and La Master (1999), it was reported that healthcare professionals who chose to breastfeed their own infants usually recommend breastfeeding to others.

Table 9 shows that 28.3% of the respondent's youngest children were aged between 13-24 months and 10.9% had children between 0-12 months of age. Most of the respondents had babies in the breastfeeding age group.

The findings revealed that 30.4% of the respondents had been in the service between 1-4 years (table 10). This could be attributed to the fact that most of the nurses have left the service due to

voluntary separation and have gone elsewhere for greener pasture. Nurses who served between 11-20 years constituted 13% of the sample while those who worked for 21 years and above (28.3%). The findings revealed that the respondents who had been long in the service had higher chances of attending a workshop on exclusive breast feeding (table 11). According to table 11, 17.4% of the respondents attended the workshop on exclusive breastfeeding while 82.6% did not. This means that most of the nurses were not sent for in-service training or workshops for capacity building, limiting them in knowledge.

The respondents were asked to state whether their health Institutions held any symposiums on health matters, 84.8% stated that they had symposiums in their institutions while 15.2% disagreed with the statement (figure 3). These results show that most Institutions were conducting symposiums on health matters. Of those who stated that symposiums were held in their institutions, 58.7% said that breastfeeding topics were not included and 41.3% stated otherwise (table 12). The study revealed that 65.2% of the health Institutions had a policy on exclusive breastfeeding while 34.8% disagreed with the statement (table 13) but many (52.2%) nurses did not have access to it (table 14). Lack of policy on exclusive breastfeeding might affect the practice in the institution, meaning that some nurses may enforce the practice while others may not, leading to lack of uniformity in the system. This could explain why many nurses were not exclusively breastfeeding and were not encouraging others to do so because they did not have access to it or did not even know whether or not it existed.

On staffing level in the institutions, the majority (89.1%) of the respondents said that their departments/units were understaffed and 10.9% stated otherwise (table 15). The shortage of staff could be attributed to poor conditions of service and salaries resulting in many members of staff leaving the civil service to join the private institutions or non-governmental organization. However, the finding is in line with the researcher's hypothesis of inadequate staffing level compromising quality of nursing care. The findings in table 16, relates to salaries and conditions of service. The study showed that 47.8% of the respondents said that salaries and conditions of service were fair, 39.1% said they were poor, 10.9% said they were good and 2.2% said that they were very good. Many (47.8%) respondents said that salaries and conditions of service were fair probably due to rural hardship allowances they were getting and housing allowance for those

who are not in institutional houses. On the other hand, the majority were trained in antiretroviral therapy, PMTCT and HIV/AIDS counseling which motivated them. There is also a policy at the health institutions of involving all nurses in out reach activities instead of only those working in MCH department. The results revealed that the majority of the respondents were not happy with salaries and conditions of service while very few (10.9%) and 2.2% said that salaries and conditions of service were good or very good respectively.

Table 17, shows that 60.9% of the respondents received unfair treatment from the senior nurses while 39.1% were fairly treated. Unfair treatment refers to the way junior nurses were handled when an offence was committed. It was found that some nurses were forgiven after committing an offence, and others were punished. This could have led to negative attitudes and frustrations in their work.

5.3. KNOWLEDGE AMONG NURSES ON EXCLUSIVE BREAST FEEDING

The study has shown that 95.6% of the nurses in this study (table 18) had heard about exclusive breast feeding against 4.4% who stated otherwise. Among the respondents who had heard about exclusive breastfeeding, 41.3% heard the information from training (nursing) schools, 32.6% from workshops, 17.4% got the information from the hospitals and symposiums while 4.3% heard from television, radio, reading books/ magazines and 4.3% gave no response (table 19). This result suggests the need for more capacity building among nurses. This finding supports the finding of a Nigerian study conducted by Okolo and Ogbanna (2002). In this study, nurses were requested to define exclusive breastfeeding, 65.2% were able to define exclusive breastfeeding correctly according to their own understanding while 34.8% were not (table 20). This result indicates the need for continued sensitization on exclusive breastfeeding. The findings showed that the majority (60%) of the respondents with children exclusively breast fed their children while 40% did not (table 21). A large number of nurses exclusively breastfed their babies because they knew the importance of breastfeeding. Table 22 focuses on the mode of breastfeeding preferred by the respondents, 66.7% gave mixed foods while 33.3% gave formula only. When the respondents were asked to state whether they exclusively breastfed other children, 38.3% stated that they did breastfed other children while 61.7% stated the opposite (table 23). A large percentage (61.7%) of the nurses did not exclusively breastfeed because this

is a new trend or practice which is receiving great emphasis presently as it was uncommon in the past (table23).

