

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

**MOTHERS WITH UNDER FIVE CHILDREN'S KNOWLEDGE AND
PRACTICES TOWARDS HOME MANAGEMENT OF DIARRHEA
IN LUSAKA DISTRICT.**

By

GETRUDE CHIPUKA KOSTA
Diploma in Nursing (Lusaka, 1987)
Certificate in Midwifery (Lusaka, 1999)

**A RESEARCH STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE IN
NURSING DEGREE AT THE UNIVERSITY OF ZAMBIA.**

**MOTHERS WITH UNDER FIVE CHILDREN'S KNOWLEDGE AND
PRACTICES TOWARDS HOME MANAGEMENT OF DIARRHEA
IN LUSAKA DISTRICT.**

By

GETRUDE CHIPUKA KOSTA

SPR
MED
KOS
2007

ACKNOWLEDGMENT

I would like to give my sincere appreciation to those who made it possible for me to undergo this course at UNZA, school of medicine.

Indeed special thanks go to Ministry of Health and District Health management team for having supported me tirelessly throughout the duration 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 there advise 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 gratitude to my supervisor Mrs. P Ndele for her tireless effort.

My special thanks must go to my children, friends and relatives 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 vi

List of abbreviations..... vii

Declaration ix

Statement..... .x

Dedication xi

Abstract..... xii

CHAPTER

1.0 Introduction..... 1

1.1 Background information..... 1

1.1.1 Management of diarrhea..... 3

1.2 Statement of the problem..... 4

1.3 Factors contributing to influence..... 9

1.3.1 Socio-economic factors..... 9

1.3.2 Disease related factors..... 12

1.3.3 Service related factors..... 12

1.4 Diagram of problem analysis..... 15

1.5 Justification..... 16

1.6	General objectives.....	16
1.6.1	Specific objectives.....	16
1.7	Hypothesis.....	17
1.8	Operational objectives.....	17
1.8.1	Knowledge.....	17
1.8.2	Practices.....	17
1.8.3	Caretaker.....	17
1.8.4	Diarrhea.....	17
1.9	Variables and cut off points.....	17
1.9.1	Dependable variables.....	18
1.9.2	Independent.....	18

CHAPTER 2

2.0	LITERATURE REVIEW.....	20
2.1	INTRODUCTION.....	20
2.2	Global perspective.....	20
2.3	Regional perspective.....	23
2.4	National perspective.....	25
2.5	Conclusion.....	26

CHAPTER 3

2.0	RESEARCH METHODOLOGY.....	26
3.1	Research Design.....	26
3.2	Research Setting.....	26
3.3	Demographic Profile.....	27

3.4	Socio-economic factors.....	27
3.5	Study population.....	28
3.6	Sample selection.....	28
3.7	Data collection.....	29
3.8	Advantages of the Interview Schedule.....	30
3.9	Data Collection Process.....	30
3.10	Pilot Study.....	30
3.11	Validity.....	31
3.12	Reliability.....	31
3.13	Ethical and Cultural Consideration.....	31

CHAPTER 4

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1	Data analysis.....	32
4.2	Presentation of Findings.....	32
4.3	Knowledge.....	39
4.4	Practice.....	31
4.5	Information, Education and Communication (IEC).....	44
4.6	Relationships Between Variables.....	46

CHAPTER 5

5.0	Discussion of Findings.....	51
5.1	Introduction.....	51
5.2	Discussion of Variables.....	51
5.2.1	Demographic Data.....	51

5.2.2 Knowledge of Diarrhea and its Management.....57

5.2.3 Practices.....59

5.2.4 Information, Education and Communication.....60

5.3 Implications.....63

5.4 Conclusion.....63

5.5 Recommendation.....64

5.6 Dissemination of Findings.....65

5.7 Limitation of Findings.....65

LIST OF TABLES

Table 1: Diarrhea Admissions 2003-2005.....6

Table 2: Reported Diarrhea Cases DHMT.....6

Table 3: Ten Major Causes of Visitation to Health Facilities.....7

Table 4: Variables, Indicators and cut – off points.....19

Table 5: Demographic Data.....33

Table 6: Respondent's understanding of diarrhea..... 39

Table 7: Manifestations of diarrhea.....39

Table 8: Management of Diarrhea at Home.....40

Table 9: Knowledge on Making Home Fluid for Diarrhea treatment.....40

Table 9A: When to Take Child To Health Centre.....41

Table 10: Traditional Beliefs Regarding Diarrhea.....41

Table 11: Respondents Who Gave Their Children Medicine Before Taking them
to health Center.....42

Table 12: Type of Medicine Given.....42

Table 12A: Persons Who Supply Medicine / Care takers.....42

Table 13: Responses on Feeding a Child with Diarrhea.....43

Table 14: Responses on Type of Food Given.....43

Table 15: Amount of Water for Reconstitution of ORS.....43

Table 16: Responses on How to Give ORS.....44

Table 17: Responses on Whether Mother / Care takers Receive IEC.....44

Table 18: Responses on Who Gives the Talks.....45

Table 19: Responses on types of information given.....45

Table 20: Education level in relation to age of respondents.....	46
Table 21: Education level in relation to occupation	47
Table 22: Educational level in relation to residence.....	48
Table 23: Age in relation to mother's or caretaker's knowledge.....	48
Table 24: Education level in relation to knowledge.....	49
Table 25: Education level in relation to definition of diarrhea.....	49
Table 25A: Residence in relation to death of children.....	50
Table 26: Education in relation to marital status.....	50

LIST OF ABBRIVIATIONS

MMD	-	Movement for Multy Party Democracy
ZHDS	-	Zambia Demographic Health Survey
WHO	-	World Health Organization
IMCI	-	Integrated Management of Child Illnesses
IEC	-	Information, Education and Communication
UTH	-	University Teaching Hospital
LDHMT	-	Lusaka District Health Management Team
MoH	-	Ministry of Health
IV	-	Intravenous
HMIS	-	Health Management Information System
MDG's	-	Millennium Development Goals
HRH	-	Human Resource for Health
ORS	-	Oral Rehydration Salt's
CSO	-	Central Statistical Office
UNZA	-	University of Zambia
UNICEF	-	United Nations International Children's Fund

DECLARATION

I Gertrude C. Kosta here by declare that the work presented in this study for the degree of Bachelor of Science in nursing has not been presented either wholly or in part 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.....*G. Kosta*..... Date.....*10/4/2007*.....
Candidate

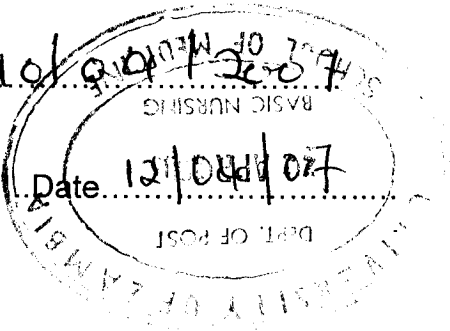
Statement

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

Signature of author.....*Rosta*.....Date.....*10/09/2007*.....

Signature.....*Figoma*.....Date.....*12/10/2007*.....

Supervising Lecturer



DEDICATION

I wish to dedicate this work to my friends Collins, Brian, David and my children including relatives and well wishers for their patience, support and encouragement during the time I was pursuing this program.

ABSTRACT

The study was conducted in Lusaka district, and targeted two compounds: these are misisi and kabwata. The purpose of the study aimed at determining mothers' / caretakers knowledge and practices towards home management of diarrhea. Literature review was based on child rearing practices and traditional beliefs regarding diarrhea and its management. A pilot study was conducted in one of the compounds in the district to test the two. The study is descriptive in nature and data was collected by interviewing 50 mothers / caretakers with under five children. The data collected was analyzed manually with aid of a scientific calculator and the responses were processed and categorized. The compounds used for the study were selected at random. A sample of 50mothers / caretakers was selected using systematic random sampling.

The study reviewed that only 4 (8%) of the respondents agreed that they always receive health talks on the management of diarrhea at home. The majority 24 (48%) of the respondents on home management of diarrhea stated that they did not know how to manage a child with diarrhea at home. Therefore, healthcare providers at the health centers need to take time in explaining to the mothers /caretakers on how to manage the child with diarrhea at home. This will help increase knowledge in the mothers / caretakers and will help reduce the morbidity and mortality rates attributable to diarrhea diseases.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Zambia with an area of 752,614 square kilometres is one of the developing countries in the sub-Saharan region consisting of about 2.5 % of the area of Africa. It shares borders with Democratic Republic of Congo and Tanzania in the North, Malawi and Mozambique in the East, Zimbabwe and Botswana in the South, Namibia in the Southwest and Angola in the West. Administratively the country is divided into nine provinces and seventy-two districts.

Zambia has a mixed economy consisting of modern and urban sector confined to the line of rail and rural agricultural sector. The modern sector was dominated by parastatal organizations most of which have since been privatised by the Movement for Multiparty Democracy (MMD) government.

The projected population for 1996 and 2015 is 9.453,894 with an annual growth rate of 3.2%. Zambia has a national general population density of 10.8 per square kilometres. The regional variations range from 4 to 40 people per square kilometres. The trend in population has been fairly constant.

The age groups 0 -14 years constitute 48.8% of the total population. It is also significant that children under 15 years and women of childbearing age (15 –49) constitute close to 75% of the population in any given year (ZHDS, 1992). The incidence of diarrhoea is high among the under 5 children who constitute the majority of the population. Diarrhoea can be fatal in children especially if it is not well managed. It can cause severe dehydration resulting in severe complications.

Diarrhoea is one of the major causes of mortality and morbidity in children under five years in Zambia. According to World Health Organization 1992, diarrhoea was reported to be a leading cause of illness and death among children in developing countries. The episodes of morbidity were estimated at 1.3 thousand million while mortality was at 3.2 million per year for the under five children. Most of these deaths occur during the first 2 years of life. MoH (1990) estimated that there were approximately 457 million episodes of diarrhoea each year in children between the ages of 0 - 4 years in Asia, Africa and Latin America. Diarrhoeal diseases are challenging paediatric problems and they represent an economic burden for the developing countries like Zambia. In many countries, patients with diarrhoea occupy most of the hospital beds for children.

The number of stools normally passed in a day varies with an individual diet and age. Diarrhoea may be defined as the passage of three or more loose or watery stools in a 24 hours period, a loose stool being one that would take the shape of the container; frequent passing of normal stool is not diarrhoea (WHO, 1992). According to WHO, there are three types of diarrhoea, namely:

Acute Diarrhoea. This is the passage of frequent loose stools without blood in a short period of time (less than 14 days). This could cause sudden onset of dehydration or may not even cause any dehydration at all.

Dysentery. This is the presence of blood in stools. It may be acute or persistent lasting more than 14 days or less. This kind of diarrhoea may /may not cause dehydration.

Persistent Diarrhoea. This is frequent passage of watery stools without blood for more than 14 days. It begins as watery diarrhoea followed by gradual loss of weight and dehydration.

Diarrhoea is very common in babies who are artificially fed and rare in their counterparts who are entirely breastfed. Low standards of hygiene such as dirty feeding bottles and teats with left over milk provide very good media for the growth of pathogens leading to diarrhoea in such infants.

1.1.1 MANAGEMENT OF DIARRHOEA

According to WHO (1992), management of diarrhoea is based on three plans, categorised as plan A, B and C. The main danger of diarrhoea is death normally resulting from dehydration. Diarrhoea with no signs of dehydration is managed at home using plan A.

Plan A. Management in this plan involves giving the child more fluids than usual to prevent dehydration. Mothers/care takers are taught how to prepare Oral Rehydration Salt at home. The Home fluids used are fluids such as salt and sugar solution, Oral Rehydration Salt Solution, food based fluids (soup, rice and yoghurt drinks) and plain water. Mothers /caretakers are advised to continue breast-feeding and to increase the frequency. They are also advised to give plenty of nutritious food to those children above 4 - 6 months to prevent malnutrition. Mothers/caretakers are also advised to give children under 2 years about 50 – 100 mills of fluid after each loose stool. Children above 2 years should be given about 100 – 200 mills. Care takers/Mothers must take the children to the health worker, if the child does not get better in five (5) days or develops other signs such as eating and drinking poorly, repeated vomiting, many watery stools, fever or blood in stool and marked thirst.

Plan B. Diarrhoea with dehydration is managed using plan B. This involves showing the mother/care takers how much solution to give the child, how often and to continue assessing the child for danger signs. If the child vomits, the mother/caretaker is advised to wait for 10 minutes, and then give the solution more slowly. The recommended amount of ORS is given over a period of 4 hours in the clinic. If the caretaker has to leave before completing Plan B, she/he should be shown how much ORS to give to finish the four-hour treatment at

home. He/She should be given enough ORS sachets to continue re-hydrations at home.

Plan C. Diarrhoea with severe dehydration is managed using Plan C. This is to treat severe dehydration quickly by the use of intravenous fluids (IV). Ringers lactate solution or normal saline 100mls / kg body weight is given. The child is monitored for progress by assessing the hydration levels every 1- 2 hours. Nasal – gastric tube can be used to give the ORS where there is no access to IV drip. 20mls / kg / hour is given for 6 hours (WHO, 1993)

The objective of this study is to find out what mothers with under 5 children know about home management of diarrhoea. Home management of diarrhoea, using plan A, when used effectively can help in reducing the episodes of diarrhoea in under 5 children. The aim of the study is to help mothers of children under 5 years to be able to know and state correctly the three rules of diarrhoea case management at home, which are to increase fluid intake, continue feeding and to seek medical care when needed. If the patient does not respond to treatment in 3 days or develops such problems like passing many watery stools, repeated vomiting, eating or drinking poorly and marked thirst, urgent medical consultation should be sought.

