



THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

POST BASIC NURSING

**RESEARCH TOPIC: MOTHERS WITH UNDER FIVE CHILDREN'S
KNOWLEDGE AND PRACTICES TOWARDS DIRRHOEA IN
ISOKA DISTRICT, ZAMBIA.**

SUBMITTED TO

**THE UNIVERSITY OF ZAMBIA IN PARTIAL FULFILMENT OF
REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF SCIENCE
DEGREE IN NURSING.**

BY

MIYAMBO .E. CHISHALA

UNZA

JANUARY 2006

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POST BASIC NURSING**

**MOTHERS WITH UNDERFIVE CHILDREN'S KNOWLEDGE
AND PRACTICES TOWARDS DIARRHOEA IN ISOKA
DISTRICT, ZAMBIA.**

BY

MIYAMBO E. CHISHALA

ZRN (Lusaka School of Nursing)

ZRM (Lusaka School of Nursing)

ZEN (Mansa School of Nursing)

MGT & ADM (UNZA)

BK & A/C (UNZA)

SPR
MED
CHI
RD006.

**A Research Study Submitted to Post Basic Nursing Department,
School of Medicine in Partial Fulfillment for the Degree of Bachelor
of Science in Nursing**

2006

ACKNOWLEDGEMENTS

I would like to give my outmost appreciation to those who made it possible for me to undergo this course at UNZA, School of Medicine. Indeed special thanks should go to the African Development bank and Ireland Aid for their valuable sponsorship to this important course, which is intended to uplift manpower and our health status.

Furthermore, many thanks go to the Ministry of Health through Central Board of Health, and District Health Management Team for having supported me tirelessly from the beginning of the course.

The production of this research study report is as a result of efforts from management at Post Basic Nursing, School of Medicine, for their advice and useful critique of this work. I am grateful to fellow course participants for their support, valuable comments and encouragement.

Appreciation will be incomplete without showing my gratitude to my supervisor Mrs. C. Ngoma for her tireless efforts.

My special thanks must go to my wife, Violet and my children for their tolerance and understanding during long periods of my absence.

May the Almighty God be with you all the time.

Thank you.

TABLE OF CONTENTS

ACKNOWLEDGEMENT.....	i
TABLE OF CONTENTS.....	ii
LIST OF TABLES AND GRAPHS.....	v
LIST OF ABBREVIATIONS.....	viii
DECLARATION.....	ix
STATEMENT.....	x
DEDICATION.....	xi
ABSTRACT.....	xii
 CHAPTER 1	 1
1.0. INTRODUCTION.....	1
1.1. Background information.....	1
1.2. Statement of the problem.....	4
1.3. Factors contributing to /influencing the problem	5
1.4. Diagram of problem analysis.....	8
1.5. Justification.....	8
1.6. Research objectives.....	9
1.6.1. General objective.....	9
1.6.2. Specific objectives.....	9
1.7. Hypotheses.....	10
1.8. Operational definitions of terms.....	10
1.9. Variables and cut off points.....	11
CHAPTER 2	13
2.0. LITERATURE REVIEW.....	13
2.1. Introduction.....	13
2.2. National perspective.....	13
2.3. Regional perspective.....	14
2.4. International perspective.....	15
2.5. Conclusion.....	17

CHAPTER 3.....	18
3.0. RESEARCH METHODOLOGY.....	18
3.1 Research design.....	18
3.2 Research setting.....	19
3.2.1 District profile.....	19
3.2.2Demographic data.....	19
3.2.3Socio economic status.....	20
3.2.4Health services.....	20
3.3 Study population.....	21
3.4 Sample selection.....	21
3.5 Sample size.....	21
3.6 Data collection tool.....	22
3.7 Data collection technique.....	23
3.8 Pilot study.....	24
3.9 Validity.....	24
3.10 Reliability.....	24
3.11 Ethical and cultural considerations.....	25
 CHAPTER 4.....	 26
4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS	26
4.1 Data analysis.....	26
4.2 presentation of findings.....	26
CHAPTER 5.....	45
5.0 DISCUSSION OF FINDINGS.....	45
5.1 Introduction.....	45
5.2 Discussion of variables.....	45
5.2.1 Demographic data.....	45
5.2.2 Knowledge of diarrhoea.....	49
5.2.3 Practices.....	50
5.3 Implications.....	57

CHAPTER 6	59
6.1 Conclusion.....	59
6.2 Recommendations.....	60
6.3 Dissemination of findings.....	61
6.4 Limitation of the study.....	61
 7.0 References	 63
 8.0 Appendices	 65
8.1: Interview Schedule for Mothers/Caretakers.....	66
8.2: Focus Group Discussion Guide.....	72
8.3: Work Plan.....	73
8.4: Gantt Chart.....	74
8.5: Budget.....	75
8.6: Permission Letter.....	77
8.7. Acceptance Letter.....	78

LIST OF TABLE

Table 1:	Incidence of diarrhoea in the under five.....	4
Table 2:	Variables, indicators and cut off points.....	12
Table 3:	Age distribution of respondents.....	27
Table 4:	Education attainment.....	27
Table 5:	Occupation status of respondents.....	28
Table 6:	Residential areas of respondents.....	28
Table 7:	Respondents' tribes.....	28
Table 8:	Marital status of respondents.....	29
Table 9:	Number of children per respondent.....	29
Table 10:	Number of respondents who have lost children.....	29
Table 11:	Number of children lost by sixteen respondents.....	30
Table 12:	Causes of death of children.....	30
Table 13:	Length of time respondents breastfeed their children.....	30
Table 14:	Children who suffered from diarrhoea in the last month.....	31
Table 15:	Number of times each child had Diarrhoea.....	31
Table 16:	Responses on what could have caused diarrhoea in their children.....	31
Table 17:	Responses on whether the respondents sought treatment or advice.....	32
Table 18:	Places where mothers seek medical Treatment.....	32
Table 19:	Respondents understanding of Diarrhoea.....	32
Table 20:	Manifestation of diarrhoea in children.....	33
Table 21:	Causes of diarrhoea in children.....	33

Table 22:	Prevention of diarrhoea.....	34
Table 23:	Respondents' treatment for diarrhoea.....	34
Table 24:	Respondents' beliefs related to causes of diarrhoea in children.....	35
Table 25:	Respondents who gave their children medicine before bringing them to the health centre.....	35
Table 26:	Types of medicines given to children.....	36
Table 27:	Persons who supply mothers with Medicine.....	36
Table 28:	Information given after receiving medicine.....	37
Table 29:	Religious beliefs of respondents.....	39
Table 30:	Relationship between age and education attainment.....	40
Table 31:	Relationship between education attainment and occupation.....	40
Table 32:	Relationship between education attainment and location.....	41
Table 33:	Relationship between age and caretakers' practices towards diarrhoea.....	41
Table 34:	Relationship between education attainment and practices towards diarrhoea.....	42
Table 35:	Relationship between location and dead Children.....	42
Table 36:	Relationship between education attainment and level of knowledge.....	43
Table 37:	Relationship between knowledge and practices towards diarrhoea.....	43
Table 38:	Relationship between religion and Knowledge.....	43
Table 39:	Relation between religion and practice.....	44

LIST OF PIE CHARTS

Pie Chart 1: Occupational status of respondents.....	37
Pie Chart 2: Number of children lost by Respondents.....	38
Pie Chart 3: Places where mothers seek medical Treatment.....	38

LIST OF BAR CHARTS

Bar Chart 1: Age distribution of respondents.....	39
---	----

ABBREVIATIONS

BP	-	Blood Pressure
CBoH	-	Central Board of Health
CHW	-	Community Health Worker
DHMT	-	District Health Management Team
DHIO	-	District Health Information Office
DEO	-	District Education Officer
IEC	-	Information Education Communication
ITS	-	Institutional Training School
IV	-	Intravenous
RHC	-	Rural Health Centre
FGD	-	Focus Group Discussion
CSO	-	Central Statistical Office
UNICEF	-	United Nations International Children's Emergency Fund
ORS	-	Oral Rehydration Salt
WHO	-	World Health organization
WASHE	-	Water and sanitation Health Education

DECLARATION

I hereby declare that the work presented in this study for the degree of Bachelor of Science Degree in Nursing has not been presented either wholly or in part for any other degree and is not being currently submitted for any other degree. I further declare that this paper has been written as a requirement for the award of a Bachelor of Science in Nursing at UNZA, School of Medicine.

Signature of Author: _____
(Candidate)

Date: _____

13th Feb 06

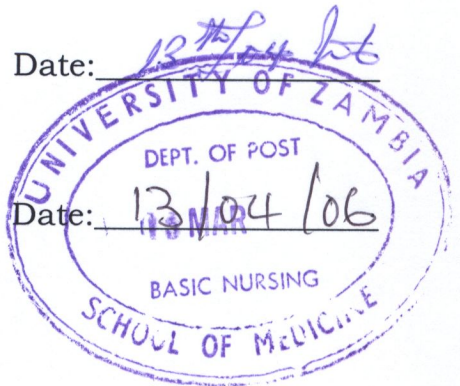
Signature of Author: _____
(supervising Lecturer)

Date: _____

DEPT. OF POST

BASIC NURSING

SCHOOL OF MEDICINE



STATEMENT

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

Signature of Author: MTN Date: 13th Feb 2016

DEDICATION

I wish to dedicate this research to my wife and my three children, other relatives and friends including well wishers for their patience, support and encouragement throughout the training.

ABSTRACT

The study was conducted in Isoka district at four health centres. The purpose of the study aimed at determining the mothers' Knowledge and practices related to diarrhoea and find out the parameters used by mothers in deciding whether to bring their children with diarrhoea to the health centre or not.

Literature review was based on traditional beliefs and practices regarding causes and treatment of diarrhoea in Zambia and other countries and on child rearing practices. A pilot study was conducted at one of the health centres to test the research tools.

The study is descriptive in nature. Data were collected by interviewing 52 Zambian mothers who had children under the age of five years. Data collected were analyzed manually with the aid of a pocket calculator and responses were processed and categorized. Health centres were selected at random out of the 8 and that was done by writing their names on the pieces of paper. The papers were folded and put in a box. An independent person was asked to pick 5 pieces of paper one at a time for the names of the health centres used for the study, including one for the pilot study.

A sample of 52 mothers/caretakers was selected using a simple random sampling method. This was a form of probability sampling in which the researcher selected a special group, which were mothers/caretakers with children aged 6-24 months with or without diarrhoea. This sampling method was good because there was good evidence that it was a representative of the total population that was studied. The study was conducted in Isoka district. The district has 8 health centres of which 4

were randomly selected for the study. One health centre was used for a pilot study to test the data collection tool.

The study combined mothers from the medium and low education groups in that area with under five children. Isoka had been chosen because it was of more rural area and where traditional customs and beliefs are practiced. This was also important because the study was conducted within a limited period of time.

The findings revealed that most (75%) mothers both young and old had a good understanding of what diarrhoea is and they knew some form of traditional beliefs and practices related to the causes of the condition in children. Most mothers gave their children some traditional medicine before they took them to the health centres and some of them knew how those medicines were prepared and their effects on diarrhoea.

The findings further revealed that most mothers went to the neighbours, grand mothers or to the traditional healers first when their children had diarrhoea. Most mothers said that, they brought their children to the health centre when the condition did not improve after administering other medicines (modern or traditional). This resulted in delay in bringing the children to the health centre for prompt, effective and efficient treatment.

It is in this regard that emphasis should be made in the training institutions for health personnel on the role of the clients' traditional beliefs and practices regarding diarrhoea or any other disease. This will make it possible for health personnel to give realistic, effective and appropriate Information, Education and Communication especially to those who strongly adhere to them. Health workers should give individualized patient teaching and different topics should be discussed.

This is very important because the teaching will be more meaningful to the client and they will benefit more from it, since it will concentrate only on their individual problems. They should evaluate the effectiveness of the IEC given to the mothers on diarrhoea prevention and control. Health workers should assist in the establishment of diarrhoea control committees at health centre, section and village levels involving influential members of the society in each setting. This would be successful especially in high-density areas where members are actively organized.

CHAPTER ONE

1.1. INTRODUCTION

1.2. BACKGROUND INFORMATION

Diarrhoeal diseases have been and continued to be a major cause of child morbidity and mortality in Zambia. It is one of the most common illnesses in children, especially of those living in the poverty, malnutrition and environmental contamination cycle. It is also responsible for a large proportion of the workload of the hospital and health centres. On the basis of the prevalence rates, it can be estimated that there are approximately 457 million episodes of diarrhoea each year in children between the ages of 0-4 years in Asia, Africa and Latin America(MOH,UNICEF and WHO-1990).

Diarrhoeal disease is also an important paediatric problem in the western world where socio-economic development, environmental sanitation and growth of health services have brought a marked improvement in mortality. The number of stools normally passed in a day varies with diet and age of a person.

Diarrhoea is defined as passing three or more loose or watery stools in a day. Frequent passing of normal stools is not diarrhoea (Integrated Technical Guidelines, 2002). There are two types of diarrhoea: -

Acute diarrhoea starts suddenly and may continue for several days. Chronic diarrhoea lasts more than two weeks and may vary from day to day. It is rare in infants who are entirely breastfed and very common in those who are artificially fed especially if the standards of hygiene are poor. Dirty bottles and teats with left over milk provide excellent media for the growth of pathogens and are common causes of diarrhoea in such infants.

