COMMUNITY KNOWLEDGE, ATTITUDES AND PRACTICE ON CONTROL AND MANAGEMENT OF CHOLERA IN KIBANDAMA PARISH, KILEMBE SUB-COUNTY KASESE DISTRICT

BY

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF A DEGREE OF BACHELOR OF NURSING SCIENCE DEGREE OF MAKERERE UNIVERSITY.

JUNE 2004
Declaration.

I do declare that this is my original work and that it has never been presented before to any institution for an academic award or publication.

.......................................................... DATE 11/6/2004

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Mrs. ROSE NABIRYE CHALO.
Supervisor.
Dedication.

I dedicate this book to my parents, Mr. Masereka Peter and Mrs. Jeremia Muhindo Masereka.

Then to all my brothers and sisters and my friends, Kule Enos Katya, Ndungo Neckson, Erejo Alex, Kato Joshua and Birungi Charles.
Acknowledgements.

The success of this study was a result of inputs from various people to whom I must give sincere thanks.

I thank God for having given me the strength, courage and patience to go on.

I extend my sincere gratitude to my parents for the financial and moral support and encouragement during the course of this study.

Special thanks go to my supervisor, Mrs Rose Nabirye Chalo for the guidance, patience, tolerance, open criticism, and special skills offered to me during this study.

I would also like to thank my friend and classmate Kato Joshua for the computer services he offered. I thank all my classmates; Akurut, Ayebare, Atuhairwe, Nabwire, Mariam, Lamunu, Namuddu, Kyaligonza, Kato, Erejo and Nambi for the support they rendered to during the development of this dissertation and my stay in medical school. Special thanks go to my grandmother, Ms. Muhindo Christine for the financial, social and moral support she gave me throughout the course.

Lastly but not least I would like to thank the Head and staff of Department of Nursing and all the lecturers of Faculty of Medicine for their tireless efforts, inputs and guidance during my undergraduate training that also contributed to the success of this dissertation.
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LIST OF ABBREVIATIONS.

ADF; Allied Democratic Forces.

CDC; Communicable Disease control.

CDDP; Control of Diarrhoeal Diseases programme.

DRC; Democratic Republic of Congo.

FGDs; Focus Group Discussions.

KCC; Kampala City Council.

LC; Local Council.

MOH; Ministry of Health.

WHO; World Health Organisation.
OPERATIONAL DEFINITIONS.

The following definitions apply for the purpose of this study:

**Attitude;** Way in which one thinks or feels about something.

**Biotype;** Organisms sharing a specific characteristic.

**Control;** Measures put in place to stop further spread of something or a disease.

**Endemic;** A disease is restricted to a particular place and is always present in the population.

**Head of Household;** A person who takes total responsibility over other members in the household.

**Household;** A group of people who live under one roof and eat together.

**Knowledge;** Having facts in mind about something.

**Practice;** Activities one does about something.

**Prevention;** Measures put in place to stop occurrence of something or disease.

**Prior knowledge;** Having heard about cholera, know signs and symptoms and having witnessed cholera patient.

**Sanitation;** Application of measures to make the environmental conditions favorable
ABSTRACT.

The study was done on people’s knowledge, attitude and practice on control and management of cholera in Kibandama parish, Kilembe sub-county, Kasese district. The district experienced recurrent outbreaks of cholera in the recent past, despite of cholera control programmes.

Methodology: It was a descriptive cross-sectional study involving individual interviews and focus group discussions.

The sample size of 100 respondents was used in the study. The data was analyzed using SPSS software.

Results: The majority of the respondents (52%) were primary school dropouts while 33% had never been to school. Eighty six percent (86%) of the respondents were peasants.

Many respondents, 98% had heard about cholera while 77% knew signs and symptoms of cholera. Seventy eight out of a hundred (78/100) knew at least one of the ways through which cholera spreads. Fifty five percent (55%) of the respondents reported that cholera can be prevented by proper disposal of human faeces and 58% said cholera was a problem in the area. However, generally the community’s attitude towards control of cholera was very poor. The community participation in control and management of cholera is also poor.

Conclusion;

The community was generally aware about cholera but their attitude towards cholera control measures is very poor.

Recommendation;

There is need to initiate cholera educational programmes by the district health team focusing on behavior change. The education programmes should focus on transmission, management and control of cholera
CHAPTER ONE.

1.0 INTRODUCTION.

Cholera has been prevalent worldwide since the early 19th century. The disease has been endemic in Sub-Saharan African countries among which South Africa, Somalia, Kenya and Tanzania have been documented (CDC Pretoria, 2001).