On the other hand, it was observed that some mothers/caretakers of under 5 children still have faith in traditional beliefs and practices, which are part and parcel of their culture. Culture is all about peoples' customs, beliefs, values, attitudes and their moral codes. Traditional beliefs and practices still persist in the traditional Zambian society despite the emerging scientific and technological advancement in modern medicine. Hence, traditional beliefs and practices are likely to influence mothers' decision on the home management of diarrhoea. The mother is likely to seek help from the traditional healer as opposed to taking the child to a health centre in most instances

The government, through the MoH has put in place some measures to control diarrhoea in under 5 children through adoption of the integrated management of childhood illnesses (IMCI) strategy which emphasizes careful assessment, classification and proper management of diarrhoea. IEC on proper refuse disposal, provision of safe and adequate water and proper sanitation has also been strengthened. The other areas where IEC has been intensified include the importance of immunization, nutrition, and breastfeeding. Currently, exclusive breastfeeding is also encouraged for the first six months of life. This is because breastfeeding provides immunity to the baby.

1.2 STATEMENT OF THE PROBLEM

Diarrhoea is the leading cause of morbidity and mortality in children under 5 years in developing countries such as Zambia. It is one of the major health problems in Zambia. It is among the top five causes of morbidity and mortality among the under five children. Drinking contaminated water is a major source of the organisms that cause diarrhoea in children. According to a 1996 National Demographic Health Survey, the prevalence of diarrhoea in children under five years in Zambia was reported to be at 25 %. Contaminated water is a serious problem in Zambia. Many Zambians in peri-urban areas get water from shallow wells and in most cases, these shallow wells are situated near pit latrines, which directly contaminate the well water through underground seepage. The 1996 ZDHS reported that 77% of the shallow wells in Lusaka were contaminated with E-coli. According to available information, admission cases due to diarrhoea are seen to be on the increase at university Teaching Hospital as reflected in 1 table below. The diarrhoea admissions increased from 1, 057 in 2003 to 1, 135 in 2005 (UTH Paediatrics data base). Deaths due to diarrhoea also increased from 214 in 2003 to 230 in 2005 (UTH Paediatrics data base)

TABLE 1: DIARRHOEA ADMISSIONS 2003 – 2005

2003			2004			2005		
Admission	Discharges	Death	Admission	Discharges	Death	Admission	Discharges	Death
1057	843	214	1186	1016	170	1365	1135	230

Source: Data base U.T.H Paediatrics 2005.

Similarly, Lusaka District Health Management Team (LDHMT) reported an increase in cases of diarrhoea from the Lusaka Urban Health Centres as reflected in table 2 below. For example, non-blood diarrhoea cases increased from 128 677 in 2002 to 9 100 101 in 2005 (DHMT, HMIS 2005). Diarrhoea with blood (dysentery) increased from 300 971 in 2002 to 5004 but to 2 564 in 2005. Hence, the total number of cases has shown steady increase from 430, 648 in 2002 to 9, 102, 665 in 2005 (DHMT, HMIS 2005).

TABLE 2 : REPORTED DIARRHOEA CASES DHMT

	BLOOD DIARRHOEA	NON BLOOD DIARRHOEA	TOTAL
2002	300 971	128 677	430 648
2003	200 594	140 092	340 686
2004	500 081	940 502	1 141 096
2005	2 564	9 100 101	9 102 665

Source: DHMT, HMIS 2005

Table 3 below shows the major causes for hospital visitations per 1, 000 population where non-blood diarrhoea ranks third (MOH, HMIS 2005). The

number of cases are higher among the under 5 children as compared to those above 5 years. In view of this scenario, it is important to carry out this study in order to ascertain factors contributing to the higher incidence of diarrhoea cases among the under 5 children so as to find measures to reduce the incidence.

TABLE 3: TEN MAJOR CAUSES OF VISITATION TO HEALTH FACILITIES

DISEASE NAME	INCIDENCE PER 1,000 POPULATION		
	Under 5	Over 5	Total
Malaria	1 108	197	373
Respiratory Infection	469	84	161
Diarrhoea (non blood)	258	31	75
Trauma	57	43	46
Respiratory Infections (Pneumonia)	132	21	42
Skin infection	111	26	42
Eye infection	145	14	40
Ear/nose/throat infection	57	16	24
Digestive system	23	18	19
Muscular skeleton	5	21	18

Source: MOH, HMIS 2005

In addition, 2005 MoH Annual Health Statistical Bulletin showed that Lusaka Province had both the highest incidence of diarrhoea in both under 5 years age group (335 per 1 000 population) and the age group 5 years and above (59 per 1, 000 population) compared to the other provinces.

The overall incidence of diarrhoea with no blood in all provinces combined was about 8 times higher in the under 5 years age group (258 per 1 000 population) than the age group 5 years and above (31 per 1 000 population) (Annual Health statistical Bulletin, MoH 2005). The MoH Annual Health Statistical Bulletin (2005) revealed that dysentery or bloody diarrhoea at National Level was three times

higher in the under 5 years age group (14.4 per 1 000 population) than the age 5 years and above (4.4 per 1 000 population). It is most likely that the incidence of diarrhoea in under 5 children could be higher than the reported figure as institutional data does not include cases in the community.

Available data has revealed that diarrhoea is one of the major causes of admissions in both the hospitals and health centres in Zambia (MoH, 1995). Effective home management of diarrhoea could reduce morbidity and mortality in under five children. Perhaps if mothers/caretakers were given correct information on how to manage their under 5 children with diarrhoea at home, the incidence of diarrhoea would be reduced.

The high incidence of diarrhoea in under 5 children could be attributed to traditional beliefs and practices. Many mothers prefer to take their children to traditional healers for treatment before bringing their children to the hospital. It may also be attributed to educational level and age of the mother. The mother/caretaker who is educated will seek medical help from health care professionals than an uneducated mother. The young mother will also not know what to do when the child has diarrhoea. The other factor contributing to the high incidence of diarrhoea is poverty. About 69% of the Zambian population lives in abject poverty (ZDHS, 2001). Poverty is associated with poor environmental sanitation and this could lead to increased cases of diarrhoea. The high incidence of diarrhoea in under 5 children could also be attributed to diseases such as malnutrition and HIV/AIDS where the immunity is compromised.

In view of the above, the researcher has decided to conduct this study in order to provide information that would assist in designing IEC strategies aimed at reducing morbidity and mortality resulting from diarrhoea.

1.3 FACTORS CONTRIBUTING OR INFLUENCING THE PROBLEM

There are several factors that may influence mothers/caretakers' knowledge and practices towards home management of diarrhoea. These include socio-cultural orientations, disease and service related factors. The socio-cultural factors are age of the mother, the education level, lack of knowledge on diarrhoea and its management, traditional beliefs and practices. These factors are discussed below.

1.3.1 SOCIO-CULTURAL FACTORS

Traditional Beliefs

Smolensky and Haar (1997) stated that an individual learns customs and beliefs from 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 either conciliating the ancestral spirits or taking an antidote against the witches poison. Therefore, it has been observed that traditional beliefs and practices could be the major factors that influence mother's decision on home management of diarrhoea. Mother's/caretakers' view of what type of diarrhoea their child has would affect their choice of treatment. The mother is likely to use traditional medicine if the diarrhoea is associated with witchcraft.

Mothers Age

The age of the mother can influence the mother's decision depending on their background. The older mothers/caretakers who may be influenced by traditional beliefs could prefer using traditional herbs to modern therapy. The adolescent mothers may not have knowledge on either traditional medicine or the modern therapy. Sometimes they may not even know the seriousness of diarrhoea, because they are too young to be responsible. The older mothers may be

resistant to change from their practices while the younger ones may be easily influenced by their peers.

Preference of Traditional Medicine

Mwangi, et al (2004), stated that traditional herbal medicine is a worldwide practice that has preoccupied mankind in his evolution. World Health Organization estimate that 70-90% of rural population in developing countries still relies on herbal medicine to meet, partially or totally, its health needs. Indeed, herbal medicine is recognised by World Health Organization as an essential component of primary health care.

Herbal medicines, which formed the basis of health care throughout the world since the earliest days of mankind, are still widely used. Therefore, medicinal plants have been a common source of medicaments, either in the form of traditional preparations or as pure active principles (Orwa, 2002).

Smith and Kane (2000) stated that mothers of suffering children sought medical or traditional Healers' advice depending on the precipitating factors of recognition of the cause, symptoms and prognosis of the illness. Therefore, the mother's knowledge about diarrhoea determines the response. Mothers/caretakers may prefer to use traditional Herbal medicine due to its availability in their home setting. It could be easy to access and cheaper than the modern therapy.

Education Level of the Mother

Education is a major factor in enhancing a country's social and economic development as it aids in fighting against poverty and hunger. Education is crucial because it enhances the life opportunities of women and their families. Girl's education is critically important not only for harnessing the nation's human resource base for development, but also for raising the self- esteem, confidence and widening the choices of females, their access to information and knowledge (Millennium Development Goals, 2005).

The mother's Educational level can have influence on the mother's understanding of the IEC that is given at health facilities. Mothers/caretakers with high education are likely to understand the IEC better than those with low educational level. Those with high education are able to read and understand health issues and increase their knowledge. Lack of education coupled with poverty deprives the mothers to have access to media (television and radio) teachings on management of diarrhoea.

Inadequate Income

In Zambia, the poverty level remains high, with 46% proportion of people living in extreme poverty (MDGs Status Report, 2005). The link between ill health and poverty has been well established. Poverty leads to ill health and ill health is more likely to impoverish the poor further than the health and wealthy. Thus, preventable and treatable diseases have taken an enormous toll on the poorest people in Zambia who do not have access to professional health care, health information, safe drinking water and sanitation, education, decent housing and secure employment. Further, evidence from research in Zambia has shown that although the poorest people suffer disproportionately from preventable diseases, they tend to make less use of health services (MoH, Strategic Plan, 2005). Some mothers/caretakers may not have adequate funds to buy sugar and salt to make the recommended WHO sugar and salt solution hence, may end up using traditional herbs, which may be available locally.

Lack of Food Based Fluids

Jarayyan et al (1994) recommended the use of food-based fluids like rice water in the management of diarrhoea. However, some mothers may not be able to buy such food like rice due to inadequate funds in their homes. Such mothers/caretakers are likely to use traditional medicine, which is usually available at little or no cost.

1.3.2 DISEASE RELATED FACTORS

It is very important for the mother to know the meaning of diarrhoea, only then can she decide and seek medical help (Armed, 1994). Armed stated that most of the mothers, even the literate wrongly attribute diarrhoea to teething. On the basis of that concept they manage diarrhoea by incising and cauterizing the site of teeth eruptions. The perceived causes of diarrhoea also include the exposure to excessive heat, and the belief that milk of a pregnant woman is a cause of diarrhoea, they therefore wean their children prematurely when they become pregnant, they do this suddenly therefore exposing their children to contaminated artificial feeding and hence diarrhoea and malnutrition. He also reported that very few mothers/caretakers could identify the earliest and simplest signs of dehydration, thus the child can go into severe dehydration unnoticeably.

According to Jurayyan (1994), lack of perceived severity of diarrhoea could affect the mother's decision towards its treatment. The adolescent mothers may not be able to know the severity of the disease, hence may delay commencement of therapy. The older mothers may be influenced by their traditional belief that diarrhoea is a means of cleaning up the bowels therefore, may not know that the child is dehydrated and needs fluid replacement (re-hydration).

1.3.3 SERVICE RELATED FACTORS

Shortage of Staff

The situation of Human Resource for Health (HRH) in the Ministry is in a crisis and requires urgent measures to address it. The health sector is a labour-intensive industry, which demands for health workers to be available in the health facilities. The recent trends of globalisation have seen a high demand for health workers worldwide. The lack of prioritization of HRH by Government and cooperating partners led to high attrition of health workers who left for greener pastures to the western world, stronger economies within the region and to the local private labour sector market.

The Government has not been able to provide improved conditions of service and incentives for health workers. This scenario presents an environment ideal for de-motivating and increased brain drain. The high brain drain has led to increased workload for the few staff left further increasing stress and resulting in poor service delivery (MoH Strategic plan, 2005). Therefore shortage of health care providers could be a leading cause to mothers receiving inadequate I E C and counselling on the management of diarrhoea. This may lead to mothers/caretakers not having adequate knowledge on the management of diarrhoea and it may affect their practice.

Poor Staff Attitude towards IEC

Some health care providers may not be willing to give I E C due to various reasons. Some of the reasons could be lack motivation due to poor wages and conditions of service. Lack of sufficient knowledge among the health care providers may affect their attitude towards giving IEC hence mothers/caretakers may be deprived of the important information needed on diarrhoea and its management. Inadequate knowledge among mothers could affect their practice.