The appropriate management or treatment plan is based on the degree of dehydration. Plan A is used to manage diarrhoea at home for no signs of dehydration. This involves giving the child more fluids than usual to prevent dehydration by using recommended home fluids such as salt and sugar solution, Oral Rehydration Salt solution, food based fluids and plain water. The child should also be given plenty of food to prevent malnutrition by giving milk, solid foods and continue to breastfeed frequently. Caretakers/mothers must be advised to take their children to the health worker if the child does not get better in five days, or develops other signs such as eating and drinking poorly, repeated vomiting, many watery stools, marked thirst, fever or blood in stool.

Plan B is used for treatment of dehydration and involve showing the mother or caretaker how much solution to give the child, frequency per minute and continue to check from time to time if there are problems. If the child vomits, wait for ten minutes, then give the solution more slowly. If the child's eyelids become puffy, stop ORS and give plain water or breast milk. Give ORS according to Plan A when the puffiness is gone. If the caretaker must leave before completing Plan B, she/he should be shown how much ORS to give to finish the four hour treatment at home, should be given enough ORS packets to complete rehydration for two more days as in Plan A. Show the caretaker how to prepare the ORS solution also the three rules in Plan A for treating her/his child at home.

Plan C is used to treat severe dehydration quickly by use of intravenous fluids(IV). If the patient can drink, give ORS by mouth while the drip is set up and give 100ml/Kg of Ringer's lactate solution or normal saline. Re-assess the patient every 1-2 hours and if hydration is not improving, give the IV drip more rapidly. Also give ORS 5ml/Kg/hour as soon as the patient can drink, usually after 3-4 hours in infants or 1-2 hours in older children. After 3-6 hours, evaluate the patient using the assessment tool/table and then choose the appropriate plan to continue treatment. If no access to IV drip a naso-gastric tube can be used to give ORS solution and give 20ml/Kg/hour for 6 hours.

Diarrhoea can be fatal in children especially if it is not well managed. It can cause severe dehydration resulting in severe complications. Hence, the objective of this research is to provide health workers with information on mothers with under five children's knowledge and practices towards diarrhoea in order to provide accurate information, management and prevention of diarrhoea. It has been observed that most of the indigenous Zambians continue to have faith in traditional beliefs and practices, which are part and parcel of their culture.

Culture is the sum total of customs, beliefs, values, attitudes, goals, laws, traditions and moral codes of people. It includes corporate views of the universe and also their attitudes to health and disease (Morley, 1995). In spite of the emerging scientific and technological advancement in modern medicine, the practice of traditional beliefs and practices still persist in the traditional Zambian society. These traditional beliefs and practices are strongly adhered to. They influence and direct the mother's action towards diarrhoea especially the causes and its treatment.. As a result of influence, every time the child has diarrhoea the mother is likely to seek help from a traditional healer. The reason being that traditional healers live and practice among the people whose culture, beliefs and customs they understand.

The government through the Ministry of Health has put in place some measures to prevent and control diarrhoea in under fives through massive IEC to the communities on proper refuse disposal, water and sanitation to provide safe water and proper sanitation. The Ministry of Health is providing IEC on the importance of immunizations and nutrition. These help to prevent some preventable diseases and prevent malnutrition that can lead to development of diarrhoea in under fives. The Ministry of Health is also giving IEC on the importance of breastfeeding as it has nutrients that provide resistance (Immunity) to diseases.

1.2. **STATEMENT OF THE PROBLEM**

Isoka district has a population of 108, 791 (Central Statistical Office) of which 21, 758.2 are the under five children representing 20%. Diarrhoea is one of the major health problems in Zambia. It is among the top five causes of morbidity and mortality in children. According to the observations made during my nursing experience in Isoka district has shown an increase in the number of diarrhoea cases as reflected in Table 1.

TABLE 1: INCIDENCE OF DIARRHOEA IN THE UNDER FIVE

YEAR	NUMBER OF CASES	INCIDENCE
2003	3, 866	35 per 1, 000
2004	4, 180	38 per 1, 000

Source: District Health Information Office (2004)

Hospital admissions for diarrhoea had relatively increased from 20% to 30% of total admission since 2003 and 10-13% of deaths in 2004 (DHIO, 2004). The health care providers continued to provide information, education and communication (IEC), preventive, curative services on diarrhoeal diseases. However, even if these services are provided, diarrhoea in the under five children has continued to increase. Most women believed that breastfeeding a baby in a public place such as a market or station could cause diarrhoea. Some believed that having sex with another man who is not a real father of that child could cause diarrhoea (Amankowesha). Other women also associated diarrhoea with teething or witchcraft.

In Luapula and Northern provinces of Zambia, most of the mothers believe that if a woman continued breastfeeding whilst pregnant, the child would develop diarrhoea (Ulundse). So, the mother would then treat the child with roots of *Acacia Macrothyrsa* (Umutaba) together with beans. Others used the beads or buttons with other talismans round the waist or the neck of the child to prevent diarrhoea. Mothers knew those practices since childhood, as a result they might not think of

taking the child to the health centre. Those traditional beliefs might also hinder the success of health programmes in the community.

Institutional based data did not include the cases in the community who did not seek medical treatment, as a result that could be higher than data presented in the above table. Therefore, it was important for the health care providers to understand the perceived causes of diarrhoea and practices in order to prevent deaths due to diarrhoea in the community.

In view of the above, the researcher decided to conduct a study on mothers/caretakers knowledge and practices towards diarrhoea in the under five children in Isoka district.

1.3. FACTORS CONTRIBUTING / INFLUENCING THE PROBLEM

Factors contributing or influencing the problem could be the following:

1.3.1. SOCIO – CULTURAL AND ECONOMIC FACTORS

1.3.1.1. Age of the Mother

The older the mother, the more likely she was to practice traditional beliefs. This was due to adherence to those traditional beliefs and practices regarding diarrhoea.

1.3.1.2. Educational Level

Mothers who had formal education were less likely to practice traditional beliefs regarding diarrhoea. This is because they were able to understand the IEC given to them better than those with low education level.

1.3.1.3. Lack of knowledge on Diarrhoea

This could have been due to insufficient IEC given to the mothers/caretakers regarding diarrhoea.

1.3.1.4. Traditional Beliefs and Practices

Traditional beliefs and practices might play a major role in deciding whether to seek medical advice regarding diarrhoea or not.

1.3.1.5. Availability of Alternative Treatment Possibility

Although modern therapists had identified medicines that could treat diarrhoea, mothers still had to seek treatment from traditional healers, due to the fact that this treatment was affordable and easily accessible.

1.3.2. DISEASE FACTORS

1.3.2. Perceived Severity of Disease

Mothers would only bring their children with diarrhoea to the health center when other methods had failed to treat that diarrhoea.

1.3.2.2. Response of Treatment

This will depend on how the child would respond to the treatment given either traditional herbs or modern medicine. If it was modern medicine to which the child would respond, then the mother could have confidence in the modern medicines given and vice versa.

1.3.3. SERVICE RELATED FACTORS

1.3.3.1. Attitude of Health Personnel

Some medical personnel could not explain/give proper information on how to give drugs, the importance and the effects of the drugs regarding diarrhoea. Hence, mothers/caretakers had to seek traditional herbs where they were told to give three tablespoons in a day.

1.3.3.2. Training of Health Personnel in Diarrhoea Management

Some health personnel might not be adequately trained in the assessment and management of a child with diarrhoea. Hence, they mistreated diarrhoea cases.

1.3.3.3. Inadequate IEC

No proper IEC was given to mothers/caretakers as a result they went back home without knowing the causes, treatment and the prevention of diarrhoea.

1.3.3.4. Access to the Health facility

Most of the mothers/caretakers in rural areas stay far from the health centers where it was difficult to access treatment of diarrhoea. Hence, they had to resort to herbs, which were found in their locality.

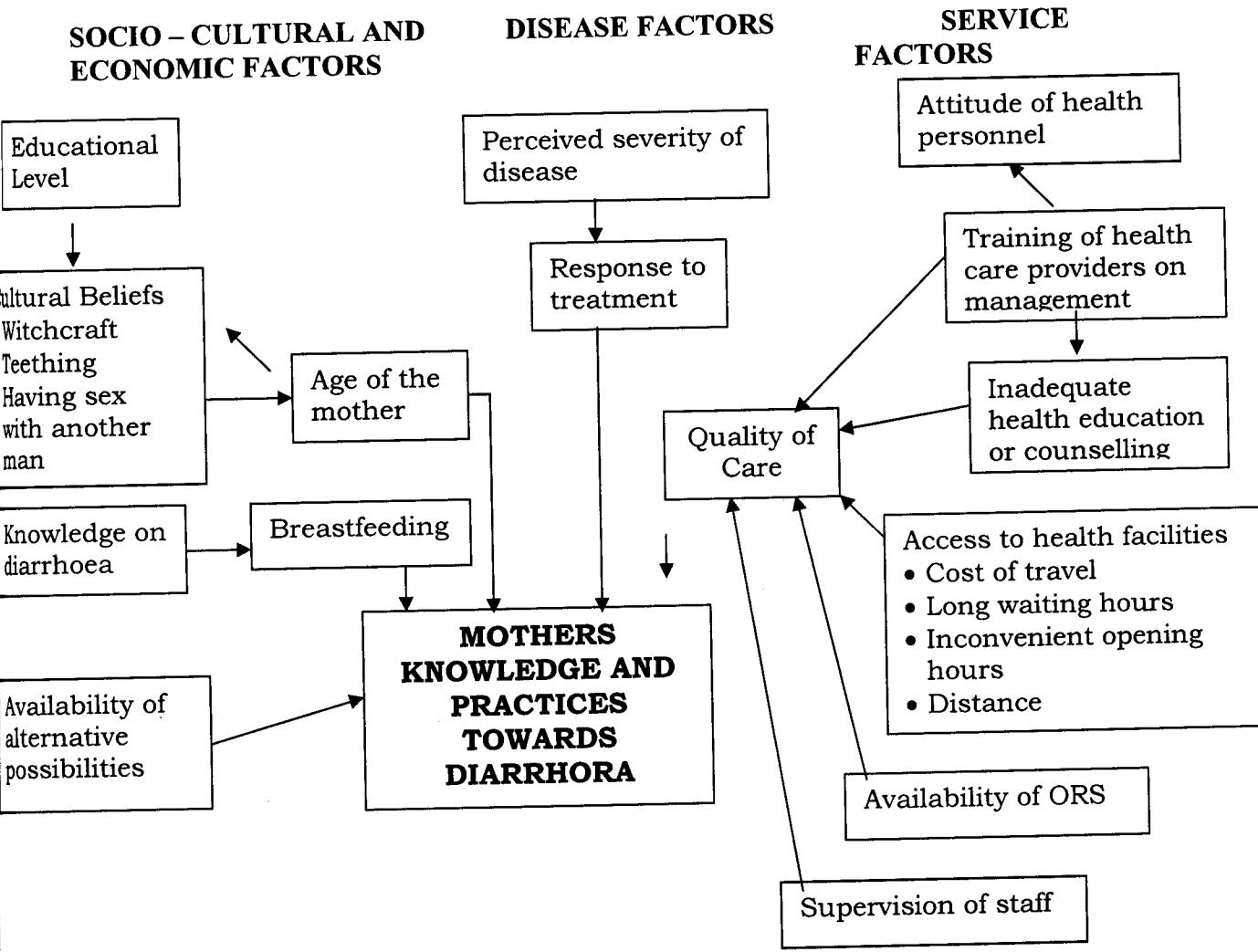
1.3.3.5. Availability of ORS

If ORS was available in the health centres, then mothers/caretakers could have access to the proper treatment of diarrhoea and vice versa.

1.3.3.6. Inadequate Supervision of Health Personnel

This has led to the health personnel not to execute/perform to their full expectations. Hence mothers were not given proper information regarding diarrhoea.

1.4. **DIAGRAM OF PROBLEM ANALYSIS**



1.5. **JUSTIFICATION**

Traditional beliefs and cultural practices always exert an impact on people who practice them. Mothers/caretakers were reluctantly taking their children with diarrhoea to the health centre because they lack faith in the modern medicine. They did not understand the condition in its right perspective due to their traditional beliefs concerning the disease. Hence, it was necessary to determine and identify mothers' knowledge, traditional beliefs and practices regarding diarrhoea in under five children, so that possible solutions could be sought in order to improve and ensure efficient and appropriate IEC on the condition. This would in turn reduce the infant morbidity and mortality due to diarrhoea. This

would also lead to less congestion in the health centres and there would be a reduction of finances on the national health budget. It was hoped that the results of the study would be beneficial to policy makers, health care providers and many more.

Although various studies had been done on the treatment, control and prevalence of diarrhoea in the district, none of the studies done looked at the traditional beliefs and cultural practices regarding diarrhoea in under five children. This had shown that lack of knowledge of the traditional health beliefs of women could be disastrous to health programmes. This was because women's reactions to illness were linked to their social and cultural behaviour. It was in this regard that a research was to be conducted to look at traditional beliefs and practices that might affect the proper management of diarrhoea in under five children in the district.

1.6. RESEARCH OBJECTIVES

1.6.1. General Objective

The main objective of the study was to evaluate mothers with under five childrens' knowledge and practices towards diarrhoea in Isoka District in order to come up with appropriate interventions to address the problem.

1.6.2. Specific Objectives

The specific objectives were as follows: -

1. To determine mothers' knowledge on diarrhoea and its management.
2. To establish mothers' practices towards diarrhoea.
3. To make recommendations to relevant authorities
4. To identify areas needing further research in relation to diarrhea.