The pattern in Uganda is normally of sporadic cases, often with an imported basis (MOH, 1998). Research has contributed a great deal in providing health workers with knowledge on the etiology and Epidemiology of the disease including clinical management of patients.

Both public and clinical research has showed that in approximately 90% of the cholera cases, the disease is mild and it is difficult to differentiate from other diarrhoeal diseases. Oral rehydration therapy is important in case management and can reduce case fatality. Vaccination and other chemoprophylaxis are ineffective in preventing cholera (WHO, 1998). However, personal hygiene, good drinking and eating habits, safe disposal of human wastes have been proven to be effective in controlling the disease (Okware, 2003).

Cholera epidemics are of public health concern and could claim up to 50% of its victims. Therefore it is important for all stakeholders in cholera prevention and control to use correct intervention strategies including the community in curbing the epidemic (WHO, 1993).

The disease is caused by a bacterium, vibrio cholerae. There are more than 60 cholera bacteria. However, the current out breaks in Africa are caused by ElTor biotype of vibrio cholerae serogroup 01. The stereotype of Eltor biotype prevalent in Africa is inaba. Vibrio cholerae 0139 is a major cause of epidemic in Asia. The disease is characterised by profuse, painless watery diarrhea that can quickly lead to severe dehydration and death within 24 hours if treatment is not promptly given. The incubation period is from few
hours to 5 days and only 10% of the infected develop severe disease (Okware, 2003). The disease spreads through the following ways; Drinking water that has been contaminated at its source, during storage or usage, eating contaminated foods, vegetables that have been fertilized with human excreta (night soil) or ‘freshened’ with contaminated water, soiled hands can also contaminate drinking water, food and fish, particularly shellfish taken from contaminated water and eaten raw or insufficiently cooked. The above are some of the best-known sources of infection (WHO, 1993).

The people most at risk of contracting cholera are those who do not have access to safe piped water, adequate and proper sanitation. In a survey done in Kampala during the 1997-1998 cholera epidemic, most cases were reported from slums where over crowding and environmental sanitation were a public health concern (Legros et al, 2000).

Therefore, cholera is a disease of poor sanitation and environmental deterioration. The May 2003 cholera epidemic in Iraq was attributed to environmental deterioration and interruption of communicable disease surveillance and control activities following the war (Marta Valenciano et al, 2003).

1.1 BACKGROUND.

The heavy and unseasonable rainfall of 1997 and early 1998 had far consequences on health in many Eastern African countries of, Kenya, Somalia, Tanzania and Uganda. This was attributed to ELNINO which typically increased and prolonged rains in these countries. In the wake of heavy rains, there were reports of cholera outbreaks to levels of epidemics in Somalia, Kenya and Tanzania (Legros et al, 2000).

In November 1997, Uganda experienced cholera epidemic through its border with Kenya and by February 1998, forty-one districts in the country had been affected. The central region reported 6688 cases with 289 deaths, Kampala alone reporting 5,632 with 15 deaths and most of these cases were in slums where environmental sanitation is poor. Eastern region reported 7,768 cases with 369 deaths, Mbale alone reporting 4,336 cases with 128 deaths. Western region reported 2,755 cases with 278 deaths, Kasese being the
most affected district with 1,321 cases and 70 deaths. In Kasese most of the cases were reported in refugee camps where sanitation was poor. Increased and uncontrolled movements across the border areas compounded by poor control programmes by the neighboring Democratic republic of Congo (DRC) due to insecurity also worsened the situation (MOH, 1998).

In 2002 Kampala and Wakiso reported cholera outbreaks, and by January 2003, 128 cases with 2 deaths had been reported in Kampala city. In the same year sporadic but localized outbreaks persisted in districts of Arua, Nebbi, Hoima, Masindi, Bundibugyo, Kasese, Kabarole, Rukungiri, Kisoro (Okware, 2003).

In 2003 cholera persisted in certain districts in the country, and among them were: Kasese, Bundibugyo, Kabarole, Arua, Masindi, Hoima, Kisoro, Nebbi and Kibaale. In 2003, 1,826 cases with 26 deaths were reported from Kasese. According to the report from cholera control program MOH, 50% cholera cases were from Kasese and the district remained the most affected contributing more than 95% of the reported cholera cases weekly (CDDP, MOH, 2003).

