

**PREVALENCE OF DIARRHOEA AMONG CHILDREN AGED 12-60 MONTHS IN FORT
– PORTAL REFERRAL HOSPITAL**

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DECLARATION

I declare that this report is my own work, and has never been presented anywhere for any award, and that I have acknowledged all results and quotations from the published and unpublished work of other people.

Students name:.....

Signature:.....**Date**.....

SUPERVISOR'S APPROVAL

This is to certify that this report is a true account of the students' own work.

Supervisor name:

Department /school:

Signature:.....

Date:.....

DEDICATION

I dedicate this report to my beloved mother Victoria Kyikafunda and my late father Andrew Munubi.

ACKNOWLEDGEMENT

1. Special thanks to Belgian Technical Cooperation (BTC) who have payed my tuition.
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LIST OF ABBREVIATIONS.

AMREF: Africa Medical and Research Foundations

CCD: Control of Diarrhoea Diseases

CHD: Child Health Dialogue

ORS: Oral Rehydration Solution

WHO: World Health Organization

PMTCT: Prevention of Mother To Child Transimition.

DHO: District Health Officer

LC: Local Council

ABSTRACT

A cross sectional study was carried out between August-September 2013 in Fort Portal referral hospital. The study aimed at establishing diarrhoea prevalence among children aged 1-5 years in Fort Portal Referral hospital

The research population was mothers of child bearing age 15-49 years with at least one or more children under five years.

The study reveal that fifty two children 52/148 (35.1%) were found to have had diarrhea during the interviewing time. This is quite a reasonable percentage that requires attention as it is well known that diarrhea can result into malnutrition , and other complications like dehydration which easily lead to death.

The report shows 44(44%) of mothers attributed “False teeth” as being the cause of diarrhoea. 32(32%) didn’t know the cause of diarrhea. This shows almost three quarters of the interviewed mothers seem not to know the real cause of diarrhoea. This may be attributed to the low level of education.

As far as treatment of water is concerned, 50(50%) don’t treat their water, 46(46%) boil water. Most of the respondents 52(52%) say that diarrhea can’t be prevented and 16(16%) didn’t know whether diarrhoea is preventable or not.

The study reveals that methods of prevention of diarrhoea are: hand washing before meals 16(36.4%), proper refusal disposal 08(18.1%) and Hand washing after using toilet 04(9.1%).

CHAPTER ONE

1.0 Introduction

Background

Diarrhoea is passing of loose stool (watery) more than three times a day. It commonly follows infections of gastro intestinal tract infection by bacteria organisms. Common bacterial infections are salmonella, shigella and vibrio cholera. Diarrhoea is a common illness and a leading cause of death in young children especially those who are malnourished according to Jelliffe and Jelliffer(2007).

According to World Health Organization(2001) Publication in Geneva,in developing countries children suffer an average of three episodes per year during the first few years of life and an estimated four million diarrhea associated death occur annually among young children throughout the world. According to the Kabarole district profile (2007), diarrhea ranks number three killer diseases in under five in the whole district.

According to Paget (2006), in Africa approximately 170 children out of every 1000 born alive die before the age of five years due to diarrhoea illness.

It was discovered by Feach (2004) that all pathogens known to be major causes of diarrhoea are transmitted primarily or exclusively by fecal oral route either directly or indirectly via water or food. Hygiene practices clearly have the potential to influence the nature and extent of such transmission. Special emphasis is put on hand washing to control diarrhoea. Several studies by Peter and Gilbert (2007) have demonstrated the Feasibility of hands acting as Vehicles of transmission and have documented positive correlation between contamination of hands and incidence of diarrhea.

Diarrhoea is major cause of mortality in children; therefore there is a need for early management of this ailment. Uganda health bulletin 1994 reports that through Oral Rehydrations Salts (ORS) use we can save 1 million of the 2.5 million children every year. The control diarrhoea disease (CDD) programmes in Uganda launched massive campaigns on Oral Rehydration salts use and it has funded seminars in order to train people on the control of diarrhoea. According to the International News letter (2006),

the discovery of Oral Rehydration Therapy which is a simple solution of water 3.3g sodium chloride, 1.5g potassium chloride, 2.9g trisodium citrate and 20g of anhydrous glucose is reported to have saved many lives by replacing fluids lost during diarrhoea.

1.2 Problem statement

Diarrhoeal disease is an important public health problem among under- five children in developing countries. Global estimates of the mortality due to diarrhoea have shown a steady decline since 1980s. However, diarrhoeal diseases still continue to be an important cause of morbidity and mortality worldwide in spite of all advances in health technology, improved management, and increased use of oral rehydration therapy in the past decades. Morbidity due to diarrhoea has not shown a parallel decline in comparison to mortality trends, and global estimates remain between two and three episodes of diarrhoea per under five year child per year.

Millennium Development Goal - 4 aims to reduce childhood mortality by 2/3 by the year 2015 and previous studies, however, show minimal progress in this regard. So efforts must be made to find out the prevalence of diarrhea in the under five to check how far we are in attaining the millennium development goal-4 in the area of study.

1.3 Study Justification

According to Kabarole district profile (2007), Diarrhea ranks number three killer disease in under five in the whole district in Uganda. According to the World Health Organisation / Control of Diarrhoea Diseases (2007-2009), Diarrhoea and Malnutrition cause almost three quarters of deaths in children under five years and continue to be the leading cause of most preventable diseases in children globally. Also Clayden and Hawkins (2008), mentions that among the 300 million children under the age of five years, 100 millions attacks of diarrhea occur every year resulting in five million deaths from dehydration. Diarrheal disease is the second leading cause of death among under-five children in low-income countries in after pneumonia and it kills 1.5 million children every year. In developing countries, children under three years old experience on average three episodes of diarrhea every year.