1.7. **HYPOTHESIS**

The hypotheses of the study were: -

1. Mothers with a high level of formal education are unlikely to practice traditional beliefs and practices related to diarrhoea.
2. The older the mother, the more likely she is to practice traditional beliefs.

1.8. **OPERATIONAL DEFINITIONS OF TERMS**

1.8.1. **Traditional Beliefs**

Refers to traditional customs and beliefs related to diarrhoea, which were held or practiced by women.

1.8.2. **Practices**

Refers to the way of life of the members of the society, or of groups within the society and their practices in relation to diarrhea. It may also include how they dress, their marriage customs and family life, their patterns of work, religious ceremonies and leisure pursuits (Giddens, 1997).

1.8.3. **Knowledge**

Refers to all the information and facts that you know in relation to diarrhoea (Collins Dictionary, 2002).

1.8.4. **Culture**

Culture is a learned set of ideas, values and assumptions about life that are widely shared among a group of people (Stanhope and Lancaster, 1996).

1.8.5. **Diarrhoea**

Refers to the passing of loose watery stool for more than three times in a day (ITG, 2002).

1.8.6. **Mother**

Any female who assumes responsibility of looking after a child with diarrhoea.

1.8.7. **Health Personnel**

Men or women with some formal training in health care delivery that attends to clients when they go to the health centre.

1.8.8. **Under Five Children**

Refers to a population group below the age of five years (with diarrhoea).

1.9. **VARIABLES AND CUT OFF POINTS**

A variable is an attribute of a person or object that varies, that is, takes on different values (such as age, Blood Pressure, temperature).

The following variables were used in the study: -

Dependent Variables

It is the outcome variable of interest, or the variable that is hypothesized to depend on or be caused by another variable (the independent variable).

- Knowledge

Independent Variable

It is the variable that is believed to cause or influence the dependent variable such as in experimental research, the manipulated (treatment) variable.

- Diarrhoea
- Practices

TABLE 2: VARIABLES, INDICATORS AND CUT OFF POINTS

VARIABLE	INDICATOR	CUT OFF POINTS
DEPENDENT		
Knowledge	High knowledge	If one scores 12-17
	Medium knowledge	If one scores 6-11
	Low knowledge	If one scores less than 6
INDEPENDENT		
Diarrhoea	Very Good	If one scores 4- 5
Practices	Good	If one scores 2- 3
	Poor	If one scores 1

CHAPTER TWO

2.0. LITERATURE REVIEW

2.1. INTRODUCTION

It is a critical summary of research on a topic of interest, often prepared to put as research problem in context or as the basis for an implementation project (Polit and Hungler. 2000). The purpose of literature review was to consider what other researchers have done in order to prevent duplication of information. Hence, it provided one with convincing actions why a particular research was to be carried out.

2.2. NATIONAL PERSPECTIVE

In Zambia, there is little literature pertaining to traditional customs and beliefs regarding diseases. Zambia like any other society has its indigenous traditional customs, beliefs and practices to which some people strictly adhere. This adherence influences their attitude towards illness. Most of the literature in this write up was from other countries and applies to most of the parts of the country though it is outdated.

Simwanza, (1999) pointed out that one of the major obstacles for successful delivery of IEC in Zambia might be due to the cultural resistance of mothers. Hanlon and Pickett (1997) in agreement with the above statement said that health programmes are frequently hampered by the failure to inquire into or understanding traditions that the members of a group consider to be important. Observations and experience have shown that there was a common tendency among trained health personnel to ignore if not ridicule the client's traditional beliefs and practices related to diarrhoea. This probably reduces the effectiveness of the advice given to mothers on diarrhoea in children.

Culture is logically integrated dynamic whole and not merely an accidental collection of customs. In this regard, the good aspect of traditional customs and

beliefs regarding diarrhoea should be carefully adapted to the opportunities and limitations of the local culture.

If one wishes to help a community improve its health, he must learn to think like the people of the community before asking them to assume new health habits. Advice given to the mothers should be constructive rather than destructive. The traditional cultural way of life of the community must be taken into account and be utilized. It is therefore wise to ascertain the existing traditional beliefs and practices regarding diarrhoea and how these habits are linked to one another. These include their functions and what they meant to mothers who practiced them. This is of paramount importance because an explanation no matter how truthful which conflicts with the patient's own ideas or which seems to indicate the patient for ignorance or superstition might result in emotional disturbance or termination of treatment.

Health care achieves greater success when it is rendered in a style, which is relevant to the social cultural and economic status of the people to whom these services are directed.

2.3. **REGIONAL PERSPECTIVE**

WeissZ (1995) stated that, it was necessary for modern therapists to study traditions in order to understand popular attitudes surrounding the community he might come in contact with. This would make it possible for the health care provider to know the feeling the mother is likely to have about diarrhoea and the methods of treatment she is likely to trust.

Aimsworth (1997) emphasized that provision of health education (IEC) relevant to the local cultural and environment will increase their awareness of how to study health through self reliance. From this, one can say that basing IEC on the local traditional beliefs and practices regarding diarrhoea lessens the mothers

conflicts on whether to adopt the health personnel's advice on causes and treatment of diarrhoea or to continue with their old traditional beliefs and practices concerning the disease. African attitude and beliefs to disease are real enough to them. It makes it imperative for those who are in daily contact with these Africans to try and understand these beliefs and attitudes. This would make health personnel well equipped to deal, more harmful aspects of those attitudes and beliefs, while allowing the fulfillment of the less harmful ones and thus appearing to be sympathetic and understanding.

Furthermore, applying knowledge, which comes to him as part of his cultural heritage, man transforms his physical environment to enhance his comfort to improve health (Landy, 1997). People seek to attain and maintain health provided there are no conflicting cultural forces. It is so important for health care providers to know the mother's traditional customs and beliefs regarding diarrhoea so that the advice given is based on these, in order to make appropriate interventions.

2.4. INTERNATIONAL PERSPECTIVE

Most of the people especially Africans look upon many illnesses as due to the anger of the spirit guardian of the family concerned or witchcraft (Gelfand, 1996). Africans in general take traditional beliefs seriously and adhere to them inspite of patient explanation of the disease or illness. The effects of traditional beliefs give rise to deep-sited prejudice and attitudes, which must be understood before they can be broken down and re-established (Hale, et al, 1998). Jelliffe (1996) stated that mothers might have different ideas as to what they believe to cause disease to their children; for example it could be witchcraft or eating forbidden food. So, it is important that health personnel knew what was in their minds. The report further stated that mothers would accept advice more readily and had more confidence if it was given knowledge of local traditions. This is very important because each culture respects and accepts certain values, attitudes and beliefs regarding diarrhoea.

It is also advisable that health workers do not work contrary to them or else conflict will ensue between the care providers and health consumers (mothers). Health workers working in an unfamiliar area should try to find out the traditional beliefs and should use the good beliefs in teaching women to try and change or modify bad beliefs through IEC and not bothering about the unimportant beliefs (Jelliff, 1996).

Health workers should seriously make an effort to understand the indigenous traditional beliefs regarding diarrhoea to be successful in their work. They should be prepared to learn as much as possible about local medical beliefs which should include attitude and practices associated with health, the prevention of diseases, ideas as to causes of diseases and methods of cure (Jelliff and Bennett, 1996).

The writers further stated that this was important because knowing mothers' traditional beliefs regarding diarrhoea in under five children would make health workers understand some of the reasons why women prefer to treat their children with traditional treatment before bringing them to the hospital. Hence, it is advisable to ensure that the advice given to women or community is not in conflict with their beliefs, attitudes and ideas, which minimize the risk of having the IEC rejected.

Smolensky and Haar (1997) stated that an individual learns customs and beliefs from his birth and through his/her lifetime, such that they become part and parcel of that person. The culture determines how that person thinks, acts and treats the sick. The traditional beliefs regarding diarrhoea are therefore inherited in total for better or for worse and as such are bound to influence the mother's reaction towards the condition. Munyaradzi (1995) stated that, once an illness was established, treatment consisted of identifying the cause of the illness first and then the appropriate treatment was sought by either conciliating the ancestral spirits or taking an antidote against the witches poison.

Smith and Kane (2000) stated that mothers of suffering children sought medical or traditional healers advice depending on the precipitating factors, which make them do so. Among them, knowledge of health and level of recognition of the cause, symptoms and prognosis of the illness. Therefore, the mother's knowledge about diarrhoea determines the response. Paul (1995) stated that if one wished to help a community improve its health, he must learn to think like the people of the community before asking them to assume new health habits.

In view of all these, it is important that medical practitioners look at mothers and clients in general as unique individuals with individual customs and beliefs. This is the only way the health personnel are likely to give appropriate and effective IEC on diarrhoea to mothers. Therefore, it was necessary to find out the mothers traditional beliefs and practices regarding diarrhoea in under fives so that IEC on diarrhoea could be successfully delivered to the mothers. This hopefully, would help to reduce the increasing morbidity and mortality rates of diarrhoea.

2.5. **CONCLUSION**

In conclusion although various studies had been done on treatment, control and prevention of diarrhoea in the country, very few studies have been done on traditional customs or beliefs and practices regarding diarrhoea. Furthermore, most of these studies have been carried out in urban areas leaving rural areas where traditional beliefs and practices are the call of the day.

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

It is a researcher's plan for obtaining answers to a research question or to a research hypothesis (Polit and Hungler, 2000).

The purpose of the study was to identify mothers/caretakers' knowledge and practices regarding diarrhoea in under five children that reported to the health centres in the district.

A descriptive survey design was used because it was thought to be more appropriate to the study since the nature of the data collected was used in a descriptive form.

Descriptive surveys are studies, which are designed to describe phenomena (Treece and Treece, 1999). Sweeney and Oliver (1996) defined a descriptive study as a research study carried out for the purpose of providing an accurate portrayal of a group of subjects with specific characteristics and entail the precise measurement of the phenomena, as they currently exist. Thus, the study has considered traditional beliefs and practices regarding diarrhoea in under five including the parameters used by mothers/caretakers to decide whether to take their children with diarrhoea to the health center or not.

The subjects remained in their natural setting during the interview and therefore were not subjected to unpleasant conditions hence cooperation was easily obtained.

2. RESEARCH SETTING

This is an area or a place where the data collection will take place and the interventions will be implemented (Polit and Hungler, 2000). The study was conducted in Isoka district. The district has 8 health centres of which 4 were randomly selected for the study. One health centre was used for a pilot study to test the data collection tool. The study combined mothers from the medium and low education groups in that area with under five children. Isoka had been chosen because it was of more rural area and where traditional customs and beliefs are practiced. This was also important because the study was conducted within a limited period of time.

3.2.1. District Profile

The district is one of the districts in the Northern province of Zambia. It is situated 200Km to the Eastern part of Kasama, the provincial Headquarters. It shares boundaries with Nakonde district in the North, Chinsali district in the South, Mungwi district in the West, Chama district and the Republic of Malawi in the East. The district has been divided into Isoka East and West. The district is mountainous creating a plateau in Chief Kafwimbi, Mwenichifungwe and Muyombe while Katyetye and Mweniwisi lie in the Luangwa valley. These physical features predispose to poor road network to the communities and some rural health centres like Nachisitu Rural Health Centre. Most of the roads are feeder roads, which are impassable during the rainy season making it difficult to reach remote rural areas of the district. Hence, Nachisitu rural health centre was considered to be hard to reach.

3.2.2. Demographic Data

The district was a population of about 108, 791 (CSO). However, 45% of the population live beyond the mountains in the eastern part of the district, 14% of the population live along the Luangwa valley and 41% live within Isoka peri-urban. This includes Kafwimbi, kalungu amnd Kasoka catchment areas. The under five-

year population also accounts for 20% of the total population (21, 758.2) and under one year account for 4% (4, 351.64).

3.2.3. **Socio-Economic Status**

Isoka district has a few parastatal organizations, which offer employment to the people in the area, but the government has employed most of them. It has also 3 secondary schools, 5 basic, 72 middle basic, 14 community and 2 private nursery schools (District Education Officer). Despite the availability of schools the illiteracy levels are high because people were failing to sponsor their children to school. Literacy levels were categorized as follows:

- 4% of the population had some education.
- 74% of the population had primary education.
- 22% of the population had secondary education.

Most of the people have engaged in small scale or subsistence farming and entrepreneurs. They grow and sell crops like finger millet, beans, rice, cassava, maize, groundnuts and sweet potatoes. They also keep animals such as goats, pigs, sheep and cattle in isolated areas. Their socio-economic status is average and the income revenue is seasonal.

3.2.4. **Health Services**

The district has 8 health centres and one first referral hospital. Other referral services have been constructed at Nakonde, Chinsali, Mpika, Chilonga mission and Kasama general hospitals. Even if health services are offered by these health centres, some women seek alternative treatment from traditional healers before coming to the health centre. The rural health centres provide promotive, preventive and curative services. In terms of promotive and preventive services on diarrhoea, there has not been any impact, hence the high incidence of diarrhoea.

3. STUDY POPULATION

This is a population on whom you can obtain information (Polit and Hungler, 2000). The study population comprised of under five mothers/caretakers in rural health centres and households.

3.4. SAMPLE SELECTION

Sample selection is a process of choosing a population to participate in the research study (Polit and Hungler, 2000). The target population was mothers/caretakers who have nursed under five children with diarrhoea.