A survey done by the MOH and KCC cholera task forces in Katie zone-Natete (Kampala) confirmed that poor sanitation, contaminated water source, bad eating habits, poor personal hygiene and bad food handling practices which also applies to other places in the country increased the risks of cholera outbreak.

However, despite the persistence of cholera in Kasese, no research had been done on community knowledge, attitudes and practice on control and management of cholera.

1.2 PROBLEM STATEMENT
Kasese district had been the most affected in western Uganda during cholera epidemics. In the 1997-1998 cholera epidemic, western region reported 2,755 cases with 218 deaths, Kasese alone reporting 1,321 cases with 70 deaths, which constituted approximately 49% of all cases reported from western region (MOH, 1998).
In 2002 cholera outbreak in the country, although other districts in the west like Bundibugyo, Kabarole, Hoima, Kisoro and Rukungiri were affected, Kasese remained the most affected district (Okware, 2003).

In 2003, Kasese reported 1,826 cases with 24 deaths and this constituted 50% of all cases reported in the country. The district remained the most affected in the country contributing more than 95% of cholera reported cases weekly (CDDP, MOH, 2003).

Despite the above observations no research pertaining to community knowledge, attitude and practice on control and management of cholera in Kasese had been done.

1.3 JUSTIFICATION OF THE STUDY.
Kasese contributed to more than 95% of the reported cholera cases weekly in the country and in 2003, 50% of all cases in the country were reported from Kasese.
Therefore, the findings of this study were to lead to identification of problems within the community related to knowledge, attitudes and practices on control and management of cholera from which recommendations geared at helping community members solve this problem would be made. The study was to generate information that would help community health Nurses, community leaders and other organizations providing community health care, mobilize the people towards fighting cholera epidemic using the available resources. The information was to also act as an evaluator for the effectiveness of health education programs in Kasese district.

1.4 RESEARCH QUESTIONS.
1. What do people in Kibandama parish know about control and management of cholera?
2. What are people’s attitudes about control and management of cholera in Kibandama parish?
3. What control and management practices on cholera does people in Kibandama parish do?
1.5 OBJECTIVES OF THE STUDY

General objective
To establish people’s knowledge, attitudes and practices on control and management of cholera in Kibandama parish so as to design recommendations that will help combat this problem in the area.

Specific objectives
1. To establish people’s knowledge on control and management of cholera.
2. To determine people’s attitudes towards control and management of cholera.
3. To establish people’s practices on control and management of cholera.
CHAPTER TWO.

2.0 LITERATURE REVIEW.

2.1 Introduction
Cholera is caused by bacterium vibrio cholerae. Robert Koch first described the organism in 1883 (Urassa et al, 2000). There are more than 130 serogroups of Vibrio cholera but only Vibrio cholerae 01 has caused epidemics and pandemics, though of recent Vibrio cholerae 0139 caused outbreaks in Madras, India.
There are two biotypes of vibrio cholerae, the classical and Eltor biotype has two serogroups: Inaba and Ogawa.

The Eltor biotype has caused almost all the recent cholera outbreaks though cases caused by classical still occur on the Indian sub continent. The Eltor biotype causes high proportion of symptomatic infection than classical and survives long in the environment and can live in association with aquatic plants and animals making water an important reservoir for infection (WHO, 1993).

Clinically most cholera infection is asymptomatic or mild and indistinguishable from other mild diarrhoeal diseases. However in severe form the following are signs and symptoms of cholera; -
Onset is typically sudden, Diarrhoea is profuse, painless and watery with flecks of mucus in stool (Rice water) and Vomiting may occur. All complications of cholera results from loss of fluids, electrolytes and vomits, muscle cramps, acidosis, peripheral vasoconstriction and ultimately renal and circulatory failure and death may occur if treatment is not promptly given (WHO, 1998). According to MOH 2003 report, death due to cholera occurred in communities due poor health seeking behaviors.
In a study done in Tanzania on health seeking behavior, it was noted that poverty, lack of knowledge and poor economic conditions were hindering factors for early seeking of medical care (Hans et al, 1998).

2.2 Epidemiology: Global situation.
Six pandemics occurred between 1817 and 1923 caused by Vibrio cholerae 01 of the
classical biotype and largely originating in Asia. The Vibrio responsible for the seventh pandemic now in progress is Vibrio cholera 01, biotype Eltor. The pandemic began in Celebes, Indonesia in 1961. The disease then spread to other countries of Eastern Asia and reached Bangladesh in 1963, India in 1964 and USSR, Iran and Iraq in 1965-6 (WHO, 1993).