Inadequate Supply of ORS

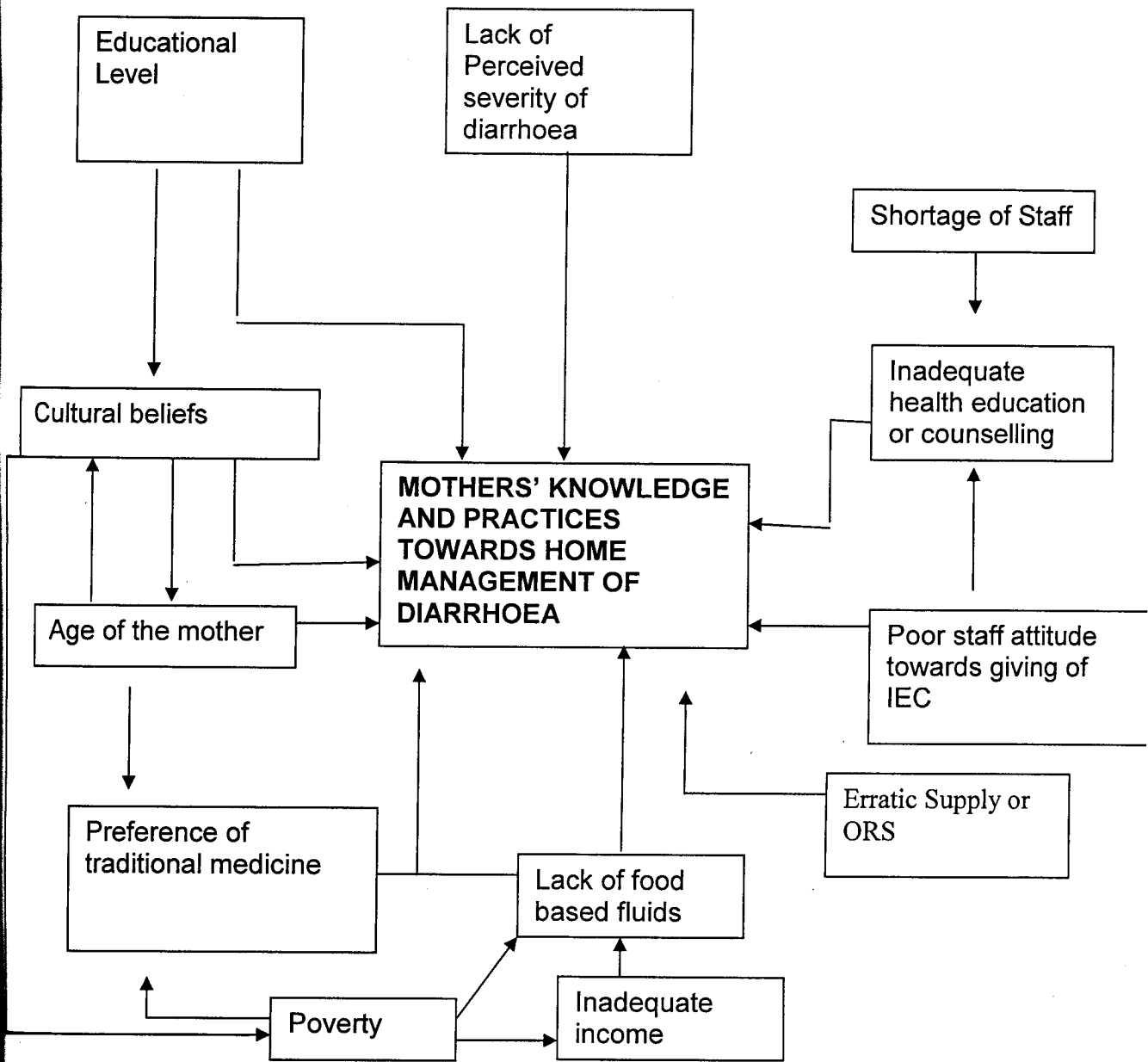
Recent studies have indicated that health services have not improved much as patients are still buying drugs most of the time; people do not understand why they pay for medical schemes and at the same time being asked to buy the medicine (Nalishebo, 1998)

Mutati (1997) in her study discovered that availability of drugs was the most determining factor on what is considered as good health to the community. Despite the introduction of cost sharing fees in the health sector, the public is still complaining about the poor health services being offered by health institutions. Health care providers too are complaining of non-availability of resources to render quality care to the community. Consequently, some health centres may not even have adequate stocks of ORS and mothers/caretakers may be advised to buy. Mothers/caretakers who may not have money to buy ORS may end up using herbs, which could be available locally.

to buy. Mothers/caretakers who may not have money to buy ORS may end up using herbs, which could be available locally.

1.4 DIAGRAM OF PROBLEM ANALYSIS SHOWING FACTORS CONTRIBUTING TO HOME MANAGEMENT OF DIARRHOEA

SOCIO-CULTURAL/ DISEASES-RELATED SERVICE-RELATED
ECONOMICAL FACTORS FACTORS
FACTORS



1.5 JUSTIFICATION

Diarrhoea is a leading cause of morbidity and mortality in children under 5 years. In Zambia it is one of the major health problems affecting the under 5 children. It is indeed among the top five causes of morbidity and mortality. Diarrhoea is one of the leading causes of hospital admissions in children, leading to congestion in most of the paediatric wards (Data Base, UTH Pediatrics 2005).

Several studies have been done on general management of diarrhoea but none have been done on the home management of diarrhoea. The researcher wishes to determine the mothers/caretakers knowledge and practices regarding home management of diarrhoea in the under 5 children. The researcher believes that possible solutions could be sought which will help in the delivery of effective and appropriate IEC on the home management of diarrhoea. It is hoped that this will help reduce the infant morbidity and mortality resulting from diarrhoea. The mothers/caretakers will be able to effectively manage their children at home and this will also help them save on transport, time and hospitalisation costs.

It is hoped that the study will be beneficial to policy makers such as the Ministry of Health and non-governmental organizations like UNICEF, CARE INTERNATIONAL and WHO.

1.6 GENERAL OBJECTIVES

To determine the knowledge and practices of mothers/caretakers of under 5 children towards home management of diarrhoea in Lusaka.

1.6.1 SPECIFIC OBJECTIVES

1. To determine mothers/caretakers knowledge on home management of diarrhoea.
2. To find out mothers/caretakers' practices when a child has diarrhoea.
3. To identify areas for further research.
4. To make recommendation to the relevant authorities.

1.7 HYPOTHESIS

1. The older the mother/caretakers, the more likely she is likely to practice traditional therapy in the home management of diarrhoea.
2. Inadequate IEC on diarrhoea is likely to lead to poor knowledge and practice on home management of diarrhoea.

1.8 OPERATIONAL DEFINITIONS

1.8.1 Knowledge

Knowledge is the "Information combined with experience, content, interpretation, and reflection. It is a high value form of information that is ready to apply to Decision and actions (Davenport et al, 1998)

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 diarrhoea. It may also include how they dress, their marriage customs and family life, their patterns of work, religious ceremonies and leisure pursuit (Giddens, 1997).

1.8.3 Caretaker

Any person who assumes responsibility of looking after a child with diarrhoea, for example amother.

1.8.4 Diarrhoea

Diarrhoea may be defined as the passage of three or more loose or watery stools in a 24 hours period, a loose stool being one that would take the shape of the container; frequent passing of normal stool is not diarrhoea.

1.9 VARIABLES AND CUT OFF POINTS

A variable is an attribute of a person or an object that varies, which takes on different values such as age, blood pressure and temperature.

(Treece and Treece 1996).

The following variables will be used in the study:

1.9.1 Dependent variables

It is the outcome variable of interest, or the variable that is hypothesised to depend on or be caused by another variable (Cormack, 1984). The dependent variables in this study are:

- Knowledge
- Practice

1.9.2 Independent variable

It is the variable that is believed to cause or influence the dependent variable such as in experimental research (Cormack, 1984). In this study, IEC and level of education are two independent variables thought to influence the problem under study.

Table 4 : VARIABLES, INDICATORS AND CUT-OFF POINTS

VARIABLE	INDICATOR	CUT-OFF POINT
DEPENDENT VARIABLES		
Knowledge	High Knowledge	A score between 8-10 on diarrhoea knowledge questions
	Medium Knowledge	A score between 7-5 on diarrhoea knowledge questions
	Low Knowledge	A score below 4 on diarrhoea knowledge questions
Practice	Very good	A score between 5-7 questions on management of diarrhoea at home correctly
	Good	A score of 2-4 on practice questions
	Poor	A score of 1 on practice questions
INDEPENDENT		
IEC	Very good	Always Given
	Good	Sometimes Given
	Poor	Not Given
Educational Level	High	College/University
	Medium	Secondary education
	Low	Primary Education

CHAPTER TWO

2.0 LITERATURE REVIEW :

2.1 INTRODUCTION

Literature Review is a process that involves finding, reading, understanding and forming conclusions about the published research on a particular topic (Treece and Treece, 1996).

The purposes of the literature review are the following:

- Helps researcher to find methods for research used by others that may be useful for the study.
- Helps to locate pertinent data or ideas useful for the present study or new study design.
- May help in discovering certain aspects, which may be included in the study to confirm or refute earlier findings.
- To find comparative data that will be valuable in interpreting conclusions of the study.
- To prevent duplication of work that has been done before
(Treece and Treece; 1996)

The literature review will be organized according to Global, Regional, and National Levels. It will focus on studies on the management of diarrhoea.

2.1 GLOBAL PERSPECTIVE

Advising mothers to give adequate fluids when a child has diarrhoea requires that health workers know which of the fluids currently available at home are safe and culturally acceptable to give the child with diarrhoea. A study among the Abaluyia speaking people in Kenya examined the use of cereal based fluids in the home management of diarrhoea .The focus of the study was on the feasibility of using uji in the management of diarrhoea. Uji is a porridge made of maize, millet or sorghum. The study recommended that mothers should be advised to

give unfermented uji called (kiyaya) tea and cooked bananas rather than to give increased fluids (W.H.O.1994).

Another study was conducted in the Philippines by WHO (1994) to assess the feasibility of promoting rice water as a recommended home fluid during diarrhoea in relation to other foods and fluids. The study revealed that even if mothers accepted the use of rice water in preference to other fluids, their practice was different. In the same study, it was also observed that some mothers/caretakers gave water, cereal, and soups but not rice water (W.H.O. 1994). Two other studies were conducted to determine treatment preferences for different types of diarrhoea in the Philippines by WHO (1994). Both studies reported that mothers' views of what kind of diarrhoea their child had affected the choice of treatment. If diarrhoea was associated with witchcraft they gave traditional medicine, and if it was associated with malaria they gave modern medicine (W.H.O. 1994).

According to W.H.O and UNICEF statement (1997), Oral Rehydration Salt (O.R.S.) and Oral Rehydration Therapy (O.R.T.) adopted by UNICEF and W.H.O. in the 1970's, have been successful in the management of diarrhoea among children. However, it has been observed that in some countries knowledge on the use of appropriate home therapies to successfully manage diarrhoea was declining. The statement emphasized the need for countries to reinforce family knowledge on diarrhoea. Therefore, families should be encouraged to have ORS ready mix packages readily available in their homes.

It was also recommended that all countries should develop a 3-4 years plan to reduce mortality rates from diarrhoeal diseases. Countries should be able to assess progress in controlling diarrhoeal diseases by monitoring usage rates of ORT/ORS home based treatment and zinc supplement. All countries were encouraged to use the media and face-to-face communication, promote and refine messages on diarrhoea and appropriate care seeking (WHO/UNICEF JOINT STATEMENT, 1997).

WHO (1992) stated that only the child's mother or caretaker could give effective home treatment for diarrhoea. The mother/caretaker has to prepare the fluids and give it correctly, provide nutritious foods and decide when the child needs to return to the treatment centre. However, the mother/caretaker can only be able to do these tasks correctly if she understands clearly what needs to be done and how to do it. WHO (1992) further states that the best opportunity for a mother/caretaker to learn about home treatment of diarrhoea is when she takes her child to the treatment centre when the child has diarrhoea. Unfortunately, this opportunity is often lost because doctors or health workers do not communicate well with the mother/caretaker. In most cases the mothers/caretaker return home without understanding how to continue treating their children effectively. Poor communication by doctors has been attributed to their use of scientific or technical terms to mother whose perspective is usually tradition and non-scientific.

Mothers/caretaker seems to learn better through demonstrations and practice and in an atmosphere of patience, encouragement, and understanding. The combination of instructions with the use of examples, demonstrations and practice in the home treatment of diarrhoea has been seen to facilitate the learning process. For instance, if a health worker wants to teach a mother/caretaker on how to carry out ORT at home, the mother/caretaker should have a familiar vessel and the health worker must mark on it a measurement for example 100mls and explain to the mother/caretaker how much of the measure makes the required amount for making the ORS solution. Instruct the mother/caretaker to give a specific amount of the solution or ORS (according to the weight of the child) after each motion of loose stool. Another effective way, would be to give the solution using a cup and spoon so that she can see how to hold her child and how to frequently give the cup and spoon of the fluid .The mother/caretaker is then allowed to practice giving ORS solution to her own child, with guidance from the health worker. (WHO, 1992).

2.2 REGIONAL PERSPECTIVE

In a study conducted by Muriithi (1996) in Odukpani, Nigeria on fluid intake and feeding practices among under 5 children during episodes of diarrhoea, it was discovered that the type of fluid used in an area depended on local conditions and the type of traditional home remedies available (fruit juice, weak tea and cereal-based gruel), availability of salt and sugar, access of mothers/caretakers to health services, National policies, and availability of oral rehydration salts. However, the standard WHO ORS sachets and home-prepared Salts-Sugar Solution (SSS) are recommended for use. The home fluid mostly frequently used other than plain water was ogi, which is a cereal-based agent. Ogi is believed to reduce stool output, frequency and duration. It's availability and affordability makes it a potential fluid for recommendation and promotion as a home fluid.

Few mothers/care takers were reported giving "soft drinks" like coke, fanta and sprite .The use of soft drinks was discouraged due to their high osmolarity which may lead to osmotic diarrhoea resulting in additional fluid loss. It was reported that there was greater weight gain in children given liberal diet intake during diarrhoea when compared with others on a more restricted diet. The study recommended that, the education given to mothers/caretakers on diarrhoea management should emphasize the continuous liberal dietary intake during and after diarrhoea. It also recommended that mothers/caretakers should be encouraged to continuously breast-feed during the episodes of diarrhoea if children are still breastfeeding. The study states that health workers could provide the relevant health information with demonstration to mothers at maternal and child clinics and in various women groups for example, the market women association Muriith (1996).

Dehydration is a potential life-threatening event to the child and requires recognition and correction (Edet, 1996). A study conducted in Saudi Arabia on management of acute diarrhoea reported that most of their patients reported with isonatremic dehydration (81.2%) and only 7% presented with hypernatremic dehydration. The study reviewed that although about 60% of the patients admitted were mildly dehydrated and about 92.7% were moderately dehydrated,

as many as 95.8% were given intravenous hydration at least initially. This indiscriminate use of intravenous therapy was attributed to the parent's anxiety and persistent vomiting. In the majority of these cases, effective home management using oral rehydration could have prevented any unnecessary hospitalisation with the cost entailed, the risk of cross infection and inconvenience to the whole family.