Health centres were selected at random out of the 8 and that was done by writing their names on the pieces of paper. The papers were folded and put in a box. An independent person was asked to pick 5 pieces of paper one at a time for the names of the health centres used for the study, including one for the pilot study. A sample of 52 mothers/caretakers was selected using a simple random sampling method. This was a form of probability sampling in which the researcher selected a special group, which were mothers/caretakers with children aged 6-24 months with or without diarrhoea. This sampling method was good because there was good evidence that it was a representative of the total population that was studied.

3.5. SAMPLE SIZE

A sample is a subset of a population selected to participate in a research study (Treece and Treece, 1999). The sample was 52 mothers/caretakers. This was done (study) on caretakers who were willing to participate in the study.

Four (4) villages were also selected from each health centre catchment area, and 12 mothers/caretakers from each catchment area, were to participate in the Focus Group Discussion (FGD). This was done by writing their names on the pieces of paper and an independent person was asked to pick the names of villages.

3.6. DATA COLLECTION TOOL

A data collection tool is a device used for the gathering of information needed to address a research problem (Polit and Hungler, 2000). Data was collected using the structured interview schedule (Appendix 1), which allowed for collection of fairly consistently data (Sweeney and Oliver, 1998). The information, which was collected, was uniform because it was collected by using the same instrument. The opportunity was accorded to the interviewer to make observations on the environment as well as picking both the verbal and non-verbal cues from the respondents. Questions, which were not clear to the respondents, were rephrased or clarified, as the interviewer was present. It also provided an opportunity for illiterate mothers to participate in the study. This was good because their contributions were equally valuable to the study.

The interview schedule had the following advantages:

1. The observer/interviewer did not need to be highly skilled in the interviewing process.
2. The response rates were high because of face-to-face interaction.
3. The interviewer maintained control over the sample because the respondents were the intended participants.
4. In interview technique all data that was obtained was usable.
5. The respondents were saved time to fill in the responses and returned the questionnaire to the researcher.
6. The structured interview allowed the interviewer to probe in order to clarify and broaden responses.
7. The researcher had a strict control over the order of presentation of questions in an interview.

The interview schedule had the following disadvantages: -

1. It was costly because of the number of respondents involved and length of time of an interview.
2. Face to face interaction had decreased the respondents feeling of autonomy (i.e. to say things openly).
3. It was also subjected to bias because of the small number of interviewed.

The focus Group Discussion Guide had similar advantages.

3.7. DATA COLLECTION TECHNIQUE

Data collection technique is a method of gathering information needed to address a research problem (Treece and Treece, 1999).

The interview schedule consisted of 25 questions. The first eight questions was information on demographic data such as name, age, education, occupation, residential area, tribe, religion, marital status and number of children. Question 9 sought information on number of live and dead children if any,. Question 10 considered the period mothers breastfeed their children. Questions 11-15 sought information regarding the number of their children who were suffering from diarrhoea, causes and where they sought medical treatment. Questions 16-20 sought information on their level of knowledge such as what diarrhoea is, cause, how they could know that the child had diarrhoea, prevention and the treatment of diarrhoea. Questions 21-25 looked at traditional beliefs and practices, and the medicines they gave before taking their children to the health centre if any, the kind of medicines they gave and by whom, also the information they got after being given the medicines if any.

The interviews were conducted in a conducive environment where participants were free to deliver the information. The rapport was made by the researcher himself before the interview or the focus group discussion. The FGD comprised 12 mothers from different villages of the study unit and we took not more than 40 minutes per session.

3.8. **PILOT STUDY**

A pilot study is a study, which is done preliminary to the main study with the aim of testing the elements for the study proposal and correcting any inconsistencies (Seaman and Verhomisk, 1995). The pilot study was done in Kafwimbi health centre catchment area, and the centre was not part of the study unit. Names of villages were written on pieces of paper and then an independent person picked 4 villages. Then some more pieces of paper were written indicating yes or no to each village. Those mothers who picked yes participated in the pilot study and the total was 8 (2 from each village). The interview schedule was used in order to test its validity and reliability in the actual study for data collection. It therefore, provided the opportunity to carry out the procedure for collecting data.

1.9. **VALIDITY**

In a quantitative research, validity is the ability of data gathering instrument to measure what it intends to measure and in a qualitative research it is the extent to which research findings represent reality (Dempsey and Dempsey, 2000).

In this study, validity was measured by conducting a pilot study before the actual study. Literature was examined to identify and delineate variables. The research instrument was also reviewed by experts in the area of paediatrics and child health and the supervising lecturer. Validity was measured in order to minimize biases. Validity was also measured having the lecturer examining the research questions or research instrument. Hence, validity refers to what extent the test accurately measure what it is supposed to measure especially to distinguish those with a disease from those without a disease.

3.10. **RELIABILITY**

Reliability in quantitative research is the stability of a measuring instrument over time and in qualitative research is the measure of the extent to which random variation may have influenced stability and consistency of results (Dempsey and Dempsey, 2000).

Reliability was measured by the fact that same questions were asked to all the respondents. This was done to establish consistency and dependability in the instrument that was if the same information was elicited from the same questions.

3.11. ETHICAL AND CULTURAL CONSIDERATION

This is the system of moral values that is concerned with a degree to which research procedures adhere to professional, legal and social obligations to the study participants (Polit and Hungler, 2000). Permission to conduct the study was obtained from Isoka DHMT (See appendix). The nature and purpose was explained to mothers/caretakers before the interviews for them to understand the importance of participating in the research and the benefits of the outcome. Participation in the study was voluntary; no respondent was forced or coerced to participate in the study (Confidentiality and anonymity).

CHAPTER FOUR

4.0. DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1. DATA ANALYSIS

It is the process by which the researcher summarizes and describes data and if possible makes inferences from the study sample to the population from which the sample was drawn (Seaman and Verhomisk, 1995). The data collected for the study were analyzed manually with the aid of a pocket calculator and responses were processed and categorized on the data master sheet. Data collected are not useful unless arranged in a meaningful manner so that it is possible to derive patterns of relationships (Polit and Hungler, 2000). The collected data were checked daily after each interview. This was to ensure completeness, validity and correction of any mistakes.

4.2. PRESENTATION OF FINDINGS

The presentation of findings is based on interviews conducted on a sample of 52 mothers/caretakers of under five children at Isoka who were sampled from the four study health centre catchment areas in the district. The findings were presented in table form, pie charts, bar chart and cross tabulations. These conserve space by presenting data in such a way that the narrative may be reduced and that tabulated data is easier to remember (Seaman and Vorhomisk, 1995). The data were arranged in frequency counts and percentages. Polit and Hungler (2002) state that percentages are descriptive statistics used to describe and synthesize obtained empirical observations and measurements.

FREQUENCY TABLES

TABLE 3: AGE DISTRIBUTION OF RESPONDENTS

AGE IN YEARS	NUMBER OF RESPONDENTS	PERCENTAGE
15 – 19	1	2
20 – 24	17	33
25 – 29	10	19
30 – 34	10	19
35 – 39	11	21
Above 40	3	6
TOTAL	52	100

Majority of the caretakers (33%) were aged between 20-24 years, 19% were aged between 25 –29 and another 19% were aged between 30-34 years. Above 40 years accounted for 6%.

TABLE 4: EDUCATION ATTAINMENT

EDUCATION ATTAINMENT	NUMBER OF RESPONDENTS	PERCENTAGE
None	2	4
1 – 4	8	15
5 – 7	31	59
8 – 9	7	14
10 - 12	4	8
TOTAL	52	100

74% of the respondents went to school up to grade 7 while 14% and 8% had attained Junior and Senior Secondary school course respectively and 4% did not go to school at all.

TABLE 5: OCCUPTIONAL STATUS OF RESPONDENTS

OCCUPATION	NUMBER OF RESPONDENTS	PERCENTAGE
Housewife	46	88
Self employed	3	6
None	3	6
TOTAL	52	100

Majority of the respondents (88%) were full time housewives, while 6% and another 6% were self employed and not employed respectively.

TABLE 6: RESIDENTIAL AREAS OF RESPONDENTS

RESIDENTIAL AREA	NUMBER OF RESPONDENTS	PERCENTAGE
High density	3	6
Unclassified	49	94
TOTAL	52	100

Majority of the respondents (94%) were from the unclassified areas and 6% were from the high-density area.

TABLE 7: RESPONDENTS TRIBES

TRIBE	NUMBER OF RESPONDENTS	PERCENTAGE
Bemba	1	2
Tumbuka/Ngoni	23	44
Nyika/Lambia	9	17
Namwanga	18	35
Others	1	2
TOTAL	52	100

44% of the respondents were Tumbuka/Ngoni by tribe, 35% were Namwanga, 17% were Nyika/Lambia speaking while the Bemba speaking and other tribes were 2% each.

TABLE 8: MARITAL STATUS OF RESPONDENTS

MARITAL STATUS	NUMBER OF RESPONDENTS	PERCENTAGE
Married	46	88
Single	2	4
Divorced	1	2
Widow	2	4
Separated	1	2
TOTAL	52	100

Majority of the respondents (88%) were married, 4% were single and another 4% were widows.

TABLE 9: NUMBER OF CHILDREN PER RESPONDENT

NUMBER OF CHILDREN	NUMBER OF RESPONDENTS	PERCENTAGE
1 – 3	29	55
4 – 6	15	29
7 – 9	7	14
10 - 12	1	2
TOTAL	52	100

55% of the respondents had between one and three children, 29% had between four and six, 14% had between seven and nine while 2% had between ten and twelve children.

TABLE 10: NUMBER OF RESPONDENTS WHO HAVE LOST CHILDREN

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Yes	16	31
No	36	69
TOTAL	52	100

Most of the respondents (69%) had not lost any children, while 31% had.

TABLE 11: NUMBER OF CHILDREN LOST BY 16 RESPONDENTS

NUMBER OF LOST CHILDREN	NUMBER OF RESPONDENTS	PERCENTAGE
1	7	44
2	7	44
3	2	12
TOTAL	16	100

44% of the respondents had lost one child , while another 44% had lost two children.

TABLE 12: CAUSES OF DEATH OF THE CHILDREN

CAUSES OF DEATH	NUMBER OF RESPONDENTS	PERCENTAGE
Diarrhoea	3	19
Malaria	9	56
Pneumonia	3	19
Others	1	6
TOTAL	16	100

56% of the respondents said that, the lives of their children were claimed by malaria and 19% each were claimed by pneumonia and diarrhoea while 6% were claimed by other diseases.

TABLE 13: LENGTH OF TIME RESPONDENTS BREASTFEED THEIR CHILDREN

LENGTH OF TIME IN MONTHS	NUMBER OF RESPONDENTS	PERCENTAGE
12 – 18	15	29
18 - 24	37	71
TOTAL	52	100

Majority of the respondents (71%) said that they breastfeed their children between 18 and 24 months, while 29% breastfeed their children between 12 and 18 months.

TABLE 14: CHIDREN WHO SUFFERED FROM DIARRHOEA IN THE LAST MONTH

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Yes	17	33
No	35	67
TOTAL	52	100

Majority of the respondents (67%) said that their children had not suffered from diarrhea in the previous month while 33%

Had.

TABLE 15: NUMBER OF TIMES EACH CHILD HAD DIARRHOEA

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
2	17	33
0	35	67
TOTAL	52	100

Most of the respondents said that their children did not have diarrhoea while 33% had diarrhoea once to twice in that month.

TABLE 16: RESPONSES ON WHAT COULD HAVE CAUSED DIARRHOEA IN THEIR CHILDREN

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Disease	4	8
Traditional belief	4	8
Did not know	9	17
TOTAL	17	100

17% of the respondents did not know the cause while 8% were the responses for disease and traditional beliefs respectively.

TABLE 17: RESPONSES ON WHETHER THE RESPONDENTS SOUGHT TREATMENT OR ADVICE

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Yes	16	31
No	2	4
0	35	65
TOTAL	52	100

Most of the respondents (65%) said that they did not seek medical advice because their children did not suffer from diarrhoea. 31% did seek medical advice or treatment while 4% did not.

TABLE 18: PLACES WHERE MOTHERS SEEK MEDICAL TREATMENT

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Health institutions	12	23
Traditional healers	5	10
0	35	67
TOTAL	52	100

Majority of the respondents (67%) did not seek medical treatment anyway, 23% sought medical treatment to the health institutions while 10% sought treatment to the traditional healers.

TABLE 19: RESPONDENTS' UNDERSTANDING OF DIARRHOEA

UNDERSTANDING OF DIARRHOEA	NUMBER OF RESPONDENTS	PERCENTAGE
Waterly stool	31	60
Loose stool	8	15
Disease of abdomen	8	15
Do not know	5	10
TOTAL	52	100

60% of the respondents understood diarrhoea as waterly stool while 15% understood diarrhoea as loose stool and disease of the abdomen respectively. 10% of the respondents did not know.

TABLE 20: MANIFESTATION OF DIARRHOEA IN CHILDREN

MANIFESTATIONS OF DIARRHOEA	NUMBER OF RESPONDENTS	PERCENTAGE
Waterly stool	17	33
Loose stool	18	35
Disease of abdomen	11	21
Do not know	6	11
TOTAL	52	100

35% of the respondents said that diarrhoea manifested with frequency of loose stool while 33% with waterly stool. Furthermore 21% of respondents said diarrhoea manifested with abdominal pain while 11% did not know.