In 1970 cholera invaded West Africa, the disease quickly spread to a number of countries in the continent. It was observed that poor sanitation facilitated the spread of infection in the continent. Since then, the majority of recent cases have been in Africa and millions of people have been affected. The disease is now endemic in some African countries among them; South Africa, Somalia, Kenya and Tanzania have been documented.

In 1991 cholera struck Latin America. By December 1993 more than 820000 cases with almost 7000 deaths had been reported worldwide.

Following the recent war in Iraq, a cholera outbreak occurred in May 2003 and 59% of the cases were children. The outbreak was attributed to environmental deterioration, poor sanitation, overcrowding in camps due to large numbers of internally displaced people and interruption of communicable disease and surveillance activities (Marta Valenacino et al, 2003).

2.3 Epidemiology: Ugandan situation

It is accepted that cholera is endemic at low levels in Somalia, Kenya and Tanzania; however, it does not seem to be endemic in Uganda. The pattern in Uganda is normally of sporadic cases with an imported basis (MOH, 1998).

The heavy and unseasonable rainfall of 1997 and early 1998 had far reaching consequences on Health in many Eastern African countries particularly Somalia, Kenya, Tanzania and Uganda. This was attributed to ELNINO, which typically increased and prolonged rains in these countries. The existing drainage systems already inadequate were overwhelmed and latrines were flooded in low-lying areas, thus creating sanitation
problems in the region. In the wake of heavy rains there were reports of cholera outbreaks to levels of epidemics in Somalia, Kenya and Tanzania (Legros et al, 2000).

In November 1997, Uganda experienced a cholera epidemic through its Eastern borders with Kenya and by February 1998, forty-one districts were already affected. In the epidemic, 6,688 cases with 289 deaths were reported in the central region, Kampala being the most affected with 5,632 cases and 15 deaths. In Kampala most of the cases were reported from slum areas around the city where overcrowding, poor environmental conditions, including, poor drainage systems, poor disposal of human excreta, poor handling of food and poor personal hygiene were identified as risk factors in the outbreak (MOH, 1998).

Eastern region reported 7,768 cases with 128 deaths. Western region reported 2,755 cases with 218 deaths, Kasese reporting 1,321 cases with 70 deaths (CDDP, MOH, 2003).

During the epidemic, Kasese in particular, the recent political turmoil (Allied democratic forces) and the associated insecurity in the neighboring DRC along the border areas resulted in population movements. There were increased numbers of internally displaced people who lived in camps where overcrowding and poor sanitation were health challenges.

In November sporadic but localized outbreaks persisted in districts of Arua, Nebbi, Hoima, Masindi, Bundibugyo, Kabarole and Kisoro. The spread of the disease is thought to have been aggravated by increased and uncontrolled movements across the border areas and internally displaced people (Okware, 2003).

In 2003, cholera persisted in certain districts in the country and among them are; Kasese, Bundibugyo, Kabarole, Arua, Masindi, Hoima and Kibale. A total of 3,679 cases with 125 deaths have been reported and most death occurred in the community due to poor care seeking behaviour of the affected persons and communities.

The most affected districts remained those along the border with DRC among which is
Kasese with 1,826 cases with 24 deaths and Bundibugyo with 1,097 cases with 70 deaths. In a survey done by MOH and KCC cholera task forces in Kigali zone-Natete, it was confirmed that poor sanitation (lack of latrines), contaminated water (66% of water sources), bad eating habits (failure to wash hands), bad food handling practices were the risk factors that increased cholera outbreak in the country.

2.4 Mode of transmission.

The disease mainly spreads via the faecal-oral route and the following are some of the best known sources of infection:

1. Drinking water that has been contaminated at its source, during storage or usage.
2. Eating contaminated foods, vegetables that have been fertilized with human excreta or freshened with contaminated water.
3. Soiled hands can also contaminate clean drinking water and food.
4. Fish, particularly shellfish taken from contaminated water and eaten raw or insufficiently cooked.

However, sudden outbreaks are usually caused by contaminated water supply, Flies play relatively a small role in spreading the diseases but their presence in large numbers indicate poor sanitary conditions which favor the transmission of the disease. Only rarely is cholera spread by direct person-to-person contact. In highly endemic areas cholera is a disease of children, although breast-feeding infants are rarely affected (WHO, 1998). Cholera therefore is a disease of poor sanitation, overcrowding, inadequate supply of safe water and poor public health facilities.