Another study conducted at a major teaching hospital in Riyadh, Saudi Arabia, Abdullah reviewed that most of the admissions (96%) were having either no dehydration or some (moderate) dehydration, and yet as many as 65% were given I.V fluids. It was clear that only 1.6% of their patient's required I.V therapy because of profuse vomiting (Jurayyan et al, 1994). Therefore, for the home management of diarrhoea to be successful and more effective, health workers and parents should understand the logistics and practicality of using oral rehydration therapy.

Gelfad (1996) stated that most people especially Africans attribute many illnesses as being due to the anger of the spirit guardian of the family or witchcraft. This notion was confirmed by Jelliffe (1996) who stated that most mothers might have different ideas as to what they believe to cause the diseases to their children, for example it could be witchcraft or eating forbidden food. Each culture respects and accepts certain values, attitudes and beliefs regarding diarrhoea (Jelliffe, 1997). Aimsworth (1997) stated that provision of adequate Information Education and Communication (IEC) relevant to the local culture and environment will increase their awareness of how to be self-reliant. For example, IEC on local traditional beliefs and practices concerning diarrhoea lessens the mother's conflict on whether to adopt the modern methods of treating diarrhoea or to continue with the old beliefs and practices. He said that it was important for health workers to know the mothers' traditional beliefs and practices regarding diarrhoea so that advice is given based on these practices. Aims worth (1997) further stated that health workers should be able to use the good traditional beliefs in teaching the mothers to try and change or modify bad beliefs through IEC.

Bennet (1996) also emphasized that knowing mothers traditional beliefs regarding diarrhea in the under 5 children would make health workers understand some of the reasons why mothers would prefer tradition medicine to the modern medicine. Essentially, the IEC given to the mothers or community must not be in conflict with their beliefs, customs and ideas to prevent its rejection.

2.3 NATIONAL PERSPECTIVE

Basically there is not much literature on the home management of diarrhoea. The literature available is on general management of diarrhoea. However, Zambia like any other country has its own traditional beliefs, customs and practices. These traditional beliefs could have an influence on the mother's decision on the treatment of diarrhoea.

One of the major obstacles for the successful delivery of IEC on diarrhoea management in Zambia might be the cultural resistance (Chishala, 2006).

He reported that there was a common tendency among trained health personnel to ignore, if not ridicule the client's traditional beliefs and practices to diarrhoea.

2.4 CONCLUSION

The literature review shows that mothers have inadequate knowledge on diarrhoea and that customs and beliefs have great influence on the mother's practices.

Customs and beliefs also influence the mothers' decision on the choice of modern of treatment.

Not many studies have been conducted locally on home management of diarrhoea. Therefore, this study focuses on home management of diarrhoea.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

This is the researchers' plan for obtaining answers to a question or to a research hypothesis (Pilot and Hungler, 2000). The purpose of the study was to determine knowledge and practices of mothers/care takers with under 5 children towards the management of diarrhoea.

This was a descriptive study that involved the systematic collection and presentation of data to give a clear picture of the situation which was under study (Treece and Treece, 1996). The reason for using descriptive study design was done in order to give an accurate account of the characteristics of the community under study. The study also involved a systematic collection and presentation of data to give a clear picture of particular situations by showing association between the dependent and independent variables. The study design was to enable the researcher collect both quantitative and qualitative data on the knowledge and practices of mothers with under five children towards home management of diarrhoea. It also helped to get information on the behaviour, knowledge, beliefs and opinions, which help to explain the behaviour. It also helped the researcher to use research methods of data collection such as the interview questionnaire. The purpose of using this design was to get a descriptive account of the situation and to provide baseline data for further research. This design was suitable because it was less expensive and does not require a lot of time in which to complete the study.

3.2 RESEARCH SETTING

This is an area or a place where data collection was done and where the interventions were implemented (Polit and Hungler 2000). The study was conducted in Kabwata and Misisi compounds in the capital city of Zambia.

Lusaka has a mixed population of both low and high-income groups. Chilenje compound was used for a pilot study to test the data collection tool.

The study combined mothers from both medium and low socio-economic groups in the two compounds. Kabwata is a medium density area whereas Misisi is a high-density area. The researcher chose Kabwata and Misisi compounds conveniently due to limited time and resources to conduct the study

3.2.1 DEMOGRAPHIC PROFILE

Lusaka District has an estimated 2006 population of 1,676,321 Central Statistical office (CSO, 2000). Lusaka as a province is the most urbanized in the country and within the southern African region and has a population density of 65.4 persons per square kilometres. The growth rate remains at 2.9% for the District while as a Province it is 4.0 %, making it the second highest in the country after Northern Province (4.3%). The fertility rate for Lusaka province is 6.0 children per woman. The average national life expectancy at birth is 48 years, with women having on average a longer life span than men of about 4 years (CSO, 2000)

3.2.2 SOCIO-ECONOMIC STATUS

Lusaka is the headquarters of all government departments and ministries. These institutions are the country's largest employers.

Lusaka, being the capital city of the country, is a hive of all international and inter-city trade and commercial investments such as shops and small and medium scale enterprises. The major industries in Lusaka include manufacturing, farming and construction.

For the last 10 years, the Zambian economy has generally been declining in almost all sectors. Poverty continues to affect the majority of households in Lusaka with an estimated 70% of the population classified as the poorest of the poor (Katundu and Situmbeko, Ministry of Finance PRSP Paper, 2002). Employment opportunities in formal sector are limited resulting in most of the people being involved in informal self-employment like carpentry, catering, trading in consumables and other semi-skilled works. It is hoped that with the enhanced privatisation program by government and with the help of international

investors/business institutions and cooperating partners, job opportunities will be created for the massively unemployed Lusaka residents.

Lusaka is regarded to have the largest number of learning and training institutions in Zambia. However, due to the introduction of school cost sharing schemes in Education, and increase in poverty levels, enrolment into the various education facilities, especially colleges and universities seems to be going down. Nevertheless, the average literacy rate for adults in the country still remains high at 69% and that for females alone at 59%, representing the highest in Africa (PRSP Paper, 2002).

3.4 STUDY POPULATION

This is the population on whom you can obtain information

(Polit and Hungler, 2000) The study population comprised of mothers /care takers in households with under 5 children.

3.5 SAMPLE SELECTION

Sample selection is a process of choosing a population to participate in the research study {Polit and Hungler, 2000}. The target population are mothers /care takers who have under five children. Therefore, sample selection is the selection of study units from a defined study population .The two compounds Kabwata and Misisi were selected at random. This was achieved by listing names of the various compounds in Lusaka. These names were then written on pieces of papers which were then folded and placed in a box .The box was shaken vigorously after which an independent individual was asked to pick two (2) pieces of paper. A sample of 50 mothers/caretakers was also selected using a systematic random sampling method. This is a form of probability sampling in which the researcher selected a especial group, which was the mothers/care takers with under five children with or without diarrhoea. Probability test ensures that all study units of the sample are chosen on the basis of equal chance. All the units of the study population had an equal or at least a known chance of being included in the same sample

This sampling method is good because it shows that the sample collected was representative of the total population. A list of 200 mothers/care takers willing to participate in the study was made.

Since the study was done in two different compounds, participants were drawn from these same compounds. Thus, 100 participants from each compound. The following formula was used.

Every X^{th} participant was selected for the study, for example:

$$\text{Sample/ population} = X$$

$$\text{Therefore, } \frac{200}{50} = 4$$

Every 4th, client participated in the study.

3.6 SAMPLE SIZE

A sample is a subset of population selected to participate in a research study (Treece and Treece 1996). The study had a sample of 50 mothers/caretakers with under five children.

3.7 DATA COLLECTION TOOL

A data collection tool is a device used for the gathering of information needed to address research problem (Polit and Hungler 2000). Data was collected using structured interview schedule (see appendix), which should allow the collection of data to be consistent (Sweeney and Oliver, 1998). The information, which was collected, was uniform because it was collected by using the same instrument. The interviewer was accorded an opportunity 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 by the interviewer. This type of a tool provided an opportunity for the illiterate mothers to participate in the study.

3.8 ADVANTAGES OF THE INTERVIEW SCHEDULE

The observer and the interviewer do not need to be highly skilled in the interviewing process.

1. The response rates are expected to be high because of face-to-face interaction.
2. The interviewer will be able to maintain control over the sample population because the respondents are going to be the intended participants.
3. In this type of technique (interview schedule) most of the data collected is usually usable.
4. The respondents can be accorded time to fill in the responses and return the questionnaire to the researcher.
5. The structured interview will allow the interviewer to probe in order to clarify and broaden the responses.
6. The interviewer will have strict control over the order of presentation of the questions in an interview.

The main disadvantage of this technique is the interviewers influence on the respondents' feelings of autonomy.

3.9 DATA COLLECTION TECHNIQUE

Data was collected in a period of 10 days from end of August to mid of September 2006. The data collected was checked for completeness on daily basis, it was entered on data master sheet and followed by data analysis.

3.10 PILOT STUDY

A pilot study is a study done preliminary to the main study with the aim of testing the elements of the study proposal and correcting any inconsistencies (Seaman and Verhomisk 1995). The pilot study was done in Chilenje compound which was not one of the study units. Chilenje compound was selected by a simple random sampling. 5 pieces of paper indicating yes and 5 indicating No were put in a box which was shaken. The 5 mothers/caretakers who picked YES papers automatically became participants to the study.

The pilot study was used in order to test its validity and reliability in the actual study for data collection. Therefore, the pilot study was used to refine the instrument. There may be need to rearrange, rephrase or omit some of the questions.

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

In this study, validity was be measured by conducting a pilot study before the actual study. The experts in the area of paediatrics and child health and the supervising lecturer also reviewed the research instrument. Validity was measured in order to minimize biases. Validity was also measured by having the lecturer examine the research questions or research instrument. Hence, validity refers to what extent the test accurately measure what is supposed to measure especially to distinguish those with disease.

3.12 RELIABILITY

Reliability in quantitative research is the stability of measuring instrument over time and in qualitative research is the measure of the extent to which random variation may have influence on 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 is if the same information was elicited from the same questions.

3.13 ETHICAL AND CULTURAL CONSIDERATIONS

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 Lusaka DHM. (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 benefit of the out come. Participation in the study was voluntary: no respondent was forced or coerced to participate in the study (Confidentiality and anonymity). The constituency chairperson was asked for permission to carry out the study in his area.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 DATA ANALYSIS

This 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 Verhomisck, 1995). The data collected was analysed and the responses categorized on master sheet. Data collected are not useful unless arranged in a meaningful manner so that it is possible to drive patterns of relationships (Polit and Hungler, 2000). The data collected was checked daily after each interview to ensure completeness, validity and correction of any mistakes.

4.2 PRESENTATION OF FINDINGS

The presentation of findings was based on interviews of 50 mothers/caretakers of under 5 children in Kabwata and Misisi compounds in Lusaka. The findings were presented in table form and cross tabulations. These conserve space by presenting data in such away that the narrative may be reduced and that tabulated data is easy to remember (Seaman and Vorhomisk, 1995). The data was arranged in frequency counts and percentages.

TABLE 5 : DEMOGRAPHIC DATA

VARIABLE	RESPONSES	FREQUENCY	PERCENT
Age Distribution of Respondents	15 – 19	3	6%
	20 – 24	12	24%
	25 – 29	11	22%
	30 – 34	17	34%
	35 – 39	7	14%
Total		50	100%
Education level of level of respondents	Never been to school	4	8%
	Grade 1 – 4	2	4%
	Grade 5 – 7	24	48%
	Grade 8 – 9	9	18%
	Grade 10 – 12	5	10%
	College	5	10%
	University	1	2%
Total		50	100%
Occupation of Respondents	Housewife	21	42%
	Self Employed	24	48%
	Formal Employment	1	2%
	No Occupation	4	8%
Total		50	100%
Residence of Respondents	High Density	25	50%
	Medium Density	25	50%
	Unclassified	0	0%

Total		50	100%
Religion of Respondents	Hindu	0	0
	Moslem	0	0
	Christian	50	100%
Total		50	100%
Marital Status of Respondents	Married	40	80%
	Single	9	18%
	Divorced	0	0
	Widowed	0	0
	Separated	1	2%
Total		50	100%
Number of Children per Respondent	1 – 3	37	74%
	4 – 6	9	18%
	7 – 12	4	8%
	> 13	0	0
Total		50	100%
No. of Under 5 Children per respondent	1	36	72%
	2	12	24%
	3	2	4%
Total		50	100%
Length of Breastfeeding time	< 5 months	1	2%
	6 – 10 months	0	0
	11 – 15 months	8	16%
	16 – 20 months	22	44%
	21 – 25 months	19	38%

Total		50	100%
Children who suffered from Diarrhoea in the last month	Yes	45	90%
	No	5	10%
Total		50	100%
No. of times each child had diarrhoea	Once	13	26%
	Twice	20	40%
	Thrice	7	14%
	Four times	6	12%
	Not applicable	4	8%
Total		50	100%
Causes of diarrhoea according to respondents	Teething	34	68%
	Exposure to excessive heat	7	14%
	Milk of pregnant mother	2	4%
	Bacteria in food or water	7	14%
Total		50	100%
Whether medical treatment or advice was sought by respondents	Yes	45	90%
	No	5	10%
Total		50	100%
Places where mothers seek medical treatment	Hospital	0	0
	Health Centre	35	70%
	Traditional Healer	8	16%
	Others	7	14%
Total		50	100%
Sources of water of Respondents	Tap Water – communal	29	58%
	Tap Water – in the house	20	40%
	Protected well	1	2%
Total		50	100%

Responses for water treatment of Respondents	Boiling	12	24%
	Chlorination	31	62%
	Others	7	14%
Total		50	100%
Garbage Disposal of respondents	Rubbish heap	16	32%
	Rubbish pit	16	32%
	Garbage Bin	18	36%
Total		50	100%
Type of toilet used by Respondents	Water closet	17	34%
	Pit latrine	32	66%
	VIP	0	0
Total		50	100%
Respondents who have lost children	Yes	10	20%
	No	40	80%
Total		50	100%
Causes of Death in Children	Diarrhoea	4	8%
	Malaria	4	8%
	Pneumonia	0	0
	Not Applicable	38	76%
Total		50	100%

Table 1 shows that the majority of the mother/ care takers 17 (34%) were aged between 30 – 34. The least respondents 3 (6%) and 7 (14%) were aged 15 – 19 and 35-39 respectively. Other significant respondents were 12(24%) who were aged

20-24.