The study has revealed that 69.7% of the respondents gave no response as to why they did not exclusively breastfeed other children, 15.2% said that they could not exclusively breastfeed because they were in formal employment and, 3.3% had fear for Mother to Child Transmission (table 24). Many respondents did not respond to this question due to lack of knowledge on exclusive breastfeeding and were shy to display their ignorance.

On the duration recommended for exclusive breast feeding, 91.3% of the nurses knew the recommended period and 8.7% did not know (table 25). It is encouraging to note that most of the nurses knew the duration of exclusive breastfeeding. According to the World Health Organization (2000), appropriate breast feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere, however, the optimal duration of exclusive breastfeeding is six months.

The majority of the respondents (63%) supported the idea that HIV positive mothers should exclusively breast feed their children while 37% did not support the idea (figure 4). This result is in line with WHO recommendations which state that HIV positive mothers should exclusively breastfeed their children. This is because breast milk is best for the baby and if the infant is not exclusively breastfed, it is likely to be undernourished and chances of developing infections are high due to lowered immunity. Breast milk also reduces the chances of HIV positive babies from diarrhoea episodes and it is also cheap. However, studies have shown that breastfeeding can transmit HIV to the baby if the mother is HIV positive (IYCF, 2006-2010). But the chances of a baby dying from infections are much higher than dying from HIV infection.

The respondents were asked to state reasons why they would not recommend HIV positive mothers to exclusively breastfeed their babies, most (94.1%) of the respondents said that they had feared the possibility of HIV transmission (table 26. The rate of HIV transmission through breast milk is 5%. (IYCF 2006-2010). However, it is better breastfeed the infant because breast milk is nutritious. On the other hand, 86.2% of the respondents said that they would recommend

HIV positive mothers to exclusively breastfeed because breastfeed milk is nutritious and contained antibodies which prevent HIV transmission (table 27).

The findings revealed that majority (93.5%) of the respondents were not able to define complementary feeding and 6.5% were able to define the term correctly (table 28). This shows that nurses lack knowledge about complementary feeding. The respondents were asked whether mothers should stop breast feeding if their babies develop diarrhoea. The study showed that the majority (93.5%) said that mothers were not supposed to stop breast feeding in spite of the baby developing diarrhoea and 6.5% stated the opposite (table 29). The respondents were also asked to state the reasons why one shouldn't stop breastfeeding if the child developed diarrhoea. The majority (82.6%) stated that breast milk was not harmful as it gave nutrients needed by the baby for its growth and prevented malnutrition while 17.4% did not know (table 30).

The respondents were asked to define artificial feeding. The majority (86.6%) were able to define the term correctly while 17.4% were not able to define it correctly (figure 5). This was encouraging because most nurses were knowledgeable about the term. However, others were not able to define the term which means that there is need for continued education of nurses. The findings revealed that 89.1% of the respondents were able to define mixed feeding correctly while 10.9% were not (table 31). On the other hand, 54.3% were able to define wet nursing correctly while 34.8% were not able to define the term correctly (figure 6). This implies that although the majorities were knowledgeable about the term, nurses still needed to be educated on the key concepts commonly used in exclusive breastfeeding.

5.4. ATTITUDES AMONG NURSES TOWARD EXCLUSIVE BREASTFEEDING

With regards to breastfeeding babies in public, the study showed that 65.2% of the respondents would breast feed in public while 34.8% would not (table 32). The reasons for not breastfeeding in public included traditional beliefs (34.8%) and children dying of a certain conditions known as **Kibele** in Kaonde. Kibele is a condition that is believed to be contracted by babies when they are breastfed in public with babies whose bodies are traditionally protected from other illnesses with charms by their mothers and it manifests with diarrhoea and vomiting. It may be accompanied with a bulging fontanel if fever is present and a depressed fontanel if fever is absent.