2.5 Control and preventive measures

The disease mainly is transmitted through contaminated food and water. Therefore, health education should focus on ways through which contamination of food and water can be avoided.

1. Protection of water sources; - High priority should be given to observing the basic principles of sanitary human waste disposal and protection of water sources from faecal contamination. The community should be educated on use of latrines, dangers of defecating in the bush and near or
in rivers. Therefore, every household should be encouraged to have latrine, which should be 30 meters away from water source and 6 meters away from the nearest house (WHO, 1993).

2. Treatment of water at home; - All drinking water in home should be boiled and kept in clean utensils. In situations where water sources are at a risk of contamination, chlorination using household bleach should be done. In an outbreak all water sources with potential for contamination must be tested and rendered safe if contaminated or otherwise closed to usage.

3. Personal hygiene; - Emphasis must be put on thorough hand washing with soap before and after handling food, following contact with human excreta and after visiting latrine or toiled.

4. Food safety; - All foods and vegetables should be thoroughly washed, sufficiently cooked in clean utensils and should be eaten when hot. Foods sold on streets and communal foods pose a special risk and should be stopped in case of an outbreak. In case of an outbreak infected persons should be excluded from handling food, Hand washing when preparing and before eating food, use of clean utensils for serving food and left over food should be re-heated before being eaten (MOH, 1998). It is therefore, very important during an outbreak to liaise with the local media such as radios, press and television to ensure that the right information is being passed to the public.

In related research to assess the effectiveness of cholera activities in Peru during the 1991 cholera epidemic, 93% of rural and 67% of urban respondents believed they could prevent cholera. However their practices were not consistent with knowledge and attitudes because 75% of the respondents drank untreated water and 91% ate unwashed produce both of which were identified as cholera risk factors. It was concluded that cholera prevention campaign successfully educated the respondents but did not cause many to adopt preventive behaviors. It was recommended that direct interpersonal education of community-based personnel could enhance the likelihood of translating health education into changes in health behavior. Therefore, knowledge,
attitude and practice surveys conducted during cholera epidemic can be effective in refining health education programmes (Quick et al, 1991).

Improvements in safe water supply and adequate sanitation are the main stem of long-term prevention of cholera (WHO, 1993). However, during an outbreak, early detection of cases and treatment of patients coupled with health education are the best control measures.

In order to respond quickly to cholera epidemic and prevent death, intravenous fluids and oral dehydration salts (ORS) are the main stem treatment in management of cholera cases. However, cholera being a diarrhoeal disease, people in many parts of the world uses herbal medicine in homes in the management of cholera patients (WHO, 1998).
CHAPTER THREE.

3.0 METHODOLOGY.

3.1 Study area.
The study was conducted in Kibandama parish, Kilembe sub-county Busongora south constituency, Kasese district. It has five villages namely; - Kisanga, Buhunga, Ngangi Bulimi and Kibandama, 500 households (2003-Housing and population census). Kasese district is found in Western part of Uganda. Kibandama parish was selected, because it is the largest in the sub-county and also for convenience to the researcher.

3.2 Study population
The study was designed to include all heads of households in Kibandama parish.

3.3 Study design
It was a descriptive cross-sectional study employing both qualitative and quantitative data collection methods.

3.4 Data collection methods and tools.
Both qualitative and quantitative methods were used. Quantitative data was collected using semi-structured questionnaires. Qualitative data was collected using focus group discussions.

3.5 Study unit
The study unit was a household.

3.6 Inclusion criteria.
All households that were selected and had household heads, spouses or adults during data collection were included in the study.

3.7 Exclusion criteria
Households that were selected and had no household head, spouse or adult were omitted. Even households in which the head refused to consent at the time of data collection were also omitted.

3.8 Sample size estimation.
Sample size was estimated using Bennets wood et al (1991)

\[ C = \frac{P(1-P)D}{S^2b} \]
Where C is number of clusters needed and it was taken as 5 since all villages were considered. P is the proportion of respondents with some knowledge on control and management of cholera and since it was not known, it was assumed to be at 50%. D is design effect and was taken as 1.04 calculated from previous cluster studies). b is the number of respondents per cluster, S is standard error.

\[
\text{And } S = \frac{\text{CI width}}{\text{Calpha}}
\]

Where CI width is the width of desired confidence interval specific at 95% and was taken as 10%. Calpha is the value from the standard normal curve corresponding to alpha error and was taken as 1.96.