26(52%) of the respondents attended school up to grade 7 while 9(18%) attained junior Secondary School 5(10%) and 1 (2%) attained college and University level education respectively. 4(8%) never went to school at all.

The Majority of the respondents 24(48%) were self-employed, 21 (42%) were housewives, only 1(2%) was in formal employment while 4(8%) were not employed.

The Majority of the respondents 25(50%) were from medium density area and another 25(50%) came from high-density area.

The Majority 18(36%) were Bemba, 9 (18%) were Tumbuka/Ngoni, 6 (12%) were Tonga .

The least 1(2%) were Lenje, while the respondents for other tribes were 16(32%).

All the respondents 50 100% were Christians. The Majority of the respondents 40(80%) were married.

37(74%) of the respondents had between one and three children, 9 (18%) had between four and six, 4(8%) had between seven and twelve children.

36(72%) had only one under 5 children, 12(24%) had two and 2(4%) had three.

The Majority 37(74%) of the respondents breastfeed their children between 18 and 24 months, while 13(26%) breastfeed their children between 12 and 18 months.

The Majority of the respondents 45(90%) agreed that their children had suffered from diarrhoea in the last month, while 5(10%) had not.

The majority 20 (40%) stated that their children had had two episodes of diarrhoea in the last month.

The majority of the respondents 34(68%) stated teething, 2(4%) milk of pregnant mother while 7(14%) exposure to heat and another 7(14%) bacteria in food or water. (Contaminated food or water) as the possible cause the diarrhoea.

The Majority of the respondents 45(90%) sought medical treatment or advice from either the health centre or traditional healer.

The Majority of the respondents 35(70%) sought medical treatment from health centres, 8(16%) from traditional healer.

The majority of the respondents 29(58%) use tap water from a communal tap, 20(40%) got their water from taps inside their houses, only one (2%) got water from a protected

16(32%) of the respondents used a rubbish heap in the middle of the compound, another 16(32%) used a rubbish pit near their homes, while the majority 18(36%) used a garbage skipper bin for refuse disposal.

17 (34%) used a water closet system of toilet while the majority 33(66%) use pit latrine.

The majority 40(80%) of the respondents have never had deaths in their families involving children, while 10(20%) have had.

4.2 KNOWLEDGE

TABLE 6: RESPONDENTS' UNDERSTANDING OF DIARRHOEA

UNDERSTANDING OF DIARRHOEA	FREQUENCY	PERCENTAGE
Disease of Abdomen	46	92%
Running Stomach	4	8%
Total	50	100%

The majority 46 (92%) of the respondents understood diarrhoea as disease while 4 (8%) understood diarrhoea as running stomach

TABLE 7: MANIFESTATIONS OF DIARRHOEA

MANIFESTATION OF DIARRHOEA	FREQUENCY	PERCENTAGE
Watery stool	33	66%
Weakness	6	12%
Frequency of loose stool	7	14%
Do not know	4	8%
Total	50	100%

The majority of the respondents 33 (66%) stated that diarrhoea manifested with watery stool while 4 (8%) of the respondents did not know the manifestation of diarrhoea.

TABLE 8 : MANAGEMENT OF DIARRHOEA AT HOME

MANAGEMENT	FREQUENCY	PERCENTAGE
Giving ORS	13	26%
Giving salt-sugar-water solution	4	8%
Giving excess water	9	18%
Do not know	24	48%
	50	100%

The majority of the respondents 24 (48%) did not know how to manage a child with diarrhoea at home. Only 13 (26%) managed diarrhoea by giving ORS and 4 (8%) managed diarrhoea by giving water salt and sugar solution.

TABLE 9: KNOWLEDGE ON MAKING HOME FLUID FOR DIARRHOEA TREATMENT

METHOD	FREQUENCY	PERCENTAGE
Mixing of salt, sugar and water	10	20%
Do not know	40	80%
Total	50	100%

The majority 40 (80%) of the respondents did not know how to make home fluid for the treatment of diarrhoea, while 10 (20%) knew how to make the fluid.

TABLE 9: A WHEN TO TAKE CHILD TO HEALTH CENTER

WHEN?	FREQUENCY	PERCENTAGE
As soon as child develops diarrhoea	22	44%
When child not improving after 5 days	22	44%
Others	6	12%
Total	50	100%

The majority 22 (44%) of the respondents stated that they take there children to the heath centre as soon as the child develops diarrhoea while another 24 (44%) of the respondents stated that they wait for five (5) days and only go to the health centre if the child does not improve.

4.3 PRACTICE

TABLE 10 : TRADITIONAL BELIEFS REGARDING DIARRHOEA

RESPONSE	FREQUENCY	PERCENTAGE
Yes	21	42%
No	29	58%
Total	50	100%

The majority 21(42%) stated that they had traditional beliefs regarding diarrhoea while 29 (58%) of the respondents stated that they did not have any traditional beliefs and practices regarding diarrhoea.

TABLE 11: RESPONDENTS WHO GIVE THEIR CHILDREN MEDICINE BEFORE TAKING THEM TO THE HEALTH CENTER

RESPONSE	FREQUENCY	PERCENTAGE
YES	32	64 %
NO	18	36%
TOTAL	50	100%

The majority 32 (64%) of the respondents stated that they do give their children medicine before taking them to the health centre, while 18 (36%) stated that they don't give their children any medicine before taking them to the health centre.

TABLE 12 : TYPE OF MEDICINE GIVEN

RESPONSE	FREQUENCY	PERCENTAGE
Traditional medicine	12	24%
Modern medicine	16	32%
Both modern and traditional	18	36%
Not applicable	4	8%
TOTAL	50	100%

The majority 16 (32%) have been using modern medicine while 12 (24%) have been using traditional medicine.

TABLE 12A : PERSONS WHO SUPPLY MEDICINE TO MOTHERS/CARETAKERS:

RESPONSE	FREQUENCY	PERCENTAGE
Friends	5	10%
Neighbour	4	8%
Family member	6	12%
Traditional healer	4	8%
Other	14	28%
Not applicable	17	34%
TOTAL	50	100%

6 (12%) of the respondents were given medicine by their family members and 4 (8%) were given medicine by the traditional healers

TABLE 13 : RESPONSES ON FEEDING A CHILD WITH DIARRHOEA

RESPONSE	FREQUENCY	PERCENTAGE
Yes	48	96%
No	2	4%
TOTAL	50	100%

The majority 48 (96%) stated that children with diarrhoea need to be fed while 2 (4%) of the respondents stated that they don't need to be fed.

TABLE 14 : RESPONSES ON TYPE OF FOOD GIVEN

RESPONSE	FREQUENCY	PERCENTAGE
Porridge	38	76%
Usual food	12	24%
Total	50	100%

The majority 38 (76%) of the respondents stated that they gave them porridge while 12 (24%) of the respondents gave them the usual food.

TABLE 15 : AMOUNT OF WATER FOR RECONSTITUTION OF ORS

RESPONSE	FREQUENCY	PERCENTAGE
50mls	14	28%
200mls	3	6%
500mls	2	4%
750mls	4	8%
1000mls	27	54%
Total	50	100%

The majority 29 (58%) stated that they use 1000mls to reconstitute ORS.

TABLE 16: RESPONSES ON HOW TO GIVE ORS

RESPONSE	FREQUENCY	PERCENTAGE
With cup	39	78%
With spoon	6	12%
Other	5	10%
Total	50	100%

The majority 39 (78%) stated that they use a cup to give ORS while 6 (12%) stated that they use a spoon.

4.4 INFORMATION, EDUCATION AND COMMUNICATION (IEC)

TABLE 17: RESPONSES ON WHETHER MOTHERS/CARETAKERS RECEIVE IEC

RESPONSE	FREQUENCY	PERCENTAGE
Always given	4	8%
Sometimes given	24	48%
Never given	21	42%
Not applicable	1	2%
Total	50	100%

The majority 24 (48%) stated that they some times receive health talks on the management of diarrhoea at home while 21 (42%) stated that they never receive any health talks on the management of diarrhoea.

TABLE 18 : RESPONSES ON WHO GIVES THE TALKS

RESPONSE	FREQUENCY	PERCENTAGE
Doctor	2	4%
Nurse	21	42%
Clinical Officer	2	4%
Community Health Worker	3	6%
Other	7	14%
Not applicable	15	30%
Total	50	100%

The majority 21 (42%) stated that the nurses gave the talks while 3 (6%) stated that the community health workers gave the talks.

TABLE 19: RESPONSES ON TYPE OF INFORMATION GIVEN

RESPONSE	FREQUENCY	PERCENTAGE
Giving ORS	7	14%
Good Hygiene Practices	8	16%
Giving Excess Water	2	4%
Could not remember	10	20%
Not applicable	23	46%
Total	50	100%

10 (20%) of the respondents could not remember the instructions while 7 (14%) and 8 (16%) stated that they were told to give ORS and to practice good hygiene respectively.

4.5 RELATIONSHIPS BETWEEN VARIABLES

TABLE 20: EDUCATION LEVEL IN RELATION TO AGE OF RESPONDENTS

EDUCATION LEVEL	AGE IN YEARS					
	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	TOTAL
NONE	0	0	4 (100%)	0	0	4
GRADE 1 – 4	0	1 (50%)	1 (50%)	0	0	2
GRADE 5 – 7	0	4 (16.6%)	10 (41%)	6 (25%)	4 (16.6%)	24
GRADE 8 – 9	3(33%)	3 (33%)	1 (11%)	1 (11%)	1 (1%)	9
GRADE 10 – 12	0	2 (40%)	0	2 (40%)	1 (20%)	5
COLLEGE	0	1 (20%)	0	2 (40%)	1 (20%)	5
UNIVERSITY	1 (100%)	0	0	0	0	1
TOTAL	4 (100%)	9 (100%)	16(100 %)	11(100%)	7 (100%)	50 (100%)

The majority 10 (41.6%) of the respondents aged between 25 and 29 years attained primary school education while 4 (100%) of the respondents aged 25 to 29 years had never been to school.

TABLE 21 : EDUCATION LEVEL IN RELATION TO OCCUPATION

EDUCATION LEVEL	OCCUPATION				
	HOUSEWIFE	SELF EMPLOYED	FORMAL EMPLOYMENT	NONE	TOTAL
NONE	2 (9.5%)	4 (17%)	0	4 (100%)	10 (100%)
GRADE 1 – 4	0	3 (13%)	0	0	3 (100%)
GRADE 5- 7	14 (66%)	8 (33%)	0	0	22 (100%)
GRADE 8 – 9	5	6 (25%)	0	0	11 (100%)
GRADE 10 - 12	4 (29%)	2 (8%)	0	0	6 (100%)
COLLEGE	0	0	1 (100%)	0	1 (100%)
TOTAL	21	24	1	4	50 (100%)

The majority of the respondents 14 (16%) who attained upper primary education were housewives while 8 (33%) of them were self-employed.

TABLE 22 : EDUCATION LEVEL IN RELATION TO RESIDENCE

EDUCATION LEVEL	RESIDENCE		
	HIGH DENSITY	MEDIUM DENSITY	TOTAL
NONE	4 (16%)	2 (8%)	6 (100%)
GRADE 1 – 4	2 (8%)	0	2 (100%)
GRADE 5 – 7	15 (60%)	8 (32%)	23 (100%)
GRADE 8 – 9	2 (8%)	6 (24%)	8 (100%)
GRADE 10 - 12	2 (8%)	4 (16%)	8 (100%)
COLLEGE	0	5 (20%)	5 (100%)
TOTAL	25	25	50 (100%)

The majority 15 (60%) of the respondents who attained upper primary education were staying in high-density areas while the majority 6 (24%) of the respondents who attained junior secondary education were staying in medium density areas.

TABLE 23 : AGE IN RELATION TO LEVEL OF MOTHERS/CARETAKERS' KNOWLEDGE

CAUSE OF DIARRHOEA	AGE IN YEARS					TOTAL
	15 - 19	20 - 24	25 - 29	30 - 34	35 – 39	
TEETHING	1 (4%)	7 (28%)	5 (20%)	9 (4%)	3 (12%)	25
EXPOSURE TO EXCESSIVE HEAT	1 (11%)	1 (11%)	2 (22%)	3 (33%)	0	9
MILK OF PREGNANT MOTHER	0	0	0	0	2 (100%)	2
BACTERIA IN FOOD/WATER	0	1 (20%)	0	1 (20%)	3 (60%)	5
OTHER	0	0	0	0	9 (10%)	9
TOTAL	2 (100%)	9 (100%)	7 (100%)	13 (100%)	17 (100%)	50

The majority of the respondents 5 (20%) and 2 (22%) aged 25 to 29 years believed that diarrhoea was caused by teething and exposure to excessive heat respectively.

TABLE 24: EDUCATION LEVEL IN RELATION TO KNOWLEDGE

EDUCATION LEVEL	RESPONSES ON CAUSE OF DIARRHOEA				
	TEETHING	EXPOSURE TO EXCESSIVE HEAT	BACTERIA IN FOOD/WATER	MILK OF PREGNANT MOTHER	OTHER
NONE	1 (3.3%)	0	1 (20%)	0	0
GRADE 1 - 4	2 (7%)	0	4 (80%)	0	5 (100%)
GRADE 5 - 7	18 (60%)	3 (37.5%)	0	1	0
GRADE 8- 9	7 (23%)	1 (12.5%)	0	0	0
GRADE 10 - 12	1 (3.3%)	2 (25%)	0	0	0
COLLEGE	1 (3.3%)	2 (25%)	1 (20%)	0	0
TOTAL	30	8	5	1	5

The majority 18 (60%) and 3 (37.5%) of the respondents who attained upper primary education believed that diarrhoea is caused by teething and exposure to excessive heat respectively.