The findings showed that 73.9% of the respondents would allow their babies to be breastfed by relatives who are HIV negative and 26.1% stated the opposite (table 33). However, it is important for nurses to understand the benefits of breast milk. Breast milk is nutritious, contains antibodies and prevents diarrheal diseases among other benefits. WHO (2006) has recommended that HIV negative relatives can breastfeed babies born from HIV positive mothers (wet nursing). The findings showed that the majority (78.3%) of the respondents said that their religions supported exclusive breastfeeding while 21.7% did not (figure 7). This shows that religious denominations had influence on exclusive breastfeeding. However, there is need to involve churches in exclusive breastfeeding so that they could encourage more of their members to exclusively breastfeed.

The respondents were asked to mention any herbs they knew that promoted breast milk production, 95.7% said that they did not know any herbs while 4.3% knew some herbs (figure 8). Many nurses did not know any herbs that promoted production of breast milk probably because most of the nurses were trained in town and brought up in urban areas where traditional beliefs were not observed. In fact, most of the nurses who work at health Institutions where the study was conducted come from other places and very few nurses come from within.

Most of the respondents did not observe cultural beliefs (63%) on exclusive breast feeding while 37% observed them (figure 9). Of those who did not observe cultural beliefs, 27% had fear of their children developing a condition traditionally called Lukunga (in kikaonde which manifests with a patch on the upper part of the palate, diarrhoea and fever), 18.9% said that breastfeeding in public could cause death to the baby as some mothers carry charms and the majority (54.1%) did not know (table 34). This implies that traditional beliefs could also influence nurses' behaviour towards breastfeeding.

The findings revealed that most (82.6%) of the respondents were of the opinion that exclusive breast feeding, was good, 13.1% said that it was bad and 43.1% said it was fair (figure 10). This finding implies that the majority of the respondents supported exclusive breastfeeding although those who had many children failed to practice it. This study revealed that the majority (89.1%) of the respondents thought that exclusive breastfeeding doesn't affect a mother's body structure

while 10.9% stated that it does (figure 11). This finding implies that nurses had a positive attitude towards exclusive breastfeeding.

The study has also revealed that 83.5% of the respondents said that they would continue breastfeeding even if they became pregnant while 16.5% stated the opposite (figure 12). When asked why they would continue to breast their babies even when they had become pregnant, 65.2% said that breast milk was nutritious and it protected and prevented malnutrition in children, 8.7% said that babies could contract HIV, 4.3% said babies could suck dirty deposited by the father into the mother if allowed to breast feed while pregnant and 21.8% gave no response (table 35). Although a large number of the respondents supported the idea of exclusive breastfeeding in spite of pregnancy, there is still need for continued sensitization as others still had different views about the matter.

In this study, the respondents were asked to give suggestions on how nurses' attitudes towards exclusive breast feeding could be improved, 52.2% said that the attitudes could be improved by conducting workshops, seminars and symposiums. Twenty four percent (24%) of the respondents stated that nurses' attitudes could be improved by intensifying nurses' interaction with the community, 6.5% said that nurses should be allowed to come with their babies at the work place so that they continue to breastfeed, 4.4% said that Government should extend maternity leave from 3 months to 6 months and 13% could not suggest anything (table 36).

5.5. IMPLICATIONS TO THE HEALTH CARE SYSTEM

The study revealed that most of the respondents who had been in the service for 10 years and above had at least attended a workshop on exclusive breast feeding (table 37). This implies that a nurse should serve for many years before he or she attends a workshop and yet health workers need continued updates on health matters as things are constantly changing. Besides, it seems that the Ministry of Health does not hold any seminars and workshops on exclusive breastfeeding but seem to be concentrating on HIV/AIDS. There is need, therefore for the Management in various Hospitals to build capacity and update Nurses with the latest

information through workshops. There is also need for the Ministry of Health to hold workshops on exclusive breast feeding.