Thus substituting, \[
S = \frac{0.1}{1.96} = 0.051
\]

\[
5 = 0.5 \times \frac{(1-0.5) \times 1.04}{(0.051)^2 b}
\]

\[
b = \frac{0.5 \times (1-0.5) \times 1.04}{5 \times 0.00260}
\]

\[
b = \frac{0.26}{0.013} = 20
\]

20 respondents were included from each village. The parish has five villages, thus a sample size of 100 respondents was calculated. Therefore, 100 respondents were involved in the study.

**3.9 Sampling procedure.**

All the five villages in the parish were considered. The LC II chairperson was asked to
provide all the lists for the villages in the parish. Each village acted as a sampling unit.

The researcher was guided around each village by the respective LCI chairperson. The boundary of each village was identified and the center of village was estimated. This acted as the starting point and in most cases it was a building or a big tree. The LCI chairperson was requested to provide the list of all the households in the village and the households to be included in the study were chosen by simple random sampling. The center of the village acted as a starting point from which households were picked using simple random sampling until 20 households were covered in the a village. The procedure was repeated for the other villages until all the five were covered. Five FGDs were held one in each village. Each FGD comprised of 10 members (5 females and 5 males). Both male and female were from randomly selected households but for gender balance, a male or female was considered till the number required for each FGD was over.

3.10 Study variables
3.10.1 Independent variables.
Sex, Age, Education status, Religion, Occupation, Mode of spread, Manifestations of the disease, Cholera control measures, place of seeking medical attention or help, source of water, Management of cholera patients.

Attitudes;- The cause of the disease, Whether cholera is a problem, Whether cholera is treatable and preventable.

3.10.2 Dependent variables.
Practices, Disposal of human excreta, Treatment of water at home (boiling), Hand washing, food eating habits, Where do they seek for help, food handling practices Management of patients at home.

3.11 Data collection.
The researcher collected data himself.
The quantitative data was collected using semi-structured questionnaires while qualitative data was collected using focus group discussions. The study was explained to the community leaders and at the time of data collection only respondents who consented
were interviewed. There was a focus group discussion held in each village.

3.12 Quality assurance.

3.12.1 Pre-testing

The data collection tools were tested before data collection started in one of villages in the study area. This was to assess the validity of the questionnaires to get the required data and also to see whether the respondents would understand the questions.

3.12.2 Field editing.

Throughout the process of data collection, all responses of respondents were recorded to avoid loss of data.

The filled questionnaire was studied carefully to ensure that no data is missing and where possible corrections were made.

3.13 Data management and analysis.

The questionnaires were coded for easy entry and analysis of the desired variables. Field editing was done, the questionnaires were studied and any corrections were made. The data was cleaned and checked for consistency and analysis was done using SPSS program.

3.14 Ethical considerations

1. Permission to undertake the study was obtained from the department of Nursing, faculty of Medicine, Makerere University.
2. The proposal of this study was presented to department of Nursing for approval.
3. A letter of introduction was obtained from department of Nursing Makerere University and was presented to local leaders in the study area.
4. A meeting was held with the community leaders to explain to them about the study that was to be conducted in their area.
5. Informed consent was sought from each respondent at the time of data collection.
6. The respondents were assured of confidentiality and only code numbers were used against each respondent.
7. The results of the study were disseminated to the department of Nursing Makerere University, Kasese district health team, District authorities and the study community.

3.14 study limitations.

Time.
The time for data collection was not enough to cover the whole parish (three weeks). Sampling and taking 100 respondents in the whole parish and having only one focus group in each village overcame this.

Money.
The funds for buying research materials for the whole parish and facilitation in the whole parish during data collection were limited.
Taking only 100 respondents in the whole parish and also doing the research alone without employing research assistants overcame this.

Season.
At the time of data collection, many respondents were not in their homes as it was a sowing season. This was overcome by visiting households in the afternoons and sometimes on Sundays.
CHAPTER FOUR.

4.0 RESULTS.

This chapter presents the findings of the study. They will be presented in tables, graphs, pie charts and quotations where possible.

The majority of the respondents (59%) were females and 41% were males. 89% of the respondents were married couples and 58% were Catholics.

**Table 4.1 Age distributions of respondents’**.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency (%)</th>
<th>Cumulative frequency.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>31-40</td>
<td>50</td>
<td>85</td>
</tr>
<tr>
<td>41-50</td>
<td>8</td>
<td>93</td>
</tr>
<tr>
<td>51 and above</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority of the respondents (50%) were in the age group of 31-40. The mean age was 33.