This is commonly results into severe dehydration complicated with malnutrition that results in long term hospitalization. This results in reduction in production of mothers and total income of families. The prevalence of diarrhea in the area of study is not well documented and there for this merits a research to document data on this for better planning and management. The study will provide baseline information on the prevalence of diarrhea in the under-five in this region for future researchers. It will also help the stake holders in planning and budgeting for the region and health education. Succesful completion of the study will contribute to the partial fulfillment of the requirements for the award of degree in medicine and surgery to the researcher.

1.4 Broad objective

To assess the prevalence of diarrhea in Fort – Portal Referral hospital in order to suggest a practical solution aiming at rectifying this problem of diarrhoea among children under five in the areas served by this hospital.

1.5 Specific Objectives

1. To determine the prevalence of diarrhea disease among the under five in Fort-portal hospital.
2. To assess the factors predisposing to diarrhoeal diseases in this area.
3. To establish the knowledge of mothers and attendants on diarrheal diseases.

1.6 Research questions

1. What are the causes of diarrhoea in children 1-5 years attending Fort Portal referral hospital?
2. Do mothers know the causes and prevention of diarrhoea?
3. What factors predispose to diarrheal diseases in children less than five years?

CHAPTER TWO:

REVIEW OF RELATED LITERATURE

Diarrhoea is a serious public health problem in the world. All children in the world suffer from diarrhea followed by spontaneous and complete recovery. Some of these children have repeated serious attacks resulting in death.

Nutritional state is very important; children who are poorly fed get severe diarrhoea infections as compared with properly fed children. Bottle feeding is another very important hazard which occurs during weaning period. The bottle is usually not cleaned properly, and contamination with bacteria or other organisms is almost inevitable. Many children have died from diarrhoea due to bottle feeding.

Often the mother, not knowing about risks, stops safe breast feeding and introduces the dangerous bottle, just for prestige reasons. The bottle can be a killer (AMREF – Revised report 2005).

Diarrhoea is almost prevalent in under five and is still the leading cause of mortality in children. According to the world Bank report (2002-2003), 2.5 million die of diarrhoea in developing countries.

According to stanfield Balldin, Zierversluys (2007), diarrhoea is a very common illness in children and the majority of the admitted children in pediatric wards have diarrhoea.

A recurring diarrhea during the weaning stage is a term known as weaning diarrhoea. The entirely breastfed child has a source of food which is clean and easily digested. When additions to the diet are made, the food may not be properly prepared or may contain pathogens which may predispose the child to gastro intestinal infections. This is supported by Ebrahim (2006), saying that during the weaning period, sub clinical malnutrition will reduce the child's resistance so that various bacteria which may be harmless in health children produce low grade diarrhoea during weaning.

It seems that most communities in Africa hold the idea that some degree of “starvation” is an essential part in management of diarrhoea for example in Bangladesh refugee camps mothers were of the opinion that starvation made children healthy (Moley 2003).

There are various reasons why many dehydrated children particularly those in rural areas never reach hospital; first a mother may not be able to take a decision to take a child, second the mother might need the father's consent and third there is a cultural belief that whenever the child is developing teeth, he /she usually develops malaria. Unfortunately this is still so despite the efforts being put by the government and ministry of health in giving mothers health talks on causes, dangers and management of diarrhoea.

In Uganda today about (67%) live below the poverty line (AUSPICE- NGO 2003) and therefore nutrition in children and infants is very poor.

WHO Stressed that over population and poor sanitation are the leading cause of diarrhea diseases in addition to HIV related infections. A study in Peru shows persistent diarrhoea causes 3% compared to the 23% in Bangladesh (World Health Organization / Control of Diarrhoea Diseases 9th Report 2002-2003).

According to Karugaba and Chisale (2005), inadequate personal and domestic hygiene, poor sanitary conditions, inadequate breast feeding, inappropriate weaning foods and bottle feeding predispose children to diarrhoea.

Among the predisposing factors to diarrhea is the quality of water distribution system from the source. As found out in Borakhpur, India, bacteriological pollution of drinking water supplies due to the infiltration of contaminated water through cross connection, leakage points, and back siphoning caused diarrheal illness.

The significant water risk factors as identified were the mode of water transportation, and the poor handling of water at the household level, including lack of or inappropriate water treatment methods. These, combined with the low education level further predispose the under five children to diarrhoea.

Also, washing and purifying fruit and vegetables; presence of wastewater in the street; refuse storage, collection and disposal; domestic water reservoir conditions; faeces disposal from swaddles; presence of vectors in the house and flooding in the lot were found to be associated with diarrhea. Amongst households storing municipal water proven to be safe at source, adhering to the best storage practices did not translate into lower incidence rates as compared to those with relatively unsafe practices. The explanation lay in factors which were external to the home and beyond the control of the affected household. Thus, household level behavioral factors such as storage practices should not be analyzed in isolation as determinants of diarrheal illness particularly.

It has also been found that breast fed infants have lower diarrhoea disease mortality and morbidity than others. Breast milk is important and should be the only or main source of water and food during early infancy from birth to six months. According to Jelliffe and Jelliff (2007), Breast feeding should also be an additional food during weaning period, as breast milk prevents diarrhoea disease, it is clean and contains antibodies.