The study revealed that the health institutions in this study held symposiums on exclusive breastfeeding. Some (17.4%) of the nurses stated that symposiums on exclusive breast feeding were held but not regularly. Most (58.7%) said that they learnt about exclusive breastfeeding from Maternal and Child Health department and nursing training schools. Therefore, there is need for institutions to intensify breastfeeding topics in their symposiums. The study also revealed that the health Institutions did not have a policy regarding exclusive breast feeding (65.2%). However, some (52.2%) respondents said that their Institutions had a policy on exclusive breastfeeding but nurses did not have access to it. This is as good as the institutions not having a policy in existence; hence nurses can not be expected to offer breastfeeding messages willingly and freely. There is need therefore for institutions to have deliberate exclusive breastfeeding policies in place and this should be implemented by all in-charges and other senior nurses.

The finding revealed that 89.1% of the respondents stated that there was inadequate staffing in the units/departments and this has resulted in nurses providing poor nursing care as a few cannot cope up with the increasing disease burden in our country. Government through the Ministry on Health should increase intakes of nurses in nursing schools and rehabilitate or build infrastructure. It should also improve salaries and conditions of service of tutors to prevent brain drain that the country is experiencing.

The study revealed that most (60.9%) of the nurses were unfairly treated by their superiors and as such, many were frustrated, making them develop negative attitude towards work. Senior nurses should change their attitude and ensure that every nurse receives the same type of treatment regardless who they are. This may help in preventing conflicts among nurses and demotivation. The study revealed that 95.6% of the respondents had heard about exclusive breastfeeding (95.6%) but could not practice it because of work (15.2%) and fear of HIV transmission (6.1%). This entails that most of the nurses are lacking knowledge on exclusive breastfeeding hence the need for orientation seminars to update them on new trends on exclusive breastfeeding.

5.6. CONCLUSION

The purpose of the study was to determine the knowledge and attitudes among nurses towards exclusive breast feeding in Kabompo District in North-Western Province. The study revealed that the majority (36.9%) of the respondents were in the age group between 25-34 years. Most (60.9%) of the respondents were married, 28.3% were single and 43.5% were formerly employed. The findings show that 50% of the respondents belonged to other religious denominations other than the Roman Catholic and Brethren in Christ while 21.7% belonged to Seventh Day Adventist and 50% belonged to other tribes other than those from North-Western Province. Most (78.3%) of the respondents attained senior secondary school, 21.7% attained junior secondary school, 73.9% were Enrolled Nurses, 15.2% Enrolled Midwives, 6.5% Registered Midwives, 2.2% Family Health Nurses and 2.2% Registered Nurses.

Most (43.4%) of the respondents had children ranging from 1-3. Of those who breastfed, 36.7% had few children (1-3) while those who had 4 and above did not. Twenty eight percent (28.3%) of the respondent's youngest children were aged between 13-24 months and 10.9% had children between 0-12 months of age. Thirty percent (30.4%) had been in the service between 1-4 years, 13% had served between 11-20 years while those who worked for 21 years and above were 28.3%. The findings also showed that 17.4% of the respondents attended a workshop on exclusive breastfeeding while 82.6% did not.

The respondents stated that their Health Institutions held symposiums on exclusive breastfeeding (84.8%) while 15.2% disagreed. A small percentage (41.3%) included exclusive breastfeeding topics in their symposiums. The study revealed that 65.2% of the health Institutions had a policy on exclusive breastfeeding while 34.8% disagreed but many (52.2%) nurses did not have access to it. The majority (89.1%) of the respondents said that their departments/units were understaffed and 10.9% stated otherwise. The study also showed that 47.8% of the respondents said that salaries and conditions of service were fair.

A large percentage (60.9%) of the respondents received unfair treatment from the senior nurses while 39.1% were fairly treated. The study has revealed that the health institutions (58.7%) in

this study did not conduct symposiums on exclusive breastfeeding despite holding the clinical meetings.

The study has revealed that most (95.6%) of the respondents had heard about exclusive breastfeeding mainly from training colleges (41.3%), HIV related workshops (32.6%) and a few (17.4%) from maternal and child health department. The finding revealed that some nurses (37%) observed cultural and traditional beliefs regarding exclusive breastfeeding. The nurses feared breast feeding in public because some mothers carried with them charms that could be used to kill the child. Exclusive breastfeeding is important for child survival, therefore, relevant authorities must ensure that it is promoted and encouraged. Without this, more lives of children will be lost.

5.7. RECOMMENDATIONS

In view of the findings of this study, the following are the recommendations made.