TABLE 25 : EDUCATION LEVEL IN RELATION TO DEFINITION OF DIARRHOEA

EDUCATION LEVEL	DEFINITION OF DIARRHOEA		
	DISEASE OF ABDOMEN	RUNNING STOMACH	TOTAL
NONE	4 (8.5%)	0	4 (100%)
GRADE 1 - 4	1 (2.1%)	1 (33%)	2 (100%)
GRADE 5 - 7	24 (51%)	1 (33%)	5 (100%)
GRADE 8- 9	7 (14%)	1 (33%)	8 (100%)
GRADE 10 - 12	6 (12%)	0	6 (100%)
COLLEGE	5 (10%)	0	5 (100%)
TOTAL	47	3	50 (100%)

The majority 24 (51%) of the respondents with upper primary school education understood diarrhoea as disease of the abdomen.

TABLE 25 A : RESIDENCE IN RELATION TO DEATH OF CHILDREN

RESPONSE	LOW DENSITY	HIGH DENSITY	TOTAL
YES	4(36%)	7 (63%)	11
NO	22(56%)	17 (43%)	39
TOTAL	26(100%)	24 (100%)	50

The majority 7 (63%) of the respondents who had lost their children came from the high-density areas.

TABLE26: EDUCATION IN RELATION TO MARITAL STATUS

EDUCATION LEVEL	MARITAL STATUS			
	MARRIED	SINGLE	SEPARATE D	TOTAL
NONE	4 (10%)	0	1	5(100%)
GRADE 1 – 4	2 (5%)	0	0	2 (100%)
GRADE 5 – 7	32 (80%)	2 (22%)	0	34(100%)
GRADE 8- 9	5 (12.5%)	4 (44%)	0	9 (100%)
GRADE 10 – 12	5 (12.5%)	0	0	5 (100%)
COLLEGE	2 (5%)	2 (22%)	0	6 (100%)
TOTAL	40	9	1	50 (100%)

The majority 32 (80%) of the respondents who attained upper primary school education were married.

CHAPTER 5

5.0 DISCUSSION OF FINDINGS.

5.1 INTRODUCTION

The results of the study were based on the analysis of responses from 50 mothers / care takers of under 5 children. These were sampled from two study compounds in Lusaka district. The study compounds were Kabwata which is a medium density area and Misisi, which is a high-density area.

The aim of the study was to determine the mothers' / caretakers' knowledge and practices regarding home management of diarrhoea in under 5 children. It was believed that possible solutions could be sought which would help in the delivery of effective and appropriate information, education and communication (IEC) on the home management of diarrhoea. It was also hoped that this would help reduce the infant mortality and morbidity rates resulting from diarrhoea. The mothers/ caretakers may be able to effectively manage their children at home and this may help them save on transport and hospitalization costs.

5.2 DISCUSSION OF VARIABLES.

5.2.1 DEMOGRAPHIC DATA.

The majority of the mothers / caretakers 17 (34%) were aged 30 - 34. The least respondents 3 (6%) and 7 (14%) were aged 15 – 19 and 35 – 39 respectively. The other significant age respondents were 12 (24%) who were aged 20 – 24. The majority of the mothers / caretakers were quite young because child bearing starts early among Zambian women. The majority 17 (34%) were those aged 30 – 34 because this is the childbearing age. The least were those aged 15 – 19 (38%) and 35 – 39 7 (14%), these are below and above the child bearing age respectively. The ages 15 – 19 is a school going age and girls are found to have children at this age because of the socio-cultural orientation which predisposes girls to early marriages and because they probably stopped school and were forced into early marriages by their parents or guardians. Those above 35 years

have passed childbearing age, there are very few who have under 5 children. The majority 26 (52%) of the respondents attained school up to grade seven (7) while 9 (18%) attained junior secondary school, 5 (10%) attained senior secondary school. Only 5 (10%) and 1 (2%) attained college and university level education respectively. 4 (8%) never went to school at all. The majority of women in Zambia are either uneducated or they have attained the lowest level of education. Very few women reach the highest level of education. Only 1 (2%) of the respondents reached the highest level of education which is the university. This could be due to the Zambian culture regarding marriage where most girls are forced into early marriages. It could be also be due to the girl child factor where many parents encourage the boy child into education and neglect the girl child's education. The other possible reason could be that because there is a limited number of school places in grade eight (8) compared to grade seven (7) places.

The majority of the respondents 24 (48%) were self-employed, 21 (42%) were housewives. Only 1 (2%) was in formal employment while 4 (8%) were not employed. This could be due to the fact that most of the mothers / caretakers did not have adequate education to enable them learn some skills. In the absence of wage labour, many mothers resort to some kind of trading or peasant farming so that they can supplement their husband's effort to sustain their living.

25 (50%) of the respondents were from medium density areas while another 25 (50%) came from high-density areas. This is because the two study compounds were from the medium and high-density areas respectively. High density areas are usually associated with poor environmental sanitation which consequently result in increase in cases of diarrhoeal diseases in children. Jellies (1996) states that diarrhoeal diseases are often related not only to the protected and available water supply but also to the individuals hand washing practices and drinking water from soiled contents. Degorroye (19 99) also reported that diarrhoea occurs mostly in low socio-economic environment where sanitation and water is scarce. It is important that both personal and environmental hygiene are promoted in order to prevent diarrhoea.

The majority 18 (36%) of the respondents were Bemba, 9 (18%) were Ngoni / Tumbuka, 6 (12%) were Tonga. The least 1 (2%) were Lenje. This could mean that the majority of Zambians are Bemba speaking or that the Bembas are the majority among the tribes that have migrated to Lusaka, either in search of job opportunities or other reasons. The Lenjes come from central and Lusaka provinces but there was only 1 (2%) of the respondents who was Lenje. This could mean that the Lenjes are among the minority tribes in Zambia or that they live in their own villages instead of moving to the compounds.

The findings also revealed that mothers from the same tribe shared the same beliefs though the majority of them mentioned that they had learnt other customs and beliefs from other tribes because of interacting with other people from different tribes. For instance, the majority of the mothers / care takers in the study mentioned that diarrhoea was caused by teething. This is believed by mothers / care takers from different tribal groups.

All the 50 (100%) of the respondents were Christians. The majority of Zambians are Christians because Zambia is a Christian nation. The minority of the Zambians who belong to other religions such as the Hindus and Muslims could be living in the low density areas which were not included in the sample.

The majority of the respondents 40 (80%) were married, 9 (18%) were single and 1 (2%) was on separation. None of the respondents were divorced. Culturally, divorce is not common in Zambia. The Zambian culture encourages marriage that should stand the test of time. Society's culture believes that every woman who has attained puberty should be married. The majority 14 (66%) of the Zambian women are of low educational level, who depend on marriage for their living. 37 (74%) of the respondents had between one (1) and three (3) children, 9 (18%) had between four and six, 4 (8%) had between seven and twelve children.

The majority 37 (74%) had between one and three children, this could mean that majority of the respondents were aged between 20 and 34 years which is a young age, while the number of children tends to increase with age. For instance,

the older the woman, the more children she was likely to have. This is because child-bearing does not stop until the woman reaches menopause, which is usually above 45 years. It could also mean that the majority of the child-bearing women do practice family planning.

This was also evidence by the fact that the majority, 36 (72%) had only one under 5 child. 12 (24%) had 2, (4%) had three. This shows that there is very good utilization of family planning services in Lusaka district.

The majority 37 (74%) breast-fed their children between 18 and 24 months while 13 (26%) breast-fed their children between 12 and 18 months. It was possible for most mothers / caretakers in the study to breast - feed their children for a long period of time because they were full-time house- wives. The other reason is that those who are self employed spend most of the time with their babies on backs even when they go out to the fields to cultivate or when they go out trading. It could also be that they understood the importance of breast- feeding, as a result they breast feed their children for a longer period until they are big enough to eat solids and benefit from the food that adults eat.

The majority 45 (90%) had children who had suffered from diarrhoea in the last one month period and only 5 (10%) had not.

Diarrhoea is a common child hood health problem affecting the under 5. Byrne, et al (1988) subscribe to the mothers / caretakers view of diarrhoea when he stated that diarrhoea of less developed countries was universally present and common in areas of poor sanitation and prevailing malnutrition. The majority 20 (40%) stated that their under five children had diarrhoea twice in the last one month, 13 (26%) once, 7 (14%) 3 times while the least 6 (12%) mentioned four times. In a Ministry of Health (1990) report, it is estimated that there were approximately 457 million episodes of diarrhoea each year in children between ages of 0 – 4 years in Africa. The episodes of morbidity were estimated at 1.3 thousand million per year for the under five children.

The majority of the respondents 34 (68%) cited teething as the cause of diarrhoea in their children. 2 (4%) and 7 (14%) mentioned milk of pregnant

mother and exposure to excessive heat respectively, while only 7 (14%) knew that diarrhoea was caused by bacteria in food or water that was contaminated. The majority of the respondents did not know the cause of diarrhoea. Experience and observations have shown that when a child is breaking his or her first teeth, he always suffers from diarrhoea. This probably could be attributed to the fact that during this time (oral phase) any thing that 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 is so termed because the mouth was primary pleasure zone. The infant associates the pleasure of hunger satisfaction with oral stimulation and soon learns to simulate the mouth for pleasure. Ebrahim (1996) stated 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. Hence, the mothers / caretakers belief that teething contributed to diarrhoea could be accepted.

Another common belief identified was that breast-feeding a child whilst pregnant could lead to diarrhoea. However, in the study by Simwanza (1999) it was revealed that mothers discontinued breast-feeding when they discovered that they were pregnant for fear of their children having diarrhoea. Although there is no harm in breast feeding during pregnancy scientifically, most mothers / caretakers in the communities strongly adhere to the belief and stop breast feeding their children as soon as they realize that they are pregnant. However, some care takers / mothers had been known to have breast fed two children together but of course gave priority to the baby since the older child was having other foods as well.

The majority of the respondents 4 (90%) sought medical treatment or advice from either the health centre or traditional healer. 5 (10%) did not seek medical treatment. The 5 (10%) who did not seek any form of treatment could be the

same. respondents who responded that their children never suffered from diarrhoea.

The majority of the respondents 35 (70%) sought medical treatment from health centres, 8 (16%) from traditional healers and remaining 7 (14%) had been using both modern and traditional medicine. Majority of the respondents were able to access medical services. The Ministry of Health's vision of taking health services as close to the family as possible has made it possible for the majority of mothers / care takers to be able to access health services. However, despite the increased accessibilities to modern medicine some of the care takers / mothers were using traditional medicine and others were using both tradition and modern medicine. They needed to consult a traditional healer who they felt understood their problems and background, they only went to the health centre when the traditional healer has failed. Unfortunately, this resulted in them taking their children with diarrhoea to the hospital or health centre late and in prostrated state. The majority of the mothers / caretakers 35 (70%) took their children to health centres and did not have faith traditional beliefs and practices because Zambia is a Christian nation as seen from the 50 (100%) responses of Christian status among the 50 respondents under-study. They had more faith in the curative powers of modern medicine as opposed to that of traditional healers. They prefer to use modern treatment although they held traditional ideas as causes of diarrhoea. This may be attributed to the fact that they were educated and had positive experiences with modern health care practices of scientific medicine. They therefore allowed their children to have professional care (Landy, 1997).

The majority of the respondents 29 (58%) used tap water from communal taps, 20 (40%) had water inside their houses while 1 (2%) got water from a protected well. The majority have access to tap water. These are council services made available to the communities.

The majority 36 (72%) used chlorine to treat their water for drinking. Only 2 (4%) of the respondents expressed ignorance in water treatment.

The majority had knowledge of how to make water safe for drinking.

This could be because health talks on how to make water safe for drinking are emphasized at the health centres and on television especially during cholera epidemics. Most people treat their water for fear of contracting cholera. The majority uses chlorine because they find it to be convenient and cheap compared to the boiling method.

The majority of respondents 18(36%) use skipper bins for garbage disposal. 16(32%) use rubbish heap, while another 16 (32%) used a rubbish pit.

The majority use skipper bins because the Lusaka City Council encourages the use of skipper bins as compared to the other methods of garbage disposal. The use of garbage pits, heap and burning are being discouraged. Burning is likely to predispose the public to pollution due to smoke and fumes. This shows that mothers / caretakers are co-operating with city authorities to maintain high standards of hygiene, in the district.

The majority of respondents 40 (80%) have never had deaths in their families involving their under 5 children, while 10 (20%) had.

5(10%) of the children died from preventable diseases / causes. These could have been attributed to the fact that some mothers / caretakers brought their children late to the health centres. Hence, the health personnel did not have enough time to treat their children successfully. The majority 7 (63%) of the respondents who had lost their children came from the high density compounds where there was inadequate or poor sanitation and poor water supply. These mothers / caretakers could be the same respondents who take their children to the traditional healers before taking them to the health centre after realizing that their children's condition was not improving.

5.2.2 KNOWLEDGE OF DIARRHEA AND ITS MANAGEMENT AT HOME.

The majority of 46 (92%) of the care- takers understood diarrhoea as a disease while (8%) understood it as a running stomach.

The majority of the respondents 33 (66%) knew that diarrhoea was manifested with watery stool while 7 (14%) stated that it was manifested with frequency of loose stool. The least (12%) and 4 (8%) of the respondents either stated that

diarrhoea was manifested by weakness or did not know respectively.

Traditionally it was believed that diarrhoea was a disease with known causes and treatment.