Gibbons and Griffith (2004) found out that both early and late weaning predisposes young children to diarrhoea diseases. Weaning begins when the child is introduced to foods other than breast milk or food substitutes and is complete when a child is used to regular family diet.

According to Ebrahim (2003), in some countries children under the age of five may suffer as many as 10 episodes of diarrhea per year and spend most of the time with diarrhoea illness.

Diarrhoea is major cause of mortality in children; therefore there is a need for early management of this ailment. Uganda health bulletin 1994 reports that through Oral Rehydration Salts (ORS) use we can save 1 million of the 2.5 million children every year. The control diarrhoea disease (CDD) programmes in Uganda launched massive campaigns on Oral Rehydration salts use and it has funded seminars in order to train people on the control of diarrhoea. According to the International News letter (2006), the discovery of Oral Rehydration Therapy which is a simple solution of water 3.3g

sodium chloride, 1.5g potassium chloride, 2.9g trisodium citrate and 20g of anhydrous glucose is reported to have saved many lives by replacing fluids lost during diarrhoea

In bloody diarrhoea, some antibiotics can be used to save the situation though some resistance against antibiotics by bacteria (*Shigella*-species) has been reported. According to child health dialogue (2004), drugs to reduce the frequency of stool should never be used to treat bloody diarrhoea as they can increase its severity.

CHAPTER THREE:

METHODOLOGY

3.0 Introduction

The study covered the following; study area, study population inclusion/exclusion criteria, study design, sample size determination, sampling procedure, data collection techniques, Ethical consideration, as well as Data management and analysis.

3.1 Study area.

The study was conducted in Fort Portal referral hospital in a Paediatric ward and outpatient department in Fort Portal municipality, Kabarole district in Western Uganda.

3.2 Study population

The study included all the children between the ages of 1-5 years who were at the hospital during the period of study. Mothers and attendants above the age of eighteen years were also interviewed. The hospital has a catchments population of about 1.5 million people.

3.3 Study design

A cross sectional study was carried out between August-September 2013 in Fort Portal referral hospital. The study aimed at establishing diarrhoea prevalence among children aged 1-5 years in Fort Portal Referral hospital.

3.4 Sample size determination

The sample size was determined by calculations using the statistical sample size formula for population of greater than 10000 which is given by Fischer. Thus; $n = \frac{Z^2 pq}{d^2}$

d^2

Where n = Desired sample size for population greater than 1000

z = The standard normal deviate usually set at 1.96 which corresponds to 95% confidence level.

P= expected diarrhoea prevalence under five year children in the district, since it is not known it is assumed to be 0.5.

$$q= 1-p$$

d= The degree of accuracy level set at (0.08) but which normally ranges between (0.02-0.05) hence calculated sample size was;

$$n= \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.08)^2}$$

$$n= \frac{3.8 \times 0.25}{0.0064}$$

$$n= 150.06$$

$$n= 150$$

$$n= 150$$

$$n= 150$$

Thus the required sample will be 150; because of limited resources a sample of 100 respondents was used.

3.5 Sampling procedure

All the children who will come to the outpatient department during the period of study will be randomly selected to take part in the study until the required number (75) will be achieved and those on the ward stratified sampling was used.

3.6 Data collection techniques

Data was collected concerning the diarrhoea prevalence among the children under five years from mothers. The main instruments used were questionnaires. These questionnaires were administered to mothers and attendants who had children less than five years.

3.7 Pre- Test

The pre– test questions was given to few residents to assess the acceptability of data collection tool used and necessary adjustments were made to ensure adequate data quality.

3.8 Ethical Consideration

The study was approved by the ethical review committee of clinical medicine and dentistry of Kampala International University Western Campus. Individual informed consent was obtained before the interview. The consent form was read in the local language and a copy was given to the women upon request. Participants were informed of the general purpose, possible risks, and benefits of the study. To ensure confidentiality, participants' data was linked to a code number

3.9 Study analysis and limitations

Due to limited time and financial resources only those patients who came to the hospital were studied and the results may not been representative of the whole kabarole district. Due to financial constraints, laboratory work to find out the cause of the diarrhoea was not done; only questionnaires to get the general prevalence were used.

CHAPTER FOUR

FINDINGS

The table below shows mothers of child bearing age 15-45 with at least one or more children under five years.

5.1 Age

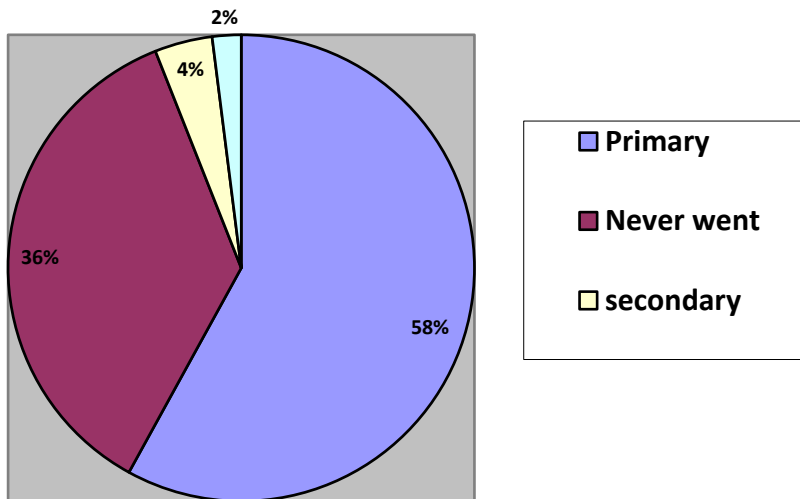
Table 1: Age of respondents (N=100)

Age distribution years	Number of respondents	Percentages
15-19	20	20
20-24	36	36
25-29	24	24
30-34	12	12
35-39	8	8
TOTAL	100	100

The age group 20-24 had the majority of respondents while 35-39 had the least.