TABLE 21: CAUSES OF DIARRHOEA IN CHILDREN

CAUSES OF DIARRHOEA	NUMBER OF RESPONDENTS	PERCENTAGE
Proper hygiene	11	21.2
Bad food / water	8	15.3
Traditional beliefs	22	42.3
Do not know	11	21.2
TOTAL	52	100

42.3% of the respondents said that the cause of diarrhoea in under five children was due to traditional beliefs, while 21.2% said that, it was due to improper hygiene. The other 21.2% of the respondents did not know the cause of diarrhoea. The remaining 15.3% said that it was due to bad food and water.

TABLE 22: PREVENTION OF DIARRHOEA

PREVENTION OF DIARRHOEA	NUMBER OF RESPONDENTS	PERCENTAGE
Proper hygiene	11	21
Good food/water	8	15
By practicing traditional beliefs	18	35
Do not know	15	29
TOTAL	52	100

35% of the respondents said that prevention of diarrhoea could be by practicing traditional beliefs, while 29% did not know. 21% and 15% was through proper hygiene and good food and water respectively.

TABLE 23: RESPONDENTS' TREATMENT FOR DIARRHOEA

TREATMENT	NUMBER OF RESPONDENTS	PERCENTAGE
Flagyl, ORS and chlorine	2	4
ORS and herbs	30	57
ORS	18	35
Do not know	2	4
TOTAL	52	100

57% of the respondents had been using ORS and herbs while 35% had been using ORS only. 4% had been using Flagyl, ORS and chlorinated water for treatment of diarrhoea. Another 4% of respondents did not know.

TABLE 24: RESPONDENTS' BELIEFS RELATED TO CAUSES OF DIARRHOEA IN CHILDREN

BELIEFS	NUMBER OF RESPONDENTS	PERCENTAGE
Breastfeeding in public	13	25.0
Teething	8	15.4
Breastfeeding whilst pregnant	11	21.2
Others	20	38.4
TOTAL	52	100

38.4% of the respondents was for other traditional beliefs related to causes of diarrhoea in children. 25% said that breastfeeding the baby in a public place such as the market or station could cause diarrhoea locally called “Chibele” and 21.2% said it could be due to breastfeeding whilst pregnant while 15.4% was due to teething.

TABLE 25: RESPONDENTS' WHO GAVE THEIR CHILDREN MEDICINE BEFORE BRINGING THEM TO THE HEALTH CENTRE

RESPONSE	NUMBER OF RESPONDENTS	PERCENTAGE
Yes	24	46
No	9	17
Sometimes	17	33
One time	2	4
TOTAL	52	100

46% of the respondents said that they gave their children medicine before bringing them to the health centre, while 33% said, they did sometimes and 4% did once. 16% said they did not.

TABLE 26: THE TYPES OF MEDICINE GIVEN TO CHILDREN BEFORE THEY ARE BROUGHT TO THE HEALTH CENTRE

MEDICINE	NUMBER OF RESPONDENTS	PERCENTAGE
Traditional	30	57
Modern	12	23
Both modern/traditional	10	20
TOTAL	52	100

57% of the caretakers had been using traditional medicine, 23% had been using modern medicine. 20% had been using both modern and traditional medicines.

TABLE 27: PERSONS WHO SUPPLY MOTHERS WITH MEDICINE

PERSONS	NUMBER OF RESPONDENTS	PERCENTAGE
Clinical officer/nurse	10	20
Grand parents	13	25
Traditional healer	15	28
Community Health worker	8	15
Others	6	12
TOTAL	52	100

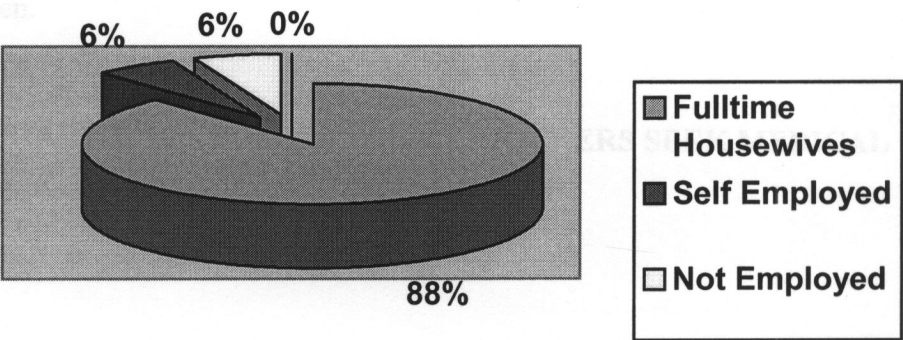
28% of the respondents were given medicine by traditional healers and 25% were given by grand parents.

TABLE 28: INFORMATION GIVEN AFTER RECEIVING MEDICINE

INFORMATION	NUMBER OF RESPONDENTS	PERCENTAGE
Given accordingly	47	90
No information	5	10
TOTAL	52	100

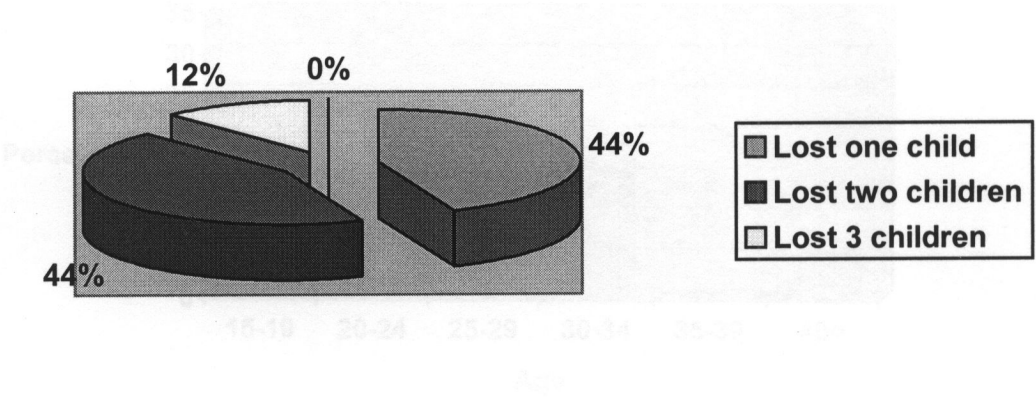
Majority of the respondents (90%) had been given information on how to use the medicines depending on the type, while 10% said that they were not given any information after receiving the medicine.

PIE CHART 1: OCCUPATIONAL STATUS OF RESPONDENTS



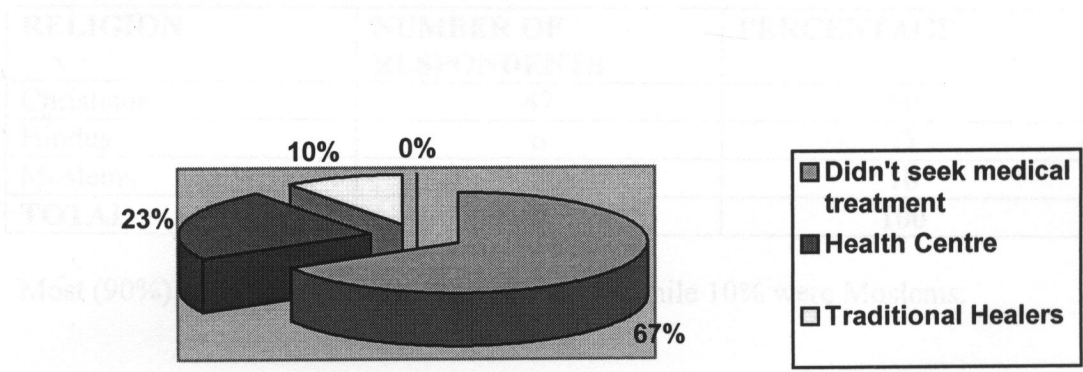
88% were full time housewives, 6% were self employed and not employed respectively.

PIE CHART 2: NUMBER OF CHILDREN LOST BY RESPONDENTS



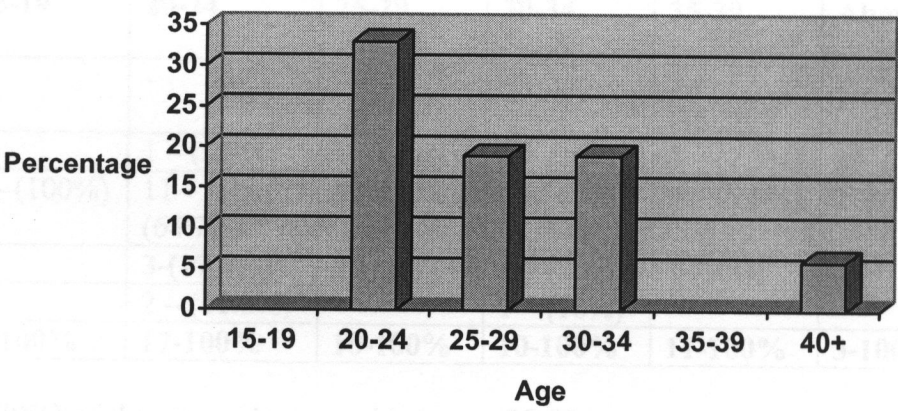
44% had lost one and two children respectively, while 12% had lost three children.

PIR CHART 3: PLACES WHERE MOTHERS SEEK MEDICAL TREATMENT



67% did not seek medical treatment anyway. 23% sought medical treatment to the health centres while 10% sought treatment to the traditional healers.

BAR CHART 1: RELATIONSHIP BETWEEN AGE AND EDUCATION ATTAINMENT



Majority of the caretakers (33%) were aged between 20-24 years, 19% between 25-29 and another 19% were aged between 30-34 years. Above 40 years accounted for 6%

TABLE 29: RELIGIOUS SBELIEFS OF RESPONDENTS

RELIGION	NUMBER OF RESPONDENTS	PERCENTAGE
Christians	47	90
Hindus	0	0
Moslems	5	10
TOTAL	52	100

Most (90%) of the respondents were Christians while 10% were Moslems.

TABLE 30: RELATIONSHIP BETWEEN AGE AND EDUCATION ATTAINMENT

EDUCATION ATTAINMENT	AGE (YEARS)						TOTAL
	15-19	20-24	25-29	30-34	35-39	Above 40	
None	-	-	-	-	2- (18.2%)	-	2
Grade 1 – 4	-	1 – (5.9%)	1 – (10%)	1 – (10%)	3 – (7.3%)	2 – (67%)	8
Grade 5 – 7	1- (100%)	11 – (64.7%)	7 – (70%)	6 – (60%)	5 – (5.5%)	1 – (33%)	31
Grade 8 – 9	-	3-(17.6%)	2 –(20%)	2 – (20%)	1-(9%)	-	8
Grade 10 – 12	-	2 – (11.8%)	-	1 – (10%)	-	-	3
TOTAL	1-100%	17-100%	10-100%	10-100%	11-100%	3-100%	52

Most (70%) of the respondents aged between 25-29 years attained upper primary education, 18.2% of the respondents aged between 35-39 years had never been to school.

TABLE 31: RELATIONSHIP BETWEEN EDUCATION ATTAINMENT AND OCCUPATION

OCCUPATION	EDUCATION ATTAINMENT (GRADE)					TOTAL
	NONE	1 – 4	5 – 7	8 – 9	10 - 12	
Housewife	2 – 100%	6 – 75%	29 – 93.5%	6 – 86%	3 – 75%	46
Self-employed	-	1 – 12.5%	-	1 – 14%	1 – 25%	3
None	-	1 – 12.5%	2 – 6.5%	-	-	3
TOTAL	2-100%	8 – 100%	31– 100%	7-100%	4-100%	52

Majority (93.5%) of those who attained upper primary education were housewives.

TABLE 32: RELATIONSHIP BETWEEN EDUCATION ATTAINMENT AND LOCATION

LOCATION	EDUCATION ATTAINMENT (GRADE)					TOTAL
	NONE	1 – 4	5 – 7	8 – 9	10 - 12	
High density	-	-	1 – 3%	-	2 – 50%	3
Unclassified	2 – 100%	8 – 100%	30 – 97%	7 100%	2 – 50%	49
TOTAL	2– 100%	8 – 100%	31-100%	7– 100%	4– 100%	52

Majority of the respondents (97%) who attained upper primary education were staying in unclassified compounds.

TABLE 33: RELATIONSHIP BETWEEN AGE AND CARETAKERS PRACTICES TOWARDS DIARRHOEA

PRACTICES TOWARDS DIARRHOEA	AGE (YEARS)						TOTAL
	15-19	20-24	25-29	30-34	35-39	Above 40	
Breastfeeding in public	-	2 – 12%	2 – 20%	4 – 40%	5– 45.5%	-	13
Teething	1 – 100%	2 – 12%	1 – 10%	3 – 30%	-	1 – 33%	8
Breastfeeding whilst pregnant	-	7 – 41%	2 – 20%	1 – 10%	1 – 9%	-	11
Other practices	-	6 – 35%	5 – 50%	2 – 20%	5 – 45.5%	2 – 67%	20
TOTAL	1-100%	17-100%	10-100%	10-100%	11– 100%	3-100%	52

Half (50%) of the respondents aged between 25-29 years mentioned other practices towards diarrhoea. 41% mentioned breastfeeding whilst pregnant.