Probably that was why majority of mothers / caretakers stated that diarrhoea was a disease. A good number of the respondents had an idea of what diarrhoea was. This could be attributed to the fact that mothers / care takers receive some form of teaching on diarrhoea either at the health centre or by other means of information dissemination such as television. WHO (19 90) states that diarrhoea would be present if there was abdominal frequency and liquidity of stools termed "loose stool " and could be accompanied by colic and tenesmus. Smith et al (200) also defined diarrhoea as frequent watery stools often accompanied by swollen belly with cramps.

Another reason why majority mothers / caretakers new what diarrhoea was, could be that the majority of them had some formal upper primary education.

This was because women who are educated easily assimilated information taught. In addition, most institutions of learning, the mass media and health centres render health tips about the condition. The majority of the respondents 24 (48%) did not know how to manage a child with diarrhoea at home. 13 (26%) managed diarrhoea by giving ORS while 9 (18%) by giving excess water. The least 4 (8%) managed diarrhoea by giving water, salt sugar solution.

The majority 40 (80%) of the respondents did not know how to make home fluid for the treatment of diarrhoea while only 10 (20%) knew how to make home fluid. Mothers / caretakers are not well informed on the management of diarrhoea at home. The majority of mothers did not bother to learn how to make the home made fluid for diarrhoea because of the presence of WHO oral rehydration salts sachets which are easy to easy to prepare compared to the salt sugar and water solution. The availability of the ingredients also contributed to it being unpopular among the mothers / caretakers. Some mothers may not have sugar and salt in their homes, to use in the kind of preparation. 22 (44%) of the respondents took their children to the heath centre as soon as the child developed diarrhoea, while another 22 (44%) waited for at least 5 days before taking the child to the heath

centre. Those that waited for 5 days are those that give some form of treatment before they took the child with diarrhoea to the health centre. They wait to monitor the effectiveness or what ever remedy given, and only go the health centre when the condition does not improve and may even go when it was too late to be helped.

5.2.3 PRACTICES

The majority 29 (58%) of the respondents did not have traditional belief and practices regarding diarrhoea. 21 (42%) had beliefs and practices regarding diarrhoea. The majority 29 (58%) did not have traditional beliefs and practices, which could be attributed to the fact that Zambia is a Christian nation. However, 21 (42%) had traditional beliefs and practices showing that Africans believe in such. Despite Zambia being a Christian nation, there are still some mothers / caretakers who practiced traditional beliefs and practices regarding diarrhoea. This could be passed on from one family member to another. 32 (64%) of the respondents stated that they gave their children with diarrhoea some form of medicine before taking them to the health centre, while 18 (36%) did not. The majority of the respondents did not go to the health centre immediately their children developed diarrhoea, they waited for some time, during which they gave some form of treatment and only took the child to the health centre if they did not respond to the treatment. The majority 16 (32%) had been giving modern medicine before going to the health centre. 12 (24%) had been giving traditional medicine while 4 (8%) were using both modern and traditional medicine. There is an increase in the use of over-the-counter drugs while others used traditional healers. This could be due to the high cost of medical services, poor attitude of the medical service providers, poor economic status and long distance to health facilities.

The majority (612%) got the medicine from their family members such as mothers and grand mothers. 5 (10%) and 4 (8%) got the medicine from their friends and neighbours respective, while another 4 (8%) got the medicine from traditional healers.

Simwanza (1999) stated that, mothers and families are the most important persons in caring for children and responsible for health of their children. Observations and experience had shown that grand mothers and old women especially, teach young mothers who are their daughters on the care of a child. This is the reason why the young mothers / caretakers consulted their mothers for advice, for as far as they are concerned their mothers knew better what was best for their children.

The majority 48 (96%) of the respondents knew that a child with diarrhoea needed to be fed while only 2 (4%) did not know. The majority of the mothers / caretakers were knowledgeable on the importance of good nutrition during the diarrhoea episode. The majority of the respondents fed their diarrhoea afflicted children porridge while 12(24%) gave them usual food including fruits. The practice is good because a child with diarrhoea needs to be fed to improve the nutritional status and to prevent malnutrition, which is common and possible complication of diarrhoeal diseases. The majority 29 (58%) knew how to reconstitute ORS into 1000mls of clean drinking water. 39. (78%) of the respondents and 6 (12%) respectively use a cup and spoon as a measure for giving ORS. However, mothers/caretakers did not know the amount to give according to age of the child. 21(42%) of the respondents did not know how to reconstitute ORS. This could be attributing to the fact some mothers/caretakers never took their children to the health centre because they belied in traditional causes of diarrhoea. They had negative attitude towards ORS as treatment for diarrhoea.

5.2.4 INFORMATION, EDUCATION AND COMMUNICATION

The majority 24 (48%) of the respondents stated that they sometimes received health talks on the management of diarrhoea at home while 21(42%) stated that they never received any health talks on the management of diarrhoea at home. Only (4%) stated that they always received health talks about management of diarrhoea when they took their children to the health centre.

There is need to intensify the dissemination of information on the management of diarrhoea at home among communities

Table 4 shows that the majority 24 (48%), which was the majority of the respondents on the responses for diarrhoea management at home, stated they did not know how to manage a child with diarrhoea at home. Health care providers at the health centres need to explain to each mother / caretaker who comes to the centre with a child who has diarrhoea on how to continue managing the child at home. Therefore, the hypothesis that inadequate IEC on diarrhoea management is likely to lead to poor knowledge and practice on home management of diarrhoea was accepted (failed to reject the hypothesis). 21 (42%) were given health talks by the nurses as they dispensed treatment. This is the actual situation where health care providers give health talk as they dispense medicine.

The majority of the respondents could not remember even the composition of the instructions given to them during the health talks by the nurses. This could mean that health workers were showing negative attitude or it could be because the respondents had low education or may be due to the fact that the talks were not at the mother's/ caretaker's level.

Table 5 shows that majority of the respondents 7(28%) and 3(33%) aged 20-24 believed that diarrhoea was caused by teething and exposure to heat respectively. 3(60%) of the respondents aged 35-39 years knew that diarrhoea was caused by bacteria in either food or water. This could be because of experience from their previous children and health talks.

Therefore, the hypothesis which stated that the older the mother, the more likely she is to practice traditional therapy in the home management of diarrhoea was rejected because the findings revealed that even younger mothers who knew and believed in traditional practices were actually the majority.

The following beliefs were identified by mothers/caretakers as the ones that were contributing to the diarrhoea in children.

- Teething accounted for 25 (50%)
- Exposure to excessive heat 9(18%)
- Milk of the pregnant mother 2 (4%)

Table 6 shows that majority 18(60%) and 3(37.5%) of the respondents who attained upper primary school education also believed that diarrhoea was caused by teething and exposure to heat respectively. The results revealed that the education of the mother/caretakers does not change their belief about the causes of diarrhoea due to their cultural beliefs. In addition, even those who had attained college level (3. 3%) and 2. (25) believed that diarrhoea was caused by teething and exposure to heat respectively.

5.3 IMPLICATIONS TO HEALTH CARE SYSTEMS

The findings revealed that 21 (42%) of the respondents never received health talks on home management of diarrhoea at the health centre. Some mothers / care takers felt that individual talks are more beneficial than IEC which normally generalised their problems as noted by 24 (48%) of the respondents.

Health personnel should take into consideration the fact that traditional customs and beliefs regarding diarrhoea in children may have on the child and the resultant delay in taking the child to the health centres. Mothers/care takers should be taught the signs and symptoms of dehydration, its dangers and how to prevent them. Once this information is give to mothers/cares-takers, the mortality rate associated with dehydration would be reduced.

Most of the diseases that caused t deaths could have been treated and thus prevented the deaths of the children. Heath personnel should be able to initiate research in these areas to find out why there is an increase in morbidity rates of diarrhoea in their areas of care even when people are aware of the condition.

It is therefore, important for health personnel to carry out research in their professional areas as it unveils knew facts and generates new ideas on how to manage of ailments.

5.4 CONCLUSION

The purpose of study was to establish knowledge and practices of mother / caretakers with under 5 children towards home management of diarrhea in Lusaka. The study findings have shown that majority 17 (34%) of the respondents were aged between 30 – 34 .24 (48%) of these had attained upper primary education and had some knowledge on the home management of diarrhea. Majority 24 (48%) were self employed and 21 (42%) were married. 25 (50%) of the respondents came from high density areas where sanitation and water supply is believe to be poor majority 7 (63%) of the respondents who had who had lost their children came form high density compounds.

The prominent tribe was Bemba 18 (36%) majority 37 (74%) breast fed their children from 18 – 24 months. Mothers / caretakers understand the importance of breast feeding IEC on the importance of breast feeding is being emphasized in most of the maternal and child health civics (M.C.H.). 21 (42%) of the respondents knew some form of traditional beliefs and practices toward carry out research s diarrhea under five children and these could have an effect on the treatment of diarrhea in under fives, as most of the children are brought in the health center in a compromised state.12 (24%) of the respondents agreed that they gave traditional treatment to their children before bringing them to the health center and it was mostly respondents were giving both modern and traditional medicine.

Traditional herbal medicines may predispose children to developing some Complications especially when the treatment is prolonged. Additionally, bacteria may not be treated with traditional medicines effectively.

The majority 45 (90%) of the respondents agreed that their under 5 children had suffered from diarrhoea in the previous one month. Diarrhoea is a major health problem in the under five children.

The majority of the respondents 33 (66%) did not know how to manage diarrhoea at home.

The majority 40 (80%) of the respondents did not know how to prepare the home made fluid using sugar salt, and water to prevent dehydration which is the major cause of death in diarrhoea. The findings revealed that mothers / caretakers do

not receive health talks on management of diarrhoea at home regularly. Some mothers / caretakers stated that they were given only at times others stated they are never given to them. Mothers / caretakers do not have the correct information on how to manage a child with diarrhoea at home.

5.5 RECOMMENDATIONS

The following recommendations have been made on the basis of the study results:

- Health care provides should be able to evaluate the effectiveness of the IEC given to the mothers / care takers on diarrhoea and it's management at home. This will help the health care providers to know whether the behaviour of the caretakers / mothers through IEC is changing positively towards health practices.
- Health care providers should be able to carry out studies regarding traditional beliefs and practices related to diarrhoea so that they good ones are identified and incorporated in the IEC and bad ones should be discouraged.
- Health care providers should be able to conduct some simple research studies.
- The composition of health talks / IEC given to the mothers / caretakers should consist of signs and when to take the child with diarrhoea back to the health centre. They should be equipped with knowledge to assess their under 5 children with diarrhoea and give correct amount s of the home fluids to prevent dehydration and its complications.

Community health workers should be trained in the home management of a child with diarrhoea because they are the ones that are close to the families so that they are able to disseminate the information in their various zones

5.6. DISSEMINATION OF FINDINGS

The final research report will be submitted to Post-Basic Nursing Department. Another copy will be submitted to the University of Zambia Medical Library. A similar copy will also be sent to the Ministry of Health

5.7 LIMITATIONS OF FINDINGS

The sample was small to allow for adequate generations of findings and this was because of lack of time and financial resources.

7.0 REFERENCES

1. Aimsworthy, R. (1997). Better Health through Self Reliance, Moyo, Volume 30, Number 8.
2. Ahmed, I.S. (1996), knowledge, Attitudes and Practices of mothers Regarding Diarrhoea Among Children in a Sudanese Rural Community, East African Medical Journal. Volume 71 Number 11:716-718.
3. Chishala, M. (2006). A Study to Determine Mothers with Under five children Knowledge and Practice towards Diarrhoea in Isoka District. UNZA Library. Lusaka. Unpublished.
4. C S O. (2002) ZDHS, Lusaka, ZAMBIA.
5. C S O. (1992).ZDHS, Lusaka, ZAMBIA.
6. C S O. (1996).ZDHS, Lusaka, ZAMBIA.
7. Collins (2002). New School Dictionary, 2nd Edition, Harpers, U.K.
8. Dempsey, P. A. and Dempsey, A.R. (2000). Using Nursing Research Process, Critical Evaluation and utilization, 5th Edition, Lippincott, New York.
9. Eddet, E. E. (19960). Fluid Intake and Feeding Practices during diarrhoea in Odukpan, Nigeria. East African Journal volume 73 Number 5: 289- 297.
10. Jellif, D.B. and Bennt F. J. 1995). Indigenous Medical systems and child health. The Journal of Paediatrics, Volume 85, Number 3.
11. Jurayyan, M. N.Nasser, M.N., Rashid, A.M., Mugaeiren, M. M. Mayzad and Eissa, Y.A. (1994) Management of Acute Diarrhoea in Saudi Arabia. Practices Verse WHO Recommendations. East African Medical Journal Volume 71 Number 2:110-111.
12. Katundu and Situmbeko, (2002). Ministry of finance PRSP Paper.
13. Munyaradzi, O. M. (1995). The Africans Journal of Medicine, Volume38, Numbr10.
14. Mutati, M. (1997). User Fees: Determining Peoples Ability and Willingness to Pay for Health Care. A comparative study between Public and Private Health Sectors in Lusaka unpublished.
15. MDGs, (2005}. Status Report. New York.