**Table 4.2 Educational levels of the respondents**.

<table>
<thead>
<tr>
<th>Educational status</th>
<th>Frequency (%)</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Lower primary (p1-p4)</td>
<td>34</td>
<td>67</td>
</tr>
<tr>
<td>Upper primary (p5-p7)</td>
<td>18</td>
<td>85</td>
</tr>
<tr>
<td>Secondary</td>
<td>8</td>
<td>93</td>
</tr>
<tr>
<td>Tertiary</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>
52% of the respondents were primary school dropouts and 33% had never been to school.

**Table 4.3 Occupation of respondents.**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency (%)</th>
<th>Cumulative frequency.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peasant</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Civil servant</td>
<td>8</td>
<td>94</td>
</tr>
<tr>
<td>Business person</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>Housewife</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

Many respondents, 86% were peasants.

**Figure 4.1 Prior knowledge about cholera.**

From the figure, 98% of respondents had heard about cholera, 77% knew signs and symptoms (Watery diarrhoea, vomiting and general body weakness) and 79% had
witnessed a cholera patient.

In all the focus group discussions, all the members had heard about cholera and most of them said a cholera patient is identified by passing stools that resemble water that remains after washing rice.

**Table 4.4 Source of information on cholera.**

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency (%)</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radios.</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Posters.</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Friends.</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td>Health center.</td>
<td>6</td>
<td>47</td>
</tr>
<tr>
<td>Community health worker.</td>
<td>11</td>
<td>58</td>
</tr>
<tr>
<td>Others.</td>
<td>42</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority of the respondents (42%) got information from church announcements and local leaders community sensitization programs (Others).

The members in the FGDs said that the community leaders did a great job to mobilize the people. However, they complained that health workers eat the money for mobilization alone and yet they never go to the villages to mobilize the community.
The majority of respondents 85/100 said cholera is caused by eating food contaminated with human faeces.

Other cholera risk factors like eating foods and juices sold in markets, eating cold foods, unwashed vegetables and fruits, cold foods, foods not properly covered were reported in four out of five FGDs.
55% the respondents reported that cholera could be controlled through proper disposal of faeces.

In all FGDs, most members knew control measures but most of them said the following statements.

- "We have lived eating cold foods, drinking unboiled water, eating Mandazi and nothing has happened to us".
- "Even those who say they are Europeans (Hygienic in their homes, drink boiled water and eat only hot foods) have been affected by cholera".
- "Even health workers have been affected by cholera".
- "If you are created to be affected you will, irrespective of the control measures".

Therefore, such statements reduce the likelihood of adoption of cholera preventive measures.
Table 4.5 Place of management of a cholera patient.

<table>
<thead>
<tr>
<th>Place</th>
<th>Frequency (%)</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital.</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Home.</td>
<td>6</td>
<td>99</td>
</tr>
<tr>
<td>Traditional healer’s place</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority of the respondents (93%) reported hospital as place of treatment. However, in all FGDs, members reported that some people in the villages still keep cholera patients in homes.

Table 4.6 Source of water in households.

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency (%)</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>River</td>
<td>15</td>
<td>71</td>
</tr>
<tr>
<td>Stream</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>Well</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, the main source of water is Tap (56%).
**Figure 4.4 Treatment of drinking water in house households.**

The majority of the respondents (90%) take unboiled water and only 10% reported taking boiled water.

**Table 4.7 Disposal of human faeces in the area.**

<table>
<thead>
<tr>
<th>Place</th>
<th>Frequency (%)</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latrines.</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Bushes.</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>Rivers</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

94%, reported latrine use.
Figure 4.5 Other home-based practices.

29% of the respondents reported hand washing before eating but only 6% reported hand washing with soap after visiting the latrine.  
27% reported eating of foods sold in markets.
Table 4.8 The distribution of number of households with no latrines in the parish.

<table>
<thead>
<tr>
<th>Village</th>
<th>Frequency</th>
<th>Percentage out 20 households.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisanga</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Buhunga</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Kibandama</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Ngangi</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Bulimi</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Totals</td>
<td>27</td>
<td>135</td>
</tr>
</tbody>
</table>

From the above table, 27% of the homes visited had no latrines.
CHAPTER FIVE.

5.0 DISCUSSION.

5.1 Socio-demographic characteristics.

The majority of the respondents (59%) were females. This was because at the time of data collection, people most found in homes were females. However, sex did not have any influence on people’s knowledge, attitude and Practice on control and management of cholera.