TABLE 34: RELATIONSHIP BETWEEN EDUCATION ATTAINMENT AND PRACTICES TOWARDS DIARRHOEA

PRACTICES TOWARDS DIARRHOEA	EDUCATION ATTAINMENT (GRADE)					TOTAL
	NONE	1 – 4	5 – 7	8 – 9	10 - 12	
Breastfeeding in public	2 – 100%	1 – 12.5%	9 – 29%	1– 14.3%	-	13
Teething	-	1 – 12.5%	4 – 12.9%	1– 14.3%	2 – 50%	8
Breastfeeding whilst pregnant	-	-	8 – 25.8%	1– 14.3%	2 – 50%	11
Other practices	-	6 – 75%	10 – 32.3%	4 - 57.1%	-	20
TOTAL	2–100%	8 – 100%	31– 100%	7-100%	4 –100%	52

Majority of the respondents (75%) who had attained lower primary education and 32.3% who attained upper primary education had practices towards diarrhoea.

TABLE 35: RELATIONSHIP BETWEEN LOCATION AND DEAD CHILDREN

DEAD CHILDREN	LOCATION		TOTAL
	HIGH DENSITY	UNCLASSIFIED	
Yes	-	16 33%	16
No	3 - 100%	33 67%	36
TOTAL	3 - 100%	49 100%	52

Most (33%) of the respondents who had lost their children due to diarrhea were from the unclassified compounds.

**TABLE 36: RELATIONSHIP BETWEEN EDUCATION
ATTAINMENT AND LEVEL OF KNOWLEDGE**

DEFINITION OF DIARRHOEA	EDUCATION ATTAINMENT (GRADE)					TOTAL
	NONE	1 – 4	5 – 7	8 – 9	10 - 12	
Waterly stool	2 - 100%	3 - 37.5%	18 – 58%	5 – 71.4%	3 – 75%	31
Loose stool	-	3 – 37.5%	4 – 13%	1 – 14.3%	-	8
Abdominal disease	-	1 – 12.5%	5 – 16%	1 – 14.3%	1 – 25%	8
Did not know	-	1 – 12.5%	4 – 13%	-	-	5
TOTAL	2 – 100%	8 – 100%	31-100%	7-100%	4-100%	52

Three quarters (75%) of the respondents with senior secondary education said that diarrhoea was waterly stool

**TABLE 37: RELATIONSHIP BETWEEN LEVEL OF KNOWLEDGE
AND PRACTICES TOWARDS DIARRHOEA**

KNOWLEDGE LEVEL	PRACTICES		TOTAL
	GOOD	BAD	
Inadequate	2 – 20%	11 – 26%	13
Adequate	8 – 80%	31 – 74%	39
TOTAL	10 – 100%	42 – 100%	52

Most (74%) of the respondents with adequate knowledge were not practicing traditional beliefs while 80% did.

**TABLE 38: RELATIONSHIP BETWEEN RELIGION AND
KNOWLEDGE**

KNOWLEDGE LEVEL	RELIGION		TOTAL
	CHRISTIANS	MOSLEMS	
Inadequate	34 – 72%	3 – 60%	37
Adequate	13 – 28%	2 – 40%	15
TOTAL	47 – 100%	5 – 100%	52

Most (72%) of the respondents with inadequate knowledge on the prevention of diarrhoea were Christians while 60% were Moslems.

TABLE 39: RELATIONSHIP BETWEEN RELIGION AND PRACTICE

RELIGION	PRACTICE		TOTAL
	BAD	GOOD	
Christians	31 – 91%	16 – 89%	47
Moslems	3 – 9%	2 – 11%	5
TOTAL	34 - 100%	18 – 100%	52

Majority (91%) of respondents were christians did not accept the practices towards diarrhea while 89%of them did.

CHAPTER 5

5.0. DISCUSSION OF FINDINGS

5.1. INTRODUCTION

The results of the study were based on the analysis of responses from the 52 mothers/caretakers of under five children. These were sampled from the four study health centre catchment areas in Isoka district. The aim of the study was to determine the mothers/caretakers' knowledge and practices towards diarrhoea with under five children, so that health personnel can help caretakers on the control and management of diarrhoea. This will also assist the health personnel to make recommendations to relevant authorities and identify areas needing further research on diarrhoea in under five children.

5.2. DISCUSSION OF VARIABLES

5.2.1. Demographic Data

Majority of the caretaker (33%) were aged between 20-24 years, 19% were aged 25-29 years and another 19% between 30-34 years. About 21% were aged between 35-39 years, 6% above 40 years while the remaining 2% were between 15-19 years. Most of the caretakers were quite young. This is because child-bearing starts early in Zambian women due to early marriages(CSO), or it could be that more young mothers/caretakers were utilizing under five children's services than older mothers/caretakers.

Table 2 shows respondents education attainment. Most of the respondents (59%) went to the upper primary school, while 14% and 8% had attained junior and senior secondary school course respectively. About 15% went up to lower primary and 4% did not go to school at all. This could be due to the limited number of school places in grade 8 compared to grade 7 places, or it could be due to lack of motivating factors that could stimulate them to go to school. It was

good that most caretakers had some formal education, even though it was minimal it could have exposed them to extra knowledge than those who never went to school. Female education is one of the best health investments, which a developing nation could make for its future, for education has a factor in mortality decline. Ebrahim (1996) says that mother's education is the key determination of her children's health. He also went on to say that a child born to a mother with no education had shown to be twice as likely to die in infancy than a child born to a mother with even 4 years of schooling. Usually the caretakers are responsible for deciding whether diarrhoea could be treated by withholding food or by continued feeding.

In table 3, majority of the respondents (88%) were full time housewives, while 6% each were self employed and not employed respectively. There was no one in formal employment. This could be due to the fact that most of the caretakers did not have adequate education to enable them to learn some skills. In the absence of wage labour, most mothers resort to petty trading and peasant farming so that they can supplement their husband's efforts to sustain their living.

In table 4, almost all the caretakers (94%) in the study were from the unclassified areas and only 6% were from the high-density areas. The unclassified and high-density areas are generally known to be of poor environmental sanitation, which consequently result in increase in cases of diarrhoeal diseases in children. Jelliffe (1996) states that diarrhoeal diseases are often related not only to the protected and available water supply but also to the attention of individuals to washing their hands, collecting water in clean buckets and drinking it out of a clean cup. In addition, Adegoroye (1999) also reported that diarrhoea occurs mostly in low socio-economic environment where sanitation is poor and water is scarce. So, it is important that both personal and environmental hygiene are maintained in order to prevent diarrhoea.

Majority of the respondents (44%) in Table 5 were Tumbuka/Ngoni by tribe, 35% were Namwanga, 17% were Nyika/Lambia, while the Bemba speaking and other tribes were 2% each. The Tumbuka and Namwanga speaking tribes were more than other tribes because they are the majority in the district. The Tumbuka and the Nyika/Lambia are found in the eastern part of the district while the Namwanga are in the west. The findings had revealed that mothers from the same tribe shared the same beliefs though most of them mentioned that they had learnt other customs and beliefs from other tribes because of mixing with other people from other tribes, for instance, most mothers as shown in Table 22, mentioned that diarrhoea was due to breastfeeding in public places such as the market, bus stations or in a bus. This belief is common in Eastern province, but most caretakers knew it and could get medicines from people from Eastern province to protect their children against it. This condition was locally known as “Chibele”. Chibele is when a child with diarrhoea produces whitish watery stool.

Most (88%) of the respondents (Table 6) were married, 4% were single and 4% were widows, 2% were divorced and separated respectively. The belief that talked about sex with another man who was not a real father of that child could be rejected, because most of the caretakers were married.

Majority (55%) of the respondents had children between one and three, 29% between four and six, 14% between seven and nine while 2% had between ten and twelve children as shown in Table 7. This could be because most of the caretakers were between the age of 20-30 years which is a young age, but the number of children tend to increase with age. For instance, the older the woman the more children she had. This is because child bearing does not stop until the woman is old at forty years and above. It could also mean that women do not practice family planning.

About 31% of the caretakers/mothers had lost children. 44% each had lost one and two children respectively and 12% lost three children each as shown in Table

8. About 56% of the children died from malaria and 19% from diarrhoea and pneumonia respectively. About 6% of the children died from other diseases/causes. Most of the children died from preventable diseases/causes. These could have been attributed to the fact that most caretakers brought their children late to the health centres. Hence, health personnel had no enough time to treat the children successfully. In developing nations, it is the child in particular who die and most commonly from diarrhoea, malaria, pneumonia, measles, malnutrition, whooping cough, tuberculosis and HIV/AIDS. So, there is need to give mass information, education and communication in the communities to prevent these diseases, hence reducing the infant mortality rate. In addition, most of them were from the unclassified compounds/villages where there was inadequate or poor sanitation and poor water supply.

It was encouraging to note that majority of the respondents (71%) said that they breastfed their children between 18-24 months while 20% breastfed their children between 12-18 months. It was possible for most caretakers/mothers in the study to breastfeed for a long time because they were full time housewives. The other reasons could be that caretakers/mothers in rural areas spend most of the time with their babies on their backs even when they go to their fields to cultivate. It could also mean that they understand the importance of breastfeeding, as a result they breastfeed their children for longer periods until they are big enough to eat solids and benefit from the foods that adults eat. Furthermore, prolonged breastfeeding was also used as part of family planning. However, the reasons given by mothers for stopping breastfeeding at that age were that, the mothers became pregnant and could not continue because their milk became sour (bad). Others said that at eighteen months the child was big enough to eat other types of food and some said babies start biting on the nipples when breastfeeding.

About 33% of the respondents had children who had suffered from diarrhoea. About 67% of the respondents said that some of the contributing factors to diarrhoea were lack of clean water in some of the communities and traditional

beliefs. s Byrne, et al (1988) subscribed to the women/caretakers view of diarrhoea when he said that diarrhoea of less developed countries was universally present and common in areas of poor sanitation and prevailing malnutrition.

5.2.2. Knowledge of Diarrhoea

Most of the caretakers (60%) understood diarrhoea as watery stool, while 15% understood diarrhoea as loose stool and disease of the abdomen respectively. About 10% of the respondents did not know as shown in Table 19. About 35% of the respondents said that diarrhoea was manifested with frequency of loose stool while 33% with watery stool. About 21% of the respondents said that diarrhoea manifested with abdominal pain while 11% did not know as shown in Table 20.

Traditionally it was believed by most caretakers that diarrhoea was a disease with known causes and treatment. Probably that was why most mothers/caretakers said it was a disease. However, it was good to note that quite a good number of respondents had an idea of what diarrhoea was. This could be contributed to the fact that caretakers/mothers are taught on management and prevention of diarrhoea in children. They are also given IEC on the importance of hygiene.

WHO (1990) states that diarrhoea could be present if there was abnormal frequent and liquidity of stools termed “loose stool” and could be accompanied by colic and tenesmus. Smith et al (2000) also defined diarrhoea as frequent watery stools often accompanied by swollen belly with cramps. Another reason why most mothers/caretakers knew what diarrhoea was, could be that most of them had some formal upper primary education. This was because women who were educated easily assimilated information taught. In addition there were also some diarrhoeal prevention and control programmes that were going on by WHO and WASHE in the district. Lastly, most institutions of learning, the mass media and health centres had been frequently talking and writing about the condition.

Majority of the respondents (67%) did not seek medical treatment for diarrhoea. About 23% sought medical treatment at the health centres while 10% sought treatment from the traditional healers. This showed that most caretakers with children who had diarrhoea had more faith in the modern medicine as opposed to traditional medicine. Gelfand (1996) said that Africans had no real opposition to western medicine, they often consult a western doctor with the hope that could recognize and cure their illness.

The minimal formal education attained by most caretakers in the sample contributed to the high percentage of caretakers who brought their children to the clinic first when they had diarrhoea. Ebrahim (1996) said that the education of women greatly changed the traditional balance of familiar relationships with profound effects on childcare. An educated woman would rather take her child with diarrhoea to the hospital than to first go to the other people for advice. This was because she understood the condition in its right perspective and knew the risks involved.

5.2.3. Practices

All the respondents knew some form of traditional practices towards diarrhoea in under five children as shown in Table 24. The hypothesis which stated that the older the mother, the more likely she is to practice traditional beliefs related to diarrhoea was rejected because the findings have revealed that even younger mothers knew some practices and were actually the majority (those less than 30 years). The following beliefs were identified by mothers/caretakers as the ones contributing to diarrhoea in children as shown in Table 24.

1. Breastfeeding in public for(25%).
2. Teething accounted (15.4%).
3. Breastfeeding whilst pregnant (21.2%).
4. Other practices accounted for (38.4%).

The other beliefs/practices were that diarrhoea could be caused by having extra marital relationship and then feeds the baby, prostitutes getting fire from the fire place of a mother with a small child, witchcraft and handling of the baby by so many people. Some caretakers said that diarrhoea was due to bad food and dirty water. Thus the hypothesis which stated that mothers with a high level of formal education were unlikely to practice traditional beliefs and practices related to diarrhoea is neither rejected nor accepted because most of the caretakers had low level of formal education and only 8% had high level of formal education as shown in Table 4.