5.2 Education

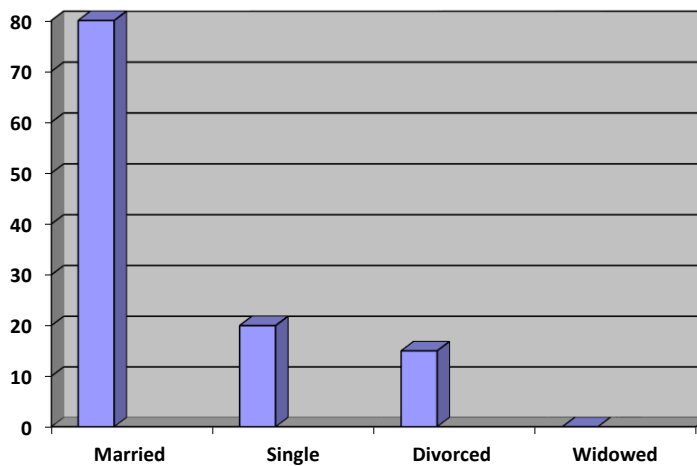
Figure 1: Education Status of Respondents (N=100)



The majority 58(58%) of the respondents had primary education while 36 (36%) never went to school

5.3 Marital Status

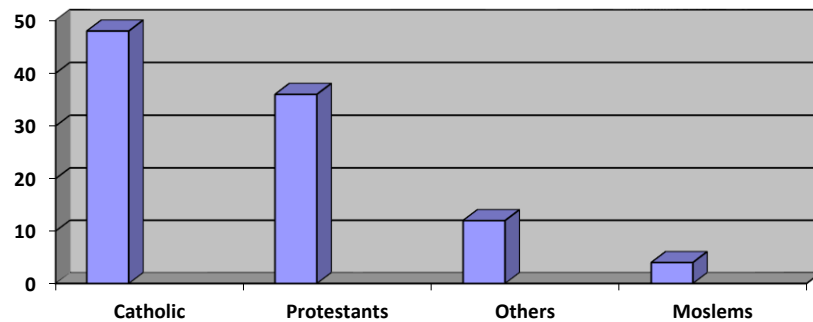
Figure 2: Marital Status of Respondents



More than 3/4 of the respondents 80/100 (80%) were married whereas 4/100 (4%) were divorced.

5.4 Religion

Figure 3: Religion of Respondents (N=100)



The majority of respondents were Catholics 48/100 (48%), followed by the protestants 36/100 (36%).

5.5 Occupation

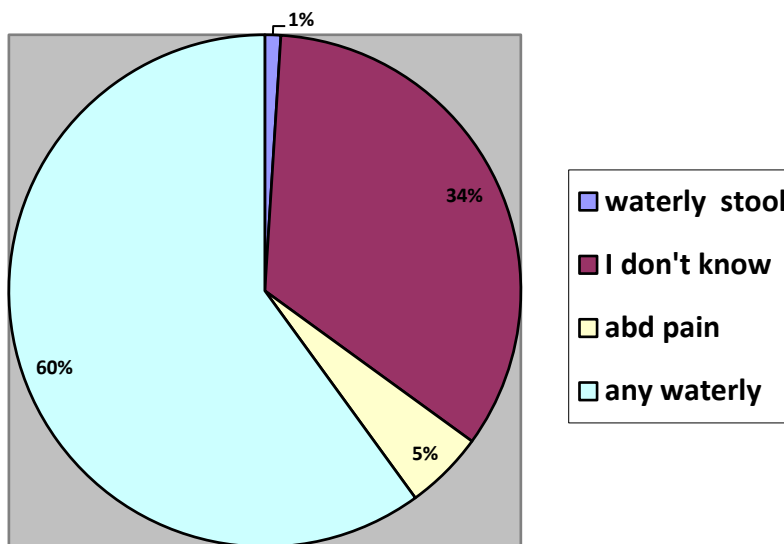
Table 2: Occupation of Respondents (N=100)

Occupation	Frequency	Percentage
Peasant Farmer	76	76
House Wife	12	12
Self employed	8	4
Civil servant	4	4
Total	100	100

Three quarters (3/4) of the respondents were peasant farmers, while none of them was employed

5.6 Knowledge on diarrhea by respondents.

Figure 4: Knowledge on diarrhea by respondents.



Majority of respondents (60%) think diarrhoea is any watery stool.

5.7: Respondents with number of children under five years.

Table 3: Respondents with number of children under five years (N=100)

Number of children	Respondents	Percentage	Total number of children
1	56	56	56
2	40	40	80
3	4	4	12
4	0	0	0
Total	100	100	148

More than half of the respondents 56/100 (56%) have a child each and only 4/100 (4%) have three children each under five.

5.8 Children under five years who have had diarrhea in the last 2 months

Fifty two (52) children under five had had diarrhea of the hundred (100) interviewed mothers during the interviewing time.