5.7.1. MINISTRY OF HEALTH

- There is need for Ministry of Health to mobilize funds to enable hospitals to hold workshops on exclusive breastfeeding and information should be disseminated and practiced accordingly.
- Ensure Hospitals have a policy and that it is implemented by continued supervision of the hospitals.

5.7.2. DISTRICT HEALTH MANAGEMENT TEAM (DHMT)

- There is need for the Kabompo District Health Management Team to sensitize nurses on exclusive breastfeeding so that they are able to educate clients confidently and effectively.
- There is need for DHMT to constitute a team of nurses to monitor the implementation of exclusive breastfeeding services in the district.

5.7.3. HOSPITAL MANAGEMENT

- Hospitals should have policies that regulate exclusive breastfeeding and members of staff should have access to the policies so that they can be guided on how to provide quality services to communities they serve.
- Hospitals should have exclusive breastfeeding guidelines displayed in the relevant departments to ensure effective implementation.
- Nurse Managers in hospitals should ensure that every nurse is accorded a chance of attending a workshop especially on exclusive breastfeeding so that nurses can implement exclusive breastfeeding policies and guidelines.

5.7.4. RECOMMENDATION FOR FURTHER STUDY

- There is need to conduct a bigger study on the same topic involving all hospitals in Zambia to enable generalization of results.

5.8. LIMITATIONS OF THE STUDY

1. There was little or inadequate literature available on studies done in Zambia on exclusive breastfeeding. This made it difficult for the researcher to compare the findings with what other researchers could have found on exclusive breastfeeding.
2. The sample size was small (46) and therefore, findings cannot not be generalized to the rest of the country.
3. Some of the respondents returned the questionnaires unattended to and claimed they had no time to answer them. One (1) questionnaire was lost by a respondent while the other questionnaire was not brought despite several attempts made to collect it.

5.9. DISSEMINATION OF FINDINGS

The findings of this study will be disseminated by presenting summaries of research findings to the Management of both Kabompo District hospital and Loloma Mission hospital as places where the research study was conducted. In addition, a presentation day will be arranged with the management of the two hospitals where the research was conducted.

A copy each of the research report will be submitted to the Department of Post Basic Nursing as Department responsible for our training and Medical Library for other users as reference, and Ministry of Health as sponsors through the USAID. The findings will also be disseminated via internet.

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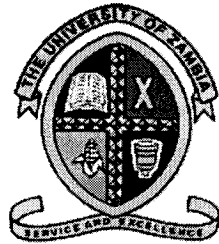
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APPENDIX 1



THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPT OF PBN

RN420

SELF ADMINSTERED QUESTIONNAIRE

TOPIC: KNOWLEDGE AND ATTITUDE AMONG NURSES TOWARDS EXCLUSIVE
BREAST FEEDING IN KABOMO DISTRICT

Questionnaire serial number.....Date.....

Hospital.....

INSTRUCTIONS FOR THE RESPONDENTS

1. Your participation in this study is voluntary.
2. **Do not** write your name any where on this questionnaire.
3. Answer **all** the questions in this questionnaire.
4. For questions provided with alternatives, **tick** your answers in the box provided.
5. For questions without alternatives, **write down** your responses in the space provided.
6. **Be honest** when answering questions.
7. Be assured that all the information provided will be treated strictly **confidential** and only be used for the purpose it is intended for.

SECTION A: DEMOGRAPHIC DATA

FOR OFFICIAL

USE ONLY

1. What was your age on your last birthday?

- (a) 15 – 24 years
- (b) 25 – 34 years
- (c) 35 -44 years
- (d) 45 – 49 years
- (e) 50 years and above

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2. What is your marital status?

- (a) Single
- (b) Married
- (c) Divorced
- (d) Separated
- (e) Widowed

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3. If married, what is the occupation of your partner? **Otherwise skip it.**

- (a) Housewife
- (b) Business
- (c) Formally employed
- (d) Other, (specify) _____

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4. What is your religious denomination?

- (a) Roman Catholic
- (b) Pilgrim Wesleyan
- (c) Brethren in Christ
- (d) Seventh Day Adventist
- (e) Other, (specify) _____

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5. What is your tribe?

- (a) Luvale
- (b) Lunda
- (C) Luchazi
- (d) Chokwe
- (e) Other, (specify) _____

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6. What is your highest level of your education?