Secondly the sample size was small as to make inferences to the total population of caretakers whose children had diarrhoea. Experience and observations have shown that when a child is breaking his/her first teeth, he always suffers from diarrhoea. This probably could be attributed to the fact that during this time (oral phase) anything that the child picks, clean or dirty, is put in the mouth and the child bites it. The oral phase covers the first year of life and so termed because the mouth was primary pressure zone. The infant associates the pressure of hunger satisfaction with oral stimulation and soon learns to stimulate the mouth for pressure. Ebrahim (1996) said that with eruption of teeth and increasing muscular control the child has a more aggressive approach to his environment. It is also probably that diarrhoea can result from the child's action during this period. Bennett et al (1998) in their study on concepts of diarrhoeal diseases reported similar findings. So, the caretaker/mothers belief that teething contributed to diarrhoea could be accepted.

Another common belief identified by mothers/caretakers was that breastfeeding a child whilst pregnant could lead to diarrhoea. In the study by Simwanza (1999) it was revealed that mothers discontinued breastfeeding when they discovered that they were pregnant for fear of their children having diarrhoea. Although there is no harm in breastfeeding during pregnancy scientifically, most caretakers in the

communities strongly adhere to the belief and stop breastfeeding their children as soon as they realize that they are pregnant.

However, some caretakers had been known to have breastfed two children together but of course gave priority to the baby since the older child was having other foods as well. Breastfeeding in public places was also mentioned by caretakers/mothers as a contributing factor to diarrhoea. Thus, the belief could be true that breastfeeding a baby in a public place could cause diarrhoea. Scientifically, is because there are a lot of bacterias in congested places, which can cause diarrhoea in under five children.

Table 25 further revealed that 46% of the respondents said that they always gave their children traditional medicine for diarrhoea before they took them to the health centre, while 33% said they gave traditional medicines sometimes and 4% gave once. About 17% of the respondents did not give any medications. This was a common practice among the respondents that when their children were sick, they first had to go to seek for help or advice from the elderly women or respected persons who lived close to them. This was because some of those people were known to be experts in certain problems. When they had a sick child, it was often the neighbours who was the nearest source of help and who would first discuss with the mother on the care needed on the child (Paul, 1995). After consulting the neighbours and nearby relatives, the decision as to who should be seen first, would depend on what they would think was the cause of the illness and which services they thought would be able to help. All these results in delay in bringing the child to the health centre for prompt effective and efficient treatment.

About 57% of the caretakers had been using traditional medicine, 23% had been using modern medicine, while 20% had been using both. This showed that caretakers were still practicing traditional beliefs towards diarrhoea. Hence the statement that stated that certain beliefs regarding diarrhoea result in delay in

taking children to the health centre and make it difficult to treat them successfully could be true.

About 28% of the caretakers said that they were given medicines by traditional healers first when their children had diarrhoea before taking them to the health centres as shown in Table 27. However, although some mothers expressed the wish to take their children to the traditional healer first, they took them to the clinic first because they had no money to pay the traditional healer for consultation and treatment.

Smolensky et al (1997) said that many times a patient was brought to the health centre with an illness that seemed to have been neglected, probably because he had attempted to cure his illness with folk remedies. Many mothers saw the need to consult a traditional healer who they felt understood their problems and background. Gelfand (1996) further stated that Africans though they had no real opposition to western medicines they did more than merely taking the drugs. He further went on writing that they always wanted to discover what spiritual agent caused the disease and they often heard them saying that western doctors had many valuable cures for diseases, which were even more powerful than their own but they did not understand some of their illness which could only be cured by their own traditional healers. Therefore, for the Africans one could say that they did not find it worthwhile to go to the hospital if they had one of those diseases. That was unfortunate because it resulted in bringing the children with diarrhoea to the health centre late and in prostrated state. About 25% of the respondents said that, they consulted their mothers first when their children had diarrhoea before taking the child to the health centre as in Table 27. Those were young mothers who had one to three children and had their mothers living near them and those who were not married and were still staying with their parents. This could be attributed to lack of experience in child rearing.

Simwanza (1999) said that, mothers and families are the most important persons in caring for children and are responsible for the health of their children. Observations and experience had shown that grandmother and old women especially teach young mothers who are their daughters or granddaughters on childcare. This could be the reason why young mothers consulted their mothers for advice, for as far as they are concerned their mothers knew best what was best for their children.

About 20% of the respondents said that they took their children to the health centres whenever they had diarrhoea. The reason given for this was that, they were sure their children would get injections and other anti diarrhoeal mixture. Some respondents said that their children became better faster when they took them to the health centre than when they took them to the traditional healers or grand parents.

According to the researcher's observations and experience, most of the caretakers took their children to the health centres because the condition did not improve, most likely after trying other treatments. Simwanza (1999) had similar findings as well. Most caretakers had more faith in the curative powers of modern medicine as opposed to that of traditional healers and said that they brought their children to the health centre because they felt their children would get the best treatment. Most mothers prefer to use modern treatment although they held traditional ideas as causes of diarrhoea. This could be due to the fact that many people especially those who were educated and had positive experiences with modern health care practices of scientific medicine, allowed their children to have professional care (Landy, 1997).

In most cases the caretakers would get a kind of medicine from the traditional healer, which she would boil and keep to use. The most common ways of preparing traditional medicine for treatment of diarrhoea was by pounding leaves or roots of certain trees (such as guava, mango, mufungo and banana were

mentioned), socking or boiling them, then giving the fluids to children whenever he/she had a diarrhoeal motion. Dosage was not important as far as they were concerned, what was important was the effect. So, the more they gave the better and the bitter the fluid, the stronger and effective it was thought to be. It was observed that most mothers/caretakers from the same tribe knew the same type of trees and methods of preparation of traditional medicine for diarrhoea. However, some women mentioned that they chew the leaves and spit it on to the fontanelle of the child whenever she has diarrhoea. This method would not have any effect on the child as such but the women were sure that it normally work by stopping the fontanelle from depressing even when the child loses a lot of fluids through frequent diarrhoea.

Gelfand (1996) said that Africans appreciate that a substance or a quality exists in a plant, which was able to remove the problem in the body. It is this confidence and faith that most caretakers/mothers have in the power of traditional medicine, which makes them, seek for it when their children have diarrhoea. Thus, many traditional beliefs related to diarrhoea are being practiced today, not only in rural areas but in urban areas as well. A good number of traditional healers are commonly seen in the townships and shanty compounds of urban Zambia. It was observed that although the caretakers/mothers did not know the actual dosage for the traditional medicine, they at least knew its effects and when to give it. That was why health personnel had to consider traditional beliefs related to diarrhoea when they had to give IEC to the caretakers on the condition. This was because there was nothing wrong with what they did as far as they were concerned.

Almost all the respondents (90%) who were given information on how to use the traditional medicine said that some of the things taught by the traditional healers were not realistic (Table 28). They further said that only the things which they felt were of use to them and their family were practiced which meant that some caretakers had to consider their individual problems. Some of the caretakers also pointed out that some health personnel talk about IEC in general not really

directing it to specific individuals. Therefore, most mothers do not put into practice the IEC taught to them because it was contrary to their traditional customs or beliefs regarding diarrhoea.

Most of the respondents (72%) with inadequate knowledge were Christians while 60% were Moslems. Among the Christians 91% of the respondents did not accept the practices towards diarrhoea while 89% did (Table 39). Among the 89% respondents who accepted the practices of traditional beliefs regarding diarrhoea gave a reason that, even the modern medicines that were given to them, were made from the herbs or traditional medicines. They went on to say that the only problem they had was on how to measure the quality, quantity, the frequency on how to give and the duration. It was in this regard that health personnel had to respect the traditional and the religious beliefs of the caretakers/mothers of the under fives. In addition, three Focus Group Discussions were held at Muyombe, Kasoka and Thendere health centres. It was evident that all the groups had adequate knowledge on diarrhoea, such as the definition, causes, prevention/control and the treatment. The FGD also revealed the traditional beliefs and practices regarding diarrhoea in the district. So, the information collected through FGD was similar and in general no disagreements were observed among the groups. Breastfeeding whilst pregnant or in public places, teething, having sex with other men, witchcraft and handling of the baby by so many people to mention a few were mentioned to be causes of diarrhoea. All groups mentioned that the caretakers/mothers interventions were either taking the children to the clinic, grandparents or traditional healers for treatment or advice.

In conclusion, the findings revealed that most caretakers/mothers knew and practiced traditional beliefs related to causes and treatment of diarrhoea. Therefore, it was vital that health personnel realize the importance of these when giving IEC to the mothers/caretakers on diarrhoea.

5.3. IMPLICATIONS

The findings revealed that most (61.6%) mothers knew some beliefs related to causes of diarrhoea and practiced them. It is therefore, important that health personnel take these into consideration when giving health education (IEC) on diarrhoea prevention and its control. Some mothers/caretakers felt that individual IEC are more beneficial and IEC that are relevant to their problems rather than the general IEC being given. Probably health personnel could consult the mothers and find out what they would want to know or learn and likewise give the IEC accordingly. Currently, nurses/health personnel decide on the topic to share with mothers. Sometimes the same topic is discussed on consecutive visits that the mother makes to the clinic. This becomes monotonous to the mothers; as a result they even lose interest. If possible, health personnel should try to find time for individual IEC especially for the few who need it. There are several hours in a week when the health centres are relatively quiet. These could be used for individual teachings and counseling.

In their IEC, health personnel should take into consideration the effects that the traditional customs and beliefs regarding diarrhoea in children may have on the child and the resultant delay in bringing the child to the health centres.

The findings also revealed that most (75%) of the children died from preventable diseases. Health personnel should emphasize to the mothers the importance of preventing those diseases so that we can reduce the infant mortality rate. Mothers should be advised on diarrhoea that the actual problem, which is usually dehydration due to loss of body fluids, would bring up complications if the child is brought to the health centre late. So it should be emphasized that bringing the children to the health centre early is very important so that dehydration could be corrected immediately. Furthermore, most of the diseases that caused the deaths of the children could have been treated and thus prevented the deaths of the children.

Health personnel should make an effort to initiate research in these areas to find out why there is an increase in morbidity and mortality rates of diarrhoea in their areas even when people are well aware about the condition. However, for this to be possible there is need for basic research to be taught in basic nursing and other school programmes also in-service programmes. This will make health personnel aware at an early stage and they will be reminded in future the importance of research in their profession. So, health personnel should take into consideration the importance of understanding the traditional practices related to diarrhoea and other diseases when giving IEC. This way they will be more meaningful to most mothers. It is believed that the more health personnel will understand the traditional customs and beliefs related to diarrhoea, the more they will be able to plan their advice appropriately.

CHAPTER 6

6.0 CONCLUSION AND RECOMEMMENDATIONS

6.1 CONCLUSION

The purpose of the study was to establish knowledge and practices of mothers/caretakers with under five children towards diarrhoea in Isoka district in order to come up with appropriate interventions to address the problem. The findings have shown that, most (71%) mothers/caretakers were aged between 20-30 years. Most (74%) of these had attained upper primary education and had some knowledge on the prevention and control of diarrhoeal diseases. Majority of the caretakers (88%) were married and 94% were from the unclassified compounds where sanitation is believed to be poor. Caretakers/mothers who lost their children came from those compounds where the living standards were below average and their children died from preventable diseases.

The most prominent tribes were the Tumbuka/Ngoni (44%) and Namwanga (35%) in the East and West of the district respectively. Majority (71%) of the respondents breastfed their children for 18-24 months which was really encouraging as most of the caretakers have understood the importance of breastfeeding.

All (100%) of the respondents knew some form of traditional beliefs and practices towards diarrhoea in under five children and these could have an effect on the treatment of diarrhoea in under fives, as most of the children are brought to the health centre in a compromised state. Some (46%) of the respondents agreed that they gave traditional treatment to their children before bringing them to the health centres and was done by traditional healers or their grand parents. The children are at risk of developing some complications from the effects of the medication especially when the treatment is prolonged. Furthermore, bacteria or infective diarrhoea may not be cured with traditional medicines, as they are not scientifically proven.

Besides 90% of the respondents who were given some information on how to use these traditional medicines said that some of the information given to them by traditional healers were not realistic because they were not specific as per individual. In view of the above, about 90% Christian respondents condemned in all strong possible terms the practices towards diarrhoea., though they were challenged by those who accepted the practices, that even the modern medicines that were given to them were made from herbs or traditional medicines. So health personnel have to consider traditional beliefs when giving IEC and consider each client as an individual.

2. RECOMMENDATIONS

On the basis of the study results the following recommendations have been made:

1. Emphasis should be made by health educators in all training institutions for health personnel on the role of the client's traditional practices regarding diarrhoea or any other disease. This will make it possible for health personnel to give realistic, effective and appropriate IEC especially to those who strongly adhere to them.
2. Health personnel should give individualized patient/client teaching and different topics should be discussed. This is very important because the teaching will be meaningful to the clients and they will benefit more from it since it will concentrate only on their individual problems.
3. Health personnel should evaluate the effectiveness of the IEC given to the mothers on diarrhoea prevention and control in their catchment areas on monthly basis. This will help personnel to know whether the behaviour of the caretakers through IEC is changing positively towards health practices or not. It will help them to know whether the caretakers are practicing what they are taught or not.

4. Studies should be conducted in the different provinces of the country by the health personnel working in their respective provinces. They should try to identify the traditional practices related to diarrhoea so that the good ones could be identified and incorporated in the IEC and bad ones should be discouraged.
5. Health workers should assist in the establishment of diarrhoea control committees, at health centre, section and village levels involving influential members of the society in each setting. This would be successful especially in high-density areas where members are actively organized.
6. A study of this nature should be conducted on a large scale so that generalization of findings can be made and it should be done during the hot season when there are many children suffering from diarrhoea, because of water shortage.