5.9 Causes of diarrhea under five

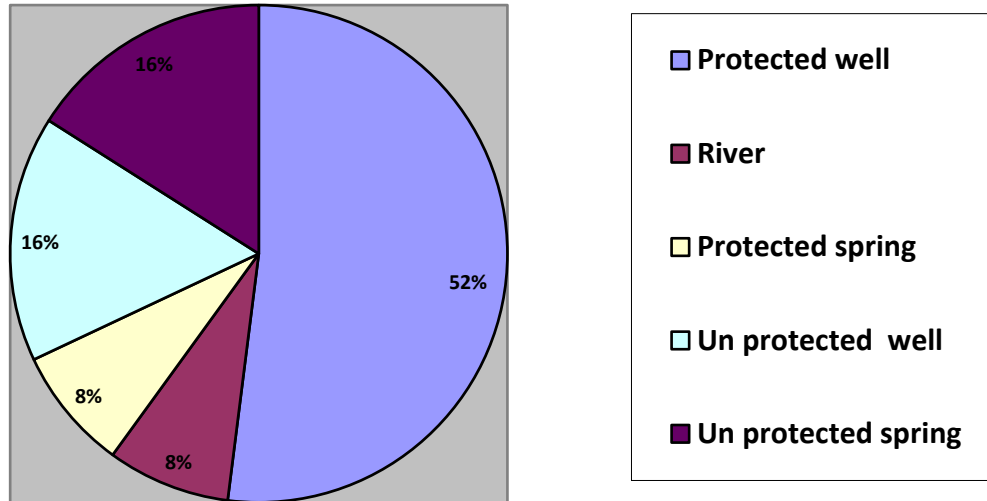
Table 4: Mothers information on causes of Diarrhoea under five (N=100)

Causes	Number of respondents	Percentage
Poor hygiene	20	20
False teeth	44	44
I don't know	32	32
Witch craft	4	4
Total	100	100

Nearly half of the mothers 44/100 (44%) attributed diarrhea under five to be caused by “falsed teeth” while 32/100 (32%) didn't know the cause.

6.0 Sources of water.

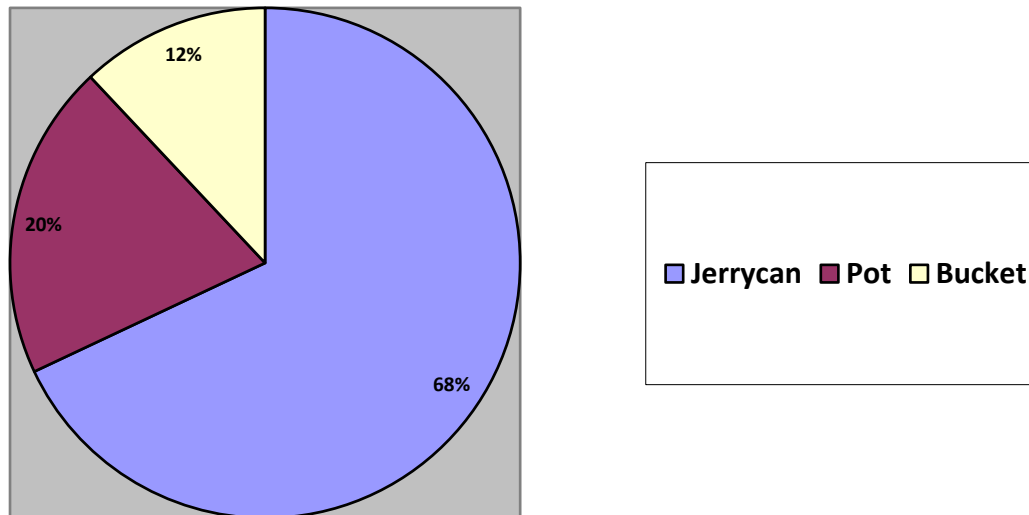
Figure 5: Sources of Water (N=100)



The majority of the respondents 52/100 (52%) use protected well.

6.1 Water storage.

Figure 6: Water storage in house hold (N=100)



Nearly three quarters of respondents 68/100 (68%) use jerry cans while 20(20%) use pots.

6.2 Water treatment

Table 5: Various Method of water treatment (N=100)

Treatment method	Response	Percentage
Boil	46	46
Sediment	00	00
Chemicals	00	00
Filtering	04	04
Don't treat	50	50
Total	100	100

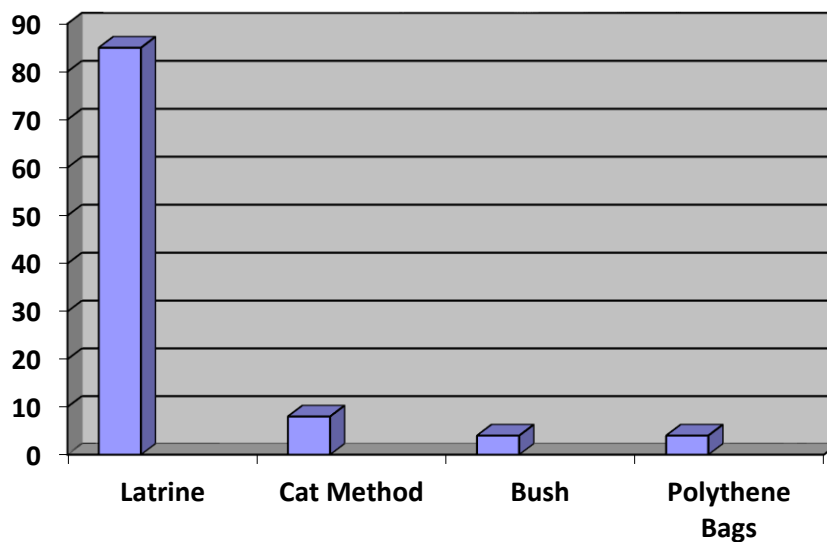
A half of the respondents 50/100 (50%) don't treat their water while 46/100 (46%) use boiling method.