16. MOH, UNICEF and WHO (1990). Traditional Medicine and its Role in Development of Primary Health Care in Zambia, Unpublished report.
17. M O H, (2005). Annual Statistical Bulletin. Lusaka.
18. MOH, (2005). Strategic Plan Ndeke House, Lusaka.+
19. Mwangi, J.W. (2004). Integration of Herbal Medicine in National Health care of Developing Counties. East African Medical Journal. Volume 81 Number 10: 497-498
20. Muriith, A.W. (1996). Control of Diarrhoeal Diseases Program. The Kenyan Situation. Volume 73 Number 5:281.
21. Nalishebo, C. B. (1998). A Study of the Impact of Medical fees on the consumers of Health Services. A case Study of Chainama Teaching Health Centre. UNZA Library Lusaka unpublished.
22. Orwa, J. A. (200). Herbal Medicine in Kenya. Evidence of Safety and Efficacy. East African Medical Journal. Volume 79 Number 7: 341-342.
23. Polit, D.and Hungler, B. (2000). Nursing Research Principles and Method. 7th Edition. Lippincott Company, Philadelphia.
24. Smolenskey, D. and Haar, F. B. (1997). Principles of Community Health. WB Saunders co. Philadelphia.
25. Sweeney M.A. and Oliver, p. (1996). An Introduction to Nursing Research, JB Lippincott, Co. Philadelphia.
26. Seaman, C. H. and Verhmick, P. J. (1997). Research Methods for undergraduate students in Nursing, Appleton – Central Craft, New York.
27. Smith, L. and Cane, R. (2002). Health Knowledge and Symptom Perception, Social science and Medicine. Volume 50 Number 5: 324-325.
28. Treece, E. W. and Treece J.W. (1996) Elements of Research in Nursing. The CV Molesby Co. St. Louis.
29. University Teaching Hospital Data Base, (2005). Lusaka.
30. WHO, (1993). The Management and Prevention of Diarrhoea. Practical Guidelines. Third Edition, Geneva.
31. WHO, (1992). Readings on diarrhoea. Student Manual Geneva.
32. WHO, (1994). Diarrhoeal and Acute Respiratory Disease Control. Geneva.

33. WHO and UNICEF, (1997). A Joint Statement. Geneva.

8.0 APPENDICES

- ANNEX**
- 8.1 Interview Schedule
 - 8.2 Work Plan
 - 8.3 Gantt Chart
 - 8.4 Budget
 - 8.4 Permission letters

8.1 INTERVIEW SCHEDULE

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

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

☐

2. What is your educational attainment?

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

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

☐

3. What is your occupation?

- a. House wife
- b. Self employed
- c. Formal employment
- d. None

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

☐

4. Where do you live?

- a. High density
- b. Medium density
- c. Unclassified

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

☐

5. What is your tribe?

- a. Bemba
- b. Tumbuka/Ngoni
- c. Tonga
- d. Lenje
- e. Others specify.....

☐

6. What is your religion?

- a. Hindu
- b. Muslim
- 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 – 12
- d. 3+

☐

9. How many of your children are under 5?.....

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

11. Has any of your under 5 children suffered from diarrhoea?

a. Yes

b. No

12. If your answer is yes to question 11, how many times.

13. If yes, what must have caused the diarrhoea?

a. Teething

b. Exposure to excessive heat.

c. Milk of a pregnant mother.

d. Bacteria in food or water.

e. Any other specify.....

--

14. Did you seek medical treatment or advice?

a. Yes

b. No

--

15. If the answer to question 14 is yes, where did you seek medical treatment?

a. Hospital

b. Health centre

--

c. CHW

d. Traditional healer

e. Others specify.

16. What is the source of water for your home?

a. Tap water (communal)

b. Tap water (Inside the house)

c. Protected well

--

d. Unprotected well

17. How do you make the water safe for drinking?

a. Boiling

b. Chlorination

--

c. Any other (specify)
.....

18. How do you dispose of garbage from your house?

- a. Rubbish heap

b. Rubbish pit

c. Garbage collection company

d. Any other (specify)

.....

.....
-

☐

19. What type of toilet do you use?

- a. Water closet (flushing)

b. VIP

c. Pit latrine
-

☐

20. Have you lost any children?

- a. Yes

b. No
-

☐

21. If your answer to question 20 is yes what was the cause of this death?

- a. Diarrhoea

b. Malaria

c. Pneumonia

d. Others specify

.....

.....
-

☐

SECTION B: KNOWLEDGE OF DIARRHOEA

22. What do you understand by the term Diarrhoea?.....
.....

23. How can you know that a child has diarrhoea.....
.....
.....

24. How do you manage a child who has diarrhoea?
.....

25. How can you tell that your child with diarrhoea needs fluid replacement?

- a. Sunken eyes.
- b. Drinks eagerly.
- c. Irritable
- d. Skin pinch goals back slowly.
- e. Any other

☐

26. How do you make sugar, salt and water solution for fluid replacement at home.
.....
.....

27. When do you take a child with diarrhoea to the health centre?

- a. As soon as child develops diarrhoea.
- b. If child is not improving after 5 days.
- c. Any other specify

☐

SECTION C: PRACTICE

28. Do you have any traditional beliefs and practices regarding diarrhoea?

- a. Yes
- b. No

29. If yes, please explain what they are.....
.....

☐

30. Do you give your under 5 children with diarrhoea medicine before taking them to the health centre or hospital?

a. Yes

b. No

31. If your answer to question 30 is yes, what kind of medicine do you give them?

32. Where do you obtain the medicine?

a. Friends

b. Neighbour

c. Family member

d. Traditional healer

e. Others specify

Do you feed a child who has diarrhoea?

f. Yes

g. No

33. If the answer to question 34 is yes, what type of food do you give them?

34. How much water do you need to reconstitute ORS powder?

a. 50ml

b. 200ml

c. 500ml

d. 750ml

e. 1000ml

35. How do you give ORS to a child with diarrhoea?

a. With a cup

b. With a spoon

c. Any other, Specify.

SECTION D: ACCESS TO INFORMATION, EDUCATION AND COMMUNICATION (IEC)

36.Are you given health talks on the home management of diarrhoea when you take your child with diarrhoea to the health centre?

- a. Always given

b. Sometimes given

c. Never given

d. Others specify
-
-

37.Who gives you the health talks?

- a. Doctor

b. Clinical officer

c. Nurse

d. CHW

e. Others, specify
-
-

38.Describe the instructions that you are given on how to manage diarrhoea at home.

.....

.....

.....

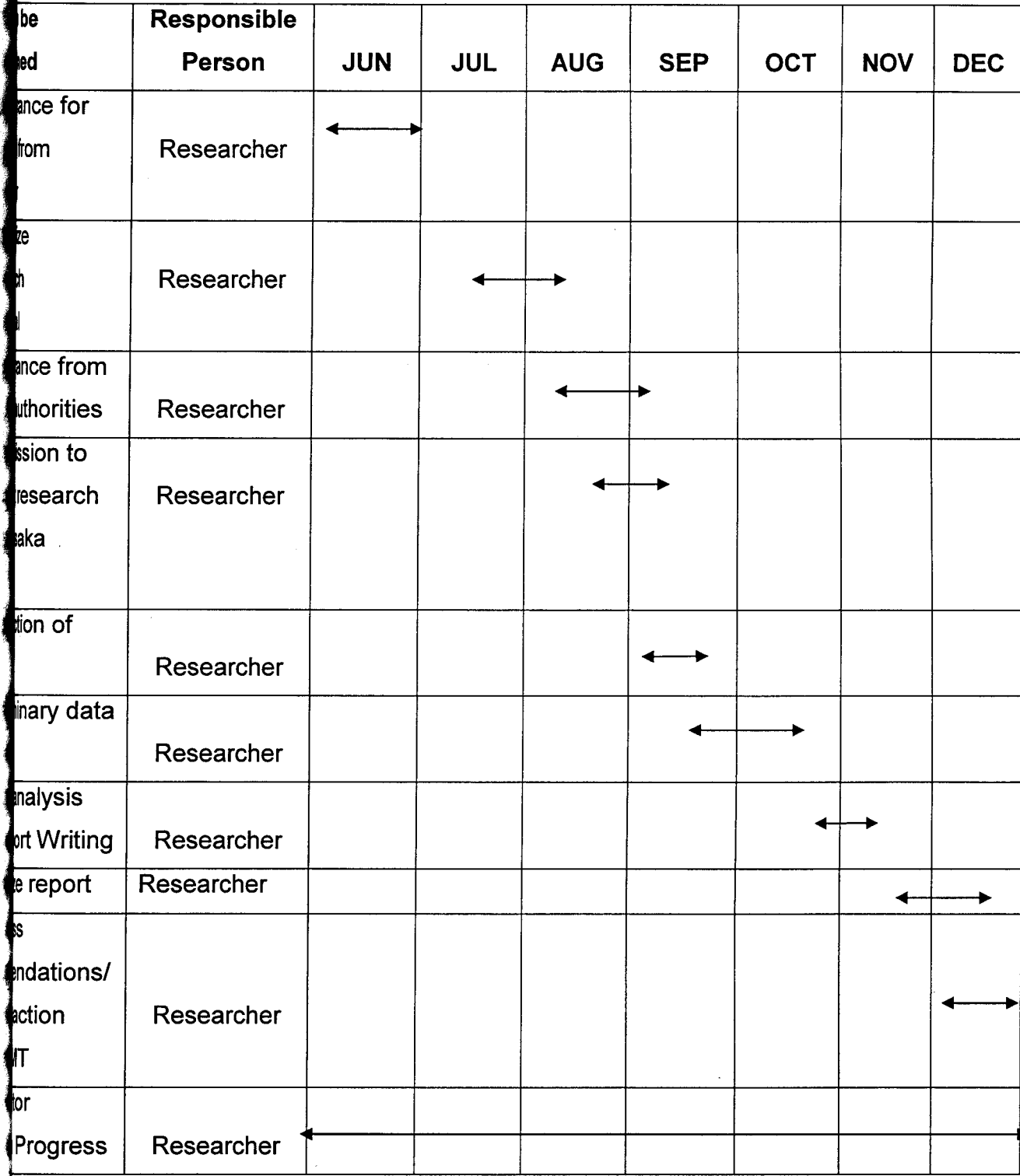
APPENDIX 2

8.2 WORK PLAN

ACTIVITY	TIME FRAME		RESPONSIBLE PERSON
	DATE	DURATION	
Development and finalization of Research Proposal	Week 1 – 7 06/06/05 to 30/07/05	40 days	Researcher
Leave from school	25/07/05 to 05/08/05 Week 8 – 9	10 days	Researcher
Decision to conduct a pilot study Main study from DHMT	29/08/05 to 31/08/05	2 days	Researcher
Study and amendments in the collection tool	01/09/05 to 09/09/05	8 days	Researcher
Collection (main study)	12/09/05 to 30/09/05	15 days	Researcher
Analysis	03/10/10/05 to 31/10/05	21 days	Researcher
Writing	01/11/05 to 14/11/05	14 days	Researcher
Report to PBN	15/11/05 to 30/11/05	14 days	Researcher
Writing 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

APPENDIX 3

8.3 GANTT CHART



APPENDIX 4

8.4 BUDGET

Budget category	Unit price (K)	Quantity	Total (K)
STATIONERY			
Writing paper	30 000.00	4 reams	120 000.00
Note book	10 000.00	1	10 000.00
Sketches	5 000.00	2	10 000.00
Pencils	6 000.00	1 packet	6 000.00
Markers	12 000.00	1 packet	12 000.00
White-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	1	80 000.00
Eraser	16 000.00	1 packet	16 000.00
Photo chart	40 000.00	2	80 000.00
Folder	5 000.00	1	5 000.00
Audio-tape	8 000.00	1	8 000.00
Folder	20 000.00	1	20 000.00
Total Stationary cost			450 000.00
Secretarial Services			
Writing research	4 000.00	90 pages	360 000.00
Proposal			
Writing	4 000.00	10 pages	40 000.00
Questionnaires			
Photocopying	250.00	550	137 500.00
Questionnaires			
Writing research	40 000.00	1 copy	40 000.00
Proposal			

typing report draft	4 000.00	100 pages	400 000.00
photocopying	250 000.00	200 pages	50 000.00
binding final report	60 000.00	4 copies	240 000.00
total secretarial cost			1 267 500.00
PERSONNEL			
transport to & from	150 000.00	2	300 000.00
lunch			
total personnel cost			300 000.00
total costs			2 017 500.00
10% contingency			201 750.00
Grand Total			2 218 250.00

APPENDIX 5

8.5 PERMISSION LETTER FOR RESEARCH STUDY

The University of Zambia
School of Medicine
Department of Post Basic
Nursing
P.O. Box 50110
Lusaka.

10th September 2006

The District Director of Health

LDHMT

Box

Lusaka.

UFS. The Head of Department
Department of Post Basic Nursing
P.O. Box 50110
Lusaka.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A RESEARCH STUDY AT KABWATA AND KAMWALA CLINICS IN LUSAKA.

I am a fourth year student at the School of Medicine, Department of Post Basic Nursing at UNZA, pursuing a Bachelor of Science Degree in Nursing.

In partial fulfilment of my Degree Programme, I am required to submit a research project. The topic of my study is "A Study to Determine Mothers/Caretakers of Under Five Children Knowledge and Practices Towards Home Management of Diarrhoea".

I am hereby asking for permission to carry out the research study at Kabwata and Kamwala Clinics.

Your assistance will be highly appreciated.

Yours faithfully,

Kosta Getrude Chipuka

APPENDIX 6

8.5 PERMISSION FOR PILOT STUDY

The University of Zambia
School of Medicine
Department of Post Basic Nursing
P.O. Box 50110
Lusaka.
10th September 2006

The Sister In-charge
Chilenje Clinic
Lusaka.

UFS. The Head of Department
Department of Post Basic Nursing
P.O. Box 50110
Lusaka.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A PILOT STUDY AT CHILENJE CLINIC

I am a fourth year student at the school of Medicine, Department of Post Basic Nursing at UNZA, pursuing a Bachelor of Science Degree in Nursing.

In partial fulfilment of my Degree Programme, I am required to submit a research project. The topic of my study is 'A Study to Determine Mothers/Caretakers of Under 5 Children Knowledge and Practices Towards Home Management of Diarrhoea'.

I am hereby asking for permission to carry out the pilot study at Chilenje Clinic. Your assistance will be highly appreciated.

Yours faithfully,

Kosta Getrude Chipuka

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

**MOTHERS WITH UNDER FIVE CHILDREN'S KNOWLEDGE AND
PRACTICES TOWARDS HOME MANAGEMENT OF DIARRHEA
IN LUSAKA DISTRICT.**

By

GETRUDE CHIPUKA KOSTA
Diploma in Nursing (Lusaka, 1987)
Certificate in Midwifery (Lusaka, 1999)

**A RESEARCH STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE IN
NURSING DEGREE AT THE UNIVERSITY OF ZAMBIA.**