3.3 **DISSEMINATION OF FINDINGS**

The final report was submitted to Post Basic Nursing Department and University of Zambia Medical library. A copy of which was sent to the Ministry of Health and summaries of research findings have been sent to Isoka DHMT. A conference was also organized to discuss the mothers' with under five children's knowledge and practices towards diarrhoea and their practices and their practical implications with all the rural health centre staff.

4 **LIMITATIONS OF THE STUDY**

During the conduct of the study, a number of constraints/ limitations were encountered.

- Literature on Zambian traditional customs and beliefs related to diarrhoea could not be found though studies on other aspects of the condition were found. This made it difficult to relate the results to other findings.

- The interview schedule for the under five caretakers had to be translated in Tumbuka and Namwanga by use of an interpreter. Therefore, there could be a possibility of interpreter bias.
- Non-availability of reliable vehicles in the area forced the researcher to use public transport to go to fars away rural health centres. This resulted in delay in data collection.
- It was difficult to get the desired study sample in two (2) health centre catchment areas as earlier planned as a result the sample size was reduced from 60 to 52 caretakers/mothers.
- Only three (3) focus group discussions were conducted instead of four as planned earlier on because the number of the respondents were very few to hold a group discussion.

7.0 REFERENCES

1. Adegrove, A.,(1999) .**Community Health Care**, Macmillan Publishers. London.
2. Ainsworth, R., (1997). **Better Health Through Self-Self-Reliance**, Moyo, Volume 30, Number 8.
3. Byrne, M., and Bennet, F.,J.,(1998).**Community Nursing in Developing Countries** , London, Oxford University Press Limited.
4. CBoH.,(2002).**Intergrated Technical Guidelines for Front line Health Workers**,CBoH, Lusaka.
5. Dempsey, P.,A., and Dempsey ,A.,R.,(2000).**Using Nursing Research Process, Critical Evaluation and Utilization**, 5th Edition, Lippincott,New york.
6. Ebrahim,G.,J.,(1996). **Practical Mother and Child Health in Developing Countries**, London, the Macmillian Press limited.
7. Gelfand ,E.,(1996).**An African Culture in Relation to Medicine. The Central Journal of Medicine**, Volume 23 ,Number 5 .
8. Hale, R.,e tal,(1998). **The principles and Practice of Health**, Pergamon Press Ltd, London.
9. Hanlon, J., and Pickett, G.,(1997). **Public Health Administration and Practice**, The C.C Mosby Company, Saint Loius ,London.
10. Jelliffe,D.,B.,(1996).**Health in the Tropics**, Edward Arnold Publishers Ltd, London.
11. Jelliffe,D.,B.,and Bennet,F.,J.,(1995).**Indigenous Medical systems and Child Health** .The Journal of Peadiatrics, Vol. 85, number 3 .
12. Landy,D.,(1997). **Culture, Disease and Healing**. Macmillan Publishing Company. London.
13. Ministry of Health, UNICEF and WHO report, (1990). **Traditional Medicine and it's Role in Development of Primary Health Care in Zambia**, Unpublished report.
14. Morley,D.,(1995). **Priorities in the Developing World**, Butter worths and Company, Ltd, London.
15. Munyaradzi, O.,M.,(1995). **The Africas' Attitudes to Disease**. The Central Journal of Medicine, Volume 38 ,Number 10 .

16. Paul, B.,D.,(1995).**Health, Cultural and Community**.Russel Sage Foundation
New York.
17. Polit, D.,and Hungler, B.,(2000).**Nursing Research Principles and Method**. JB
Lipincott company, Philadelphia, 7th Edition
18. Seaman,C.,H., and Verhomick, P.,J.,(1995). **Research Methods for
undergraduates students in nursing**, Appleton-Centuary Croft, New York.
19. Simwanza,P.,K.,(1999).**Determining What Mothers with Children admitted in
Hospital With Protein Energy Malnutrition Think are the causes of the
Condition**, Unpublished ,PAID-ESA , Kabwe.
20. Smith ,L., and Kane, R.,(2000).**Health Knowledge and Symptom Perception,
Social Science and Medicine**, Vol.50.
21. Smolensky, D.,and Haar, F.,B.,(1997). **Principles of Community Health**, WB
Saunders Co. Philadelphia.
22. Sweeney,M.,A.,and Oliveri, P.,(1996). **An Introduction to Nursing Research**,JB
Lippincott ,Co. Philadelphia.
23. Treece,E.,W., and Treece, J.,W.,(1995). **Elements of Research in Nursing**. The
CV Mosby Co. St. Loius .
24. Weisz, J.,R., (1995). **East African Medical Attitudes, Social Science and
Medicine**, Vol. 28.

8.0 APENDICES

ANNEX	8.1:	Interview Schedule for Mothers/Caretakers
	8.2:	Focus Group Discussion Guide
	8.3:	Work Plan
	8.4:	Gantt Chart
	8.5:	Budget
	8.6:	Permission Letter
	8.7:	Acceptance Letter

APPENDIX 8.1

INTERVIEW SCHEDULE FOR MOTHERS WITH UNDER FIVE CHILDREN/CARETAKERS

INSTRUCTIONS

1. Ask for permission from respondents to be interviewed.
2. Introduce yourself and the topic under study.
3. Reassure respondents that the information they will give will be treated as strictly confidential.
4. Circle and tick (✓) or write all respondents in the spaces provided.
5. Do not keep respondents for more than 40 minutes.
6. Make a brief summary of the responses.

Respondents identification number: _____

Locality: _____

Name of RHC: _____

Date of Interview: _____

Name of Interviewer: _____

SECTION A: DEMOGRAPHIC DATA

1. How old are you?

- a). 15 – 19 years
- b). 20 – 24 years
- c). 25 – 29 years
- d). 30 – 34 years
- e). 35 – 39 years
- f). Above 40 years

2. What is your education attainment?

- a). None
- b). Grade 1-4
- c). Grade 5-7
- d). Grade 8-9
- e). Grade 10-12
- f). College

3. What is your occupation?

- a). Housewife
- b). Self employed
- c). Formal employment
- d). None

4. Where do you live?
- a). Medium density

b). High density

c). Unclassified
5. What is your tribe?
- a). Bemba

b). Tumbuka/Ngoni

c). Nyika/Lambia

d). Namwanga

e). Others, specify_____

6. What is your religion?
- a). Hindu

b). Moslem

c). Christian

7. What is your marital status?
- a). Married

b). Single

c). Divorced

d). Widowed

e). Separated

8. How many children do you have?

- a). 1 – 3
- b). 4 – 6
- c). 7 – 9
- d). 10 – 12
- e). 13+

9. i). Have you lost any children?

- a). Yes
- b). No

ii). How many of these are under five_____

iii). What did they die of?

- a). Diarrhoea
- b). Malaria
- c). Pneumonia
- d). Others specify:_____

10. For how long do you breastfeed your children? _____

11. Did the child suffer from diarrhoea within the last one month?

- a). Yes
- b). No

12. If yes, how many times?_____

13. What could have caused

the diarrhoea? _____

14. Did you seek medical treatment or advise? _____

15. If, yes, where did you seek medical treatment?

a). Hospital

b). Health Centre

c). CHW

d). Traditional healer

e). Others, specify _____

SECTION B: KNOWLEDGE OF DIARRHOEA

16. What is diarrhoea? _____

17. How can you know the child has diarrhoea?

18. How can a child get diarrhoea (causes)?

19. How can you prevent getting diarrhoea?

20. What is the treatment of diarrhoea?

SECTION C: PRACTICE

21. What are your traditional beliefs and cultural practices in your area regarding diarrhoea?
- _____
- _____
22. Do you give children any medicine before taking them to the health centre or hospital?
- a). Yes
- b). No
23. If yes, what kind of medicine do you give to children with diarrhoea?
- _____
- _____
24. Who gives you the medicine?
- _____
25. What information is given in relation to diarrhoea by medicine supplier.
- _____
- _____

APPENDIX 8.2

FOCUS GROUP DISCUSSION GUIDE

Date: _____

Number of participants: _____

Area: _____

1. what is diarrhoea? _____
2. How can you know that one has diarrhoea? _____
3. How can you get diarrhoea? _____
4. How can you prevent diarrhea? _____
5. What is your traditional beliefs and practices regarding diarrhoea? _____
6. Is diarrhea a problem in the community? _____
7. How can you treat diarrhea? _____
8. Where do you go when a child has diarrhoea? _____
9. Any other comments? _____

8.3 WORK PLAN

ACTIVITY	TIME FRAME		RESPONSIBLE PERSON
	DATE	DURATION	
Development and finalization of the Research Proposal	Week 1- 7 06/06/05 to 30/07/05	40days	Researcher
Clearance from school	25/07/05 to 05/08/05 Week 8 – 9	10 days	Researcher
Permission to conduct a pilot study and main study from DHMT	29/08/05 to 31 /08 /05	2 days	Researcher
Pilot study and amendments in the data collection tool	01/09/05 to 09/09/05	8 days	Researcher
Data collection (main study)	12/09/05 to 30/09/05	15 days	Researcher
Data analysis	03/10/05 to 31/10/05	21 days	Researcher
Report Writing	01/11/05 to 14 /11/05	14 days	Researcher
Draft report to PBN	15/11/05 to 30/11/05	14 days	Researcher
Finalizing the report	01/12/05 to 14/12/05	14 days	Researcher
Publication of research results	15/12/05 to 31/12/05	14 days	Researcher
Monitoring research progress	-	Continuous	Researcher

8.4 GANNT CHART

Task to be performed	Responsible Person	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.Clearance for funding from Sponsor	Researcher	↔						
2.Finalize Research Proposal	Researcher		↔					
3. Clearance from school authorities	Researcher			↔				
4. Permission to conduct research from Isoka DHMT	Researcher			↔				
5.Collection of data	Researcher				↔			
6. Preliminary data analysis	Researcher				↔			
7. Data analysis and Report Writing	Researcher					↔		
8. Finalize report	Researcher							←
9.Discuss recommendations / plans of action with DHMT	Researcher							←
10.Monitor research Progress	Researcher	←						

8.5 BUDGET

Budget category	Unit price (K)	Quantity	Total (K)
A. STATIONERY			
Typing paper	30 000.00	4 reams	120 000.00
Note book	10 000.00	1	10 000.00
Diskettes	5 000.00	2	10 000.00
Pencils	6 000.00	1 packet	6 000.00
Pens	12 000.00	1 packet	12 000.00
Tip-Ex corrective fluid	5 000.00	3	15 000.00
Stapler	25 000.00	1	25 000.00
Staples	8 000.00	1 packet	8 000.00
Markers	7 000.00	5	35 000.00
Calculator	80 000.00	1	80 000.00
Eraser	16 000.00	1 packet	16 000.00
Flip chart	40 000.00	2	80 000.00
Ruler	5 000.00	1	5 000.00
Cello-tape	8 000.00	1	8 000.00
Folder	20 000.00	1	20 000.00
Total stationery cost			450 000.00
B. SECRETARIAL SERVICES			
Typing research proposal	4000.00	90 pages	360 000.00
Typing	4000.00	10 pages	40 000.00

Questionnaires			
Photocopying Questionnaires	250.00	550	137500.00
Binding research proposal	40 000.00	1 copy	40 000.00
Typing report draft	4000.00	100 pages	400 000.00
Photocopying	250.00	200 pages	50000.00
Binding final report	60 000.00	4 copies	240 000.00
Total secretarial cost			1267500.00
C.PERSONNEL			
Transport to & from Isoka	150000.00	2	300000.00
Total personnel cost			300000.00
Total costs			2017500.00
10% contingency			201750.00
Grand Total			2,218,250.00

8.6 PERMISSION LETTER.

THE UNIVERSITY OF
ZAMBIA
SCHOOL OF MEDICINE
DEPT. OF POST BASIC
NURSING
PO BOX 50110
LUSAKA.
4TH AUGUST 2005.

THE DISTRICT DIRECTOR OF HEALTH
ISOKA DHMT
PO BOX 440009
ISOKA
UFS

THE HEAD OF DEPT.
DEPT. OF POST BASIC NURSING
PO BOX 50110
LUSAKA.

Dear Sir/Madam,

RE: PERMISSSION TO CONDUCT A STUDY ON MOTHERS WITH UNDER FIVE CHILDREN'S KNOWLEDGE AND PRACTICES TOWARDS DIRRHOREA IN ISOKA.

I would like to seek permission to conduct the above stated study in your area from mid August to September, 2005 .

I am an undergraduate student at the Dept. of Post Basic Nursing/ School of Medicine.

The purpose of the study is to determine mothers' with under five children's knowledge and practices towards diarrhoea in Isoka.

I wish to conduct the study in 4 Health centres in your District and the study will entail interviewing Mothers/ Caretakers in the above subject.

Your consideration will highly be appreciated.

Your faithfully,

Elasto Miyambo Chishala.

8.7 ACCEPTANCE LETTER

Isoka District Health Management Board
P. O. Box 440009
ISOKA

3RD September 2005

Mr. Miyambo Chishala
Post Basic Nursing Department
School of Medicine
P. O. Box 50110
LUSAKA

Dear Sir,

RE: RESEARCH PROJECT

Reference is made to your letter regarding your request for permission to carry out research project in our district.

I am pleased to inform you that the management has no objection to your request and you can start as soon as you can.

Wishing you all the success in your project.

Yours faithfully,

E. Zulu
MANAGER ADMINISTRATION