6.3 Excreta disposal by respondents

Nearly all people (respondents) use pit latrines 96%) while the remaining percentage 4/100 (4%) is shared equally between cat method and Bush method.

6.4 Excrete Disposal

Figure 7: Children excrete disposal



More than three quarters of the respondents 84/100(84%) dispose children excreta in pit latrine while 4/100(4%) use bush method.

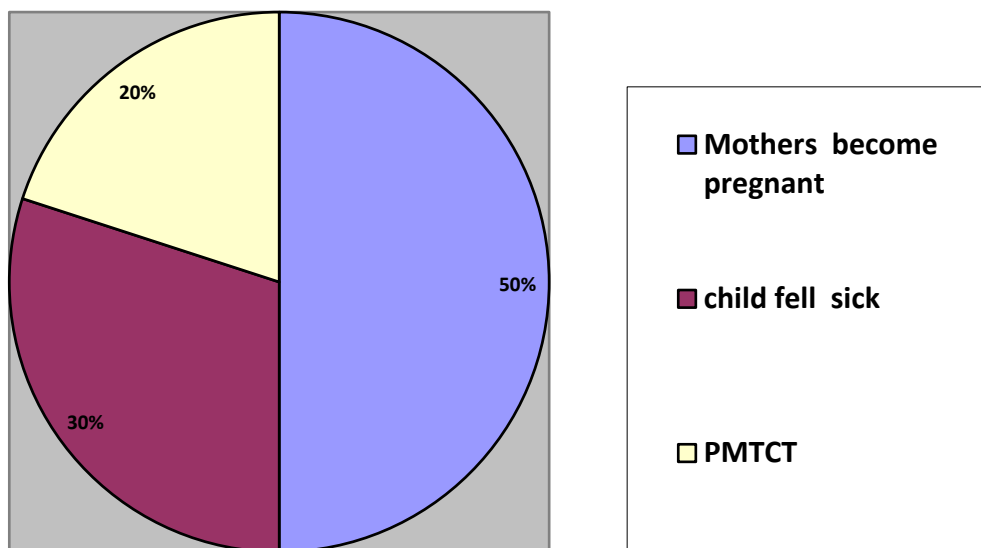
6.5 Breastfeeding in children

Table 6: Frequency of breast feeding in children (N=60)

Frequency of breast feeding	Number of respondents	Percentages
More than 10times in 24hrs	08	13.3
During night when am around.	00	00.0
During day only	04	06.7
When she/he cries	40	66.6
3 times a day in 24hrs	08	13.3
Total	60	100

Among the 60 respondents, equal numbers 40(66.6%) breast fed when the child cried and very few 08(13.3%) breastfed more 10times a day.

Figure 7: Reasons for stopping breast feeding (N=100)



Half of the respondents 20/40 (50%) stopped breast feeding because they were pregnant.

While 12/40 (30%) stopped because the child fell sick and 6/40 respondents stopped breastfeeding because they were on PMTCT.

6.7 Weaning age

Table 7: shows weaning age.

Weaning ages in months	Number of respondents	Percentages
0-1	08	11.1
2-3	12	16.7
4-5	20	27.8
6-7	28	38.9
8-9	04	05.5
TOTAL	72	100

The commonest age group (in month) for introducing supplementary feeds is 6-7 which contributes 38.9% followed by 4-5 which has 27.8%.

6.8 Supplementary foods

Table 8: The supplements given to the child weaning age (N=100)

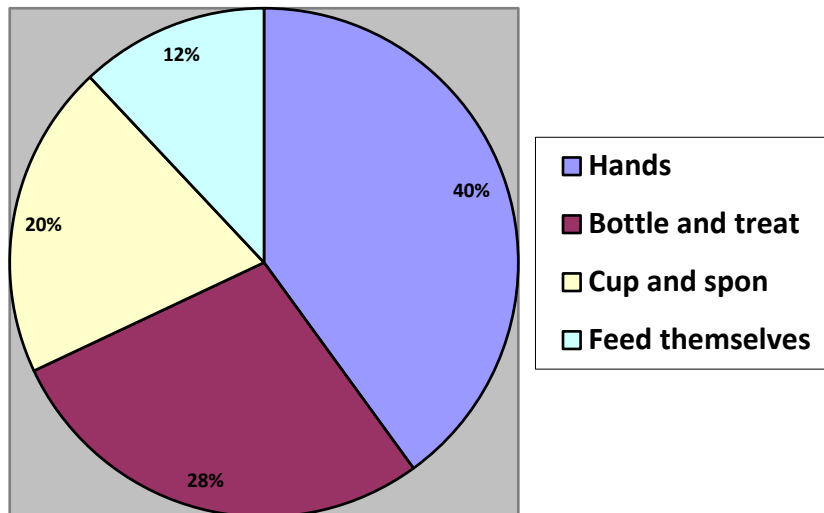
Type of food	Respondents	Percentages
Cow milk	36	22.7
Porridge	24	17.1
Irish potatoes	24	17.1
Beans	14	17.1
All foods we eat	32	22.9
TOTAL	140	100

The majority of the mothers use cow milk 36/140 (22.7%) as their weaning food followed

Non -specified foods (daily menu of family) 32/140 (22.9%).

6.9 Feeding methods

Figure 8: Feeding methods (N=100)



The majority 40(40%) of the respondents use Hands to feed babies, followed by bottle and teat 28(28%).