(a) Junior Secondary

(b) Senior Secondary

7. What is your professional qualification?

(a) Enrolled Nurse

(b) Registered Midwife

(c) Enrolled Midwife

(d) Health nurse

(e) Registered nurse

8. How many children do you have?

(a) None

(b) 1 -3

(c) 4 -6

(d) 7 - 9

(e) 10 and above

9. How old is your youngest child?

(a) 0-12 months

(b) 13-24 months

(c) 25-36 months

(d) Other, specify _____

10. How long have you been in the service?

(a) 1-4 years

(b) 5-10 years

(c) 11-20 years

(d) Other, specify _____

11. Have you ever attended a workshop on exclusive breastfeeding?

- (a) Yes
- (b) No
12. Do you hold symposiums or clinical meetings in your institution?
- (a) Yes
- (b) No
13. If yes to question 12, is exclusive breastfeeding included in the clinical discussions or symposiums?
- (a) Yes
- (b) No
14. Do you have a policy that supports exclusive breastfeeding at your hospital?
- (a) Yes
- (b) No
15. If yes to question 14, do you have access to it?
- (c) Yes
- (d) No
16. Is the staffing level in your department or unit adequate?
- (a) Adequate
- (b) Inadequate
17. How are the salaries and the conditions of service?
- (a) Very good
- (b) Good
- (c) Fair
- (d) Poor
18. Do you think your senior nursing staff treat you fairly when you commit an offence or when you take your problem to them like any other Nurse at the institution?
- (a) Yes
- (b) No

SECTION B: QUESTIONS ON KNOWLEDGE

19. Have you ever heard about exclusive breast feeding?

(a) Yes

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(b) No

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20. If yes, where did you hear about exclusive breast feeding?

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21. What do you understand by the term exclusive breastfeeding?

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22. Do you exclusively breastfeed your baby?

(a) Yes

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(b) No

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23. If no, how do you feed your baby? _____

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24. Did you exclusively breastfeed your other children?

(a) Yes

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(b) No

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25. If no, give a reason for your answer _____

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26. For how long should a mother exclusively breastfeed the baby?

(a) 2 years

(b) 1 year

(c) 4months

(d) 6 months

27. Do you think an HIV positive mother should exclusively breast feed her baby?

(a) No

(b) Yes

28. Give reasons for your response? _____

29. What is complementary feeding? _____

30. If the child who is breastfeeding develops diarrhoea, should a mother discontinue breast feeding?

(c) Yes

(d) No

31. Give a reason for your answer. _____

32. What is artificial feeding?

a) Feeding a child on breast milk substitutes

b) Feeding a baby on breast milk

c) Feeding a baby on expressed milk

d) Feeding a baby breast milk using a cup

33. What is mixed feeding?

a) Partial breastfeeding and giving some other milk

b) Feeding a baby on breast milk

c) Feeding a baby on porridge

d) Feeding a baby porridge and water

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34. What do you understand by wet nursing?

a) Breastfeeding by another woman, who is HIV negative

b) Feeding a baby on porridge and water

c) Feeding a baby on water only

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SECTION C: QUESTIONS ON ATTITUDES

35. Can you breastfeed your baby in public?

(a) Yes

(b) No

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36. Would you allow your baby to be breastfed by your relative who is HIV negative when you are HIV positive?

a) Yes

b) No

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37. Does your religion encourage exclusive breast feeding?

a) Yes

b) No

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38. Do you know of any herbs that promote or increase breast milk production?

(a) yes

(b) No

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39. Do you observe any cultural beliefs regarding breastfeeding in public?

(a) Yes

(b) No

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40. If yes to question 39, explain _____

41. What is your opinion about exclusive breastfeeding?
(a) It is good
(b) It is bad
(c) Fair

42. Can exclusive breastfeeding affect one's body structure?
(a) Yes
(b) No

43. In you become pregnant when you are still breastfeeding, can you stop Breast feeding?
(a) Yes
(b) No

44. Give a reason for your answer _____

45. Please suggestions on how nurses' knowledge and attitudes towards Exclusive Breast feeing could be improved _____

THANK YOU FOR YOUR COOPERATION AND PARTICIPATION. GOD BLESS!!!