7.0 Health seeking behavior

The majority of the mothers take their children to the health facility when their children contract diarrhea (40%), 32% use herbs, 20% use homemade fluids and 08% buy drugs.

7.1 Knowledge on whether diarrhea is preventable.

Of the 100 respondents 52(52%) say that diarrhea can't be prevented, 32 (32%) knew that diarrhea is preventable and 16(16%) didn't know whether diarrhea is preventable or not.

7.2 Methods of prevention

Table 9: Respondents knowledge on methods of prevention (more than one correct response given)

Methods of diarrhea prevention	Frequency	Percentage
Hand washing before meals	16	36.4
Hand washing after using toilet	04	9.1
Use of clean drinking water	16	36.1
Proper refusal disposal	0.8	18.1

The most frequent methods of prevention are hand washing before meals and use of clean drinking water 16/44 (36.4%)

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS:

6.1 DISCUSSION

The research population was mothers of child bearing age 15-49 years with at least one or more children under five years.

Table 1 shows that the majority of mothers in the community are still young 92/100 (92%) and able to produce more children, most probably this is due to early marriage therefore a need for education on diarrhea disease so as to enable them prevent and treat diarrhea effectively.

Section 5.8 reveal that fifty two children 52/148 (35.1%) were found to have had diarrhea during the interviewing time. This is quite a reasonable percentage that requires attention as it is well known that diarrhea can result into malnutrition , and other complications like dehydration which easily lead to death. This percentage shows that diarrhea disease is still prevalent in our community which is in line with the World Bank report 1993 which stated that diarrhea is almost prevalent in less than five.

Figure 1 shows that most mothers 58(58%) attained primary education level, 36% never went to school and only a very small percentage 4% and 2% attained secondary and tertially levels respectively. This might be due to low social economic level of the people and it shows that the community still has a problem because the literacy level goes hand in hand with general health status preventive measures on diarrhoea disease and other sickness.

Most of the mothers 80(80%) were married and peasant farmers 76(76%), 16(16%) were single and where most of them were self employed (figure 2 and Table2). The economic capacity of an individual determines the nutritional status, hygiene and treatment in every family. Seemingly, according to the occupation of the mothers it

shows that their children are more susceptible to getting diarrhoea since diarrhoea is associated with poor nutrition, poor hygiene and poor sanitary environment.

According to table 4, 44(44%) of mothers attributed “False teeth” as being the cause of diarrhoea which answers my research question No.2. 32(32%) didn’t know the cause of diarrhea. This shows almost three quarters of the interviewed mothers seem not to know the real cause of diarrhoea. This may be attributed to the low level of education.

The majority of respondents 60(60%) use water from protected sources while the minority gets water from unprotected sources (Figure 4), this percentage put the community on a good health status.

As far as treatment of water is concerned, 50(50%) don’t treat their water, 46(46%) boil water- (Table 6). This figure 50% put the community on a risk of contracting diarrhoea diseases.

A good number of respondents store their drinking water in jerricans most likely because of their availability and durability though difficult to clean while others store in pots or buckets. The majority of the respondents 96(96%) were using latrines as a method of excreta disposal while very few were using cat method and bush (Figure 7). This latrine coverage puts the community on a good health status. However, those who don’t use might be ignorant or with low social economic status this still promote infection and infestation level.

Table 7: shows a greater number of mother breast feed their children when they cried 66(66%) and very few breastfed more than 10times in 24hours, this shows inadequate knowledge about breast feeding. Most children were stopped from breast feeding before two years because mothers became pregnant, 20(20%) stopped breastfeeding when their children were still very young (less than 4 months) because they had HIV/AIDS (figure 8).

We also notice that we have a good percentage of mothers 20/72 (27.8%) who introduce weaning food when their children are three months below. A child need to be breastfeed for a long time otherwise he/she would be at risk of getting infections and

malnutrition as it is well known that breast milk contains protective anti bodies. This is in line with jelliffe and jelliffe 1989 who said that breast milk prevents diarrhoea diseases; it is clean and contains antibodies.

Surprisingly still a reasonable percentage of the respondents (figure 9) whose children are still using bottle and teat 28(28%) to feed them and those feeding themselves 20(20%). These methods of feeding predispose children to infections as bottle and teat and children's hands are usually dirty. This is in line with AMREF-1975 who said bottle can be a killer.

While section 7.0 shows us that out of 100 respondents 40(40%) took their children to the health facility, 32(32%) gave herbs. This practice is done by most African cultures, could be because government of Uganda is trying to integrate native medicine to modern one under Uganda Herbalist association but the alarming part is the purity, dosage and toxic effects is not considered.

According to section 7.1 reveal that most of the respondents 52(52%) say that diarrhea can't be prevented and 16(16%) didn't know whether diarrhoea is preventable or not. Lack of knowledge on prevention would lead to continued occurrences of the disease in the community since no precaution would be taken. Most likely due to lack of health education more so at the grass root.

Table 9, reveal mostly mentioned methods of prevention which include; hand washing before meals 16(36.4%), proper refusal disposal 08(18.1%) and Hand washing after using toilet 04(9.1%). This is a good practice it should be up hold but lack of knowledge on prevention would lead to continuous occurrence.

6.2 CONCLUSION

From the findings of the study the following are the conclusions

1. A good number of respondents were married, house wives and peasant farmers who had no other source of income for economic stand.
2. The majority of the respondents had attained primary education
3. Breast feeding is discontinued at an early age of one year or even before among the majority so long as the mother becomes pregnant.
4. The majority of the respondents introduce supplementary food to their children at an early age. These contribute to the occurrence of diarrhoea diseases in the community.
5. A significant number of mothers use water from protected sources but some number of these does not treat their water before drinking it.
6. The majority of the respondents knew that diarrhea is not preventable.
7. A significant number of respondents take their children with diarrhoea to health facilities while other use local made fluids, the rest buy drugs from local shops.

6.3 RECOMMENDATIONS

According to the study findings, the following recommendations are put forward to minimize the problem of diarrhoea diseases in the areas served by fort portal referral hospital.

1. The district health education in conjunction with the local council leaders in the respective districts should organize seminars educating on causes, prevention and management of diarrhoea.
2. The DHO office should initiate community based health care to train village health committees and community health workers that would assist the community in carrying out regular home visits to educate the community on diarrhoea and use of ORS and discourage of impure traditional herbs and drugs from local shops which they claim that can cure diarrhoea other than ORS.
3. The DHO office should send health inspectors to revisit where water sources are protected and advise the community on further treatment of water and also increase on the number of protected water sources.
4. The Health Assistant should in collaboration with LCIII, LCII, and LCI launch campaigns for latrine construction and use such that every family has its own latrine.
5. Health Education about family planning (at health facility) should be emphasized for mothers of child bearing age to avoid early pregnancies.
6. Both early weaning and late weaning should be discouraged this information can be delivered to the respondents using different media for example Radio through the Office of the DHO.
7. Mothers visiting the Health facilities with a child who is under five years should be given a health talk and at the end be supplied with packets of ORS

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APPENDIX III: QUESTIONNAIRE

Your participation is voluntary and the information you give is confidential. You may also stop the interview at any time you wish hoping that this information will be used in improving the welfare of our children.

NB: Tick the correct answer and answer where necessary.

SECTION A: SOCIAL DEMOGRAPHIC CHARACTERISTICS.

1. Age of the mother

2. Education level of the mother.

(a) None []

(b) Primary []

(c) Secondary []

(d) Tertiary/University []

3. Marital status of the mother

(a) Single []

(b) Married []

(c) Widowed []

(d) Separated/divorced []

4. Occupation of the mother

(a) House wife []

(b) Civil Servant []

(c) Self employed []

(d) Peasant/farmers []

5. Tribe of the mother.

(a) Mutooro []

(b) Munyankore []

(c) Muganda []

(d) Mukonjo []

(e) Others []

6. Religion of the mother.

(a) Catholic []

(b) Protestant []

(c) Muslim []

(d) Others []

SECTION B: KNOWLEDGE AND PREVALENCE OF DIARRHOEA DISEASES

6. What is diarrhea?

a) Watery stools 3 or more times in a day (24 hrs)

b) Don't know

c) Abdominal pain

d) Any watery stool.

7. How can you tell the child under five has diarrhea?

a) By passing watery stools in more than 3 times a day

b) I don't know

c) Uncontrolled passage of stool

d) Others (specify)

8. How many children under five do you have?

a) 3

b) 2

c) 1

d) None

9. How many of your children under five years have had diarrhea in the last two months?

a) 1

b) 2

c) 3

d) None

10. What do you think is the cause of this diarrhea?

a) Poor hygiene

b) False teeth

c) I don't know

d) Witchcraft

**SECTION C: SOCIAL PRACTICE THAT MAY LEAD TO DIARRHOEA IN
UNDER FIVE.**

i) ASSESSEMENT OF WATER HYGIENE

11. What is your water source?

- a) River
- b) Un protected spring
- c) Un protected shallow well
- d) Protected spring
- e) Protected shallow well

12. How do you store your water?

- a) Bucket
- b) Pot
- c) Jerrycan
- d) Others (specify)

13. How do you ensure that your water is safe for drinking?

- a) Filter
- b) Sediment
- c) Chemicals
- d) Boil
- e) Don't treat

ii) EXCRETA DISPOSAL

14.Excreta disposal by adults / respondents

- a) Latrine
- b) Bush method
- c) Cat method

15.Excreta disposal by children

- a) Latrine
- b) Cat method
- c) Bush method
- d) Polythene bags

iii) BREAST FEEDING AND WEANING

16.Do you have a breastfeeding child

- a) Yes ()
- b) No ()

17.If yes, how often do you breast him /her

- a) Whenever he/she wakes up
- b) During night
- c) During day only
- d) Others (specify)

18.What were the reason of stopping breastfeeding if your child is less than 2 years

- a) No breast milk

- b) Mother became pregnant
- c) Child feel sick
- d) Baby rejected breast milk
- e) Am on PMTCT

19. Is the baby getting supplements

- a) Yes () No()

20. At what age did you start the supplements

- a) Two Months
- b) Four months
- c) Six months
- d) Others (specify)

21. What supplements do you give a child?

- a) Cow milk
- b) Porridge
- c) Irish potatoes
- d) Beans
- e) Others (specify)

22. What do you use in feeding the child?

- a) Bottle and teat
- b) Cup and spoon
- c) Hands

- d) Feed themselves

SECTION D: HEALTH SEEKING BEHAVIORS AND PREVENTION OF DIARRHOEA

23. What do you do if your child get diarrhea.

- a) Go to the health facility
- b) Use homemade ORS
- c) Use herbs
- d) Buy drugs

25. Can diarrhea be prevented?

- a) Yes ()
- b) No ()
- c) I don't know ()

26. If yes, how do you prevent it?

- a) Hand washing before meals
- b) Hand washing after using toilet
- c) Use of clean drinking water
- d) Proper refuse disposal