Fifteen percent of the respondents (15%) were 41 years and above and majority of them reported use of local herbs in management of cholera patients. This could be explained by the fact that old people are more likely to know traditional herds than the young generation.

The majority of the respondents, 52% were primary dropouts, 33% had never been to school. However the level of education didn’t have much influence on their common knowledge about cholera and neither did it influence their practices.

5.2 KNOWLEDGE.

5.2.1 Cause (mode of transmission) and manifestations.

Generally, the majority of respondents were aware about cholera, 98% of them had heard about cholera. In the FGDs, this was attributed to the community mobilization and sensitization done by local leaders and church announcements.

The majority of the respondents had common knowledge about the signs and symptoms of cholera. However, 6% of the respondents did not know the signs and symptoms.

The results show that the community was knowledgeable about the signs and symptoms of cholera. Most of the respondents knew the ways through which cholera spreads. The
major modes of spread reported were eating food contaminated with human excreta, drinking water contaminated with human excreta and eating without hand washing after visiting a latrine or after handling human excreta.

However, other risk factors like eating cold foods, eating unwashed fruits and vegetables, foods not properly covered and foods sold in markets were not responded to by individual respondents. However, they were mentioned in the focus group discussions. The above factors have been identified as cholera risk factors in a survey done by MOH and KCC cholera task in Kigali zone-Natete, Kampala (2002).

Some respondents mentioned other ways like not sweeping the house, 7% while 11% mentioned not slashing the compound. Though these are components of domestic hygiene and sanitation, there are not documented modes of cholera spread. Nine percent (9%) did not know how cholera spreads. They said cholera just comes by air and “if you are created to get it then you will get it”. Therefore, 20% of the respondents did not know the modes of cholera spread.

The level of knowledge about the mode of transmission was found to be high because, on average 78% knew about only three ways through which cholera spreads, despite the fact that there are many contributing factors.

The level of education did not have much influence on the knowledge of the respondents about the mode of transmission of cholera. This is evidenced by the fact that 33% of the respondents had never been to school while 52% were primary dropouts but majority of the respondents knew the ways through which cholera spreads.

The results agree with findings of the study done during the 1991 Peru epidemic. In the study, it was found out that most rural people (93%) knew the ways through which cholera spreads but their practices were not consistent with their knowledge (Quick et al, 1991).
Generally, the community was aware about cholera, it’s transmission, and it’s manifestations.

**5.2.2 Source of information.**

Health information is an important concept. Barton and Wamai (1994), observed that inadequate information resulted in lack of service utilisation, poor use of opportunities and dependency on peers who may also be less informed. In this study it was established that, majority of respondents, 42% got information through mobilization and sensitization by local leaders and church announcements and 22% through Radio announcements.

This result explains the need for community involvement, multi-sectoral collaboration in provision of health education and other health related services. The fact that only 11% got information from community health worker explains why health workers alone are inadequate in provision of health education.

Twenty two percent (22%) got information from radios; this explains the need to liaise with the media in provision of health education to ensure that the right information is passed on to the public (WHO, 1993). Though in the study only 22% got information through radios, this could be because some people do not have radios or timing does not favor them and by the time announcements are made they doing other activities. Thus, this limits radios to be the only channels for passing on information to general public during cholera outbreaks.

**5.2.3 Preventive and control measures.**

Fifty-five percent (55%) of the respondents reported proper disposal of human excreta, 20% drinking safe boiled water, 15% hand washing before eating and after use a latrine or handling human excreta while 5% reported good eating habits among which were avoiding cold and overnight foods, foods not covered properly, foods sold in markets, use of dirty utensils for serving food and juices. Five percent (5%) did not know any control measure. They said the fact that cholera just
comes through air, you can’t avoid it,” it will come when your time comes”.

However, many of the respondents who reported these control measures said that is what they tell them and that the place being a village they have failed to adopt some of them. Some said they have lived long doing practices like eating cold foods, drinking unboiled water and nothing has happened to them. Some said their children go school where they drink unboiled water, so if they come home and drink boiled water they will get sick.

In the FGDs, it was noted that even if you educate people about cholera control measures, they do not adopt them, for example they said, some say “even those who say they are Europeans (Hygienic in their homes, take boiled water and eat only hot foods) have also been affected with cholera”.

Therefore, the level of knowledge about cholera control measures was found to be low. This could be due to the poor attitude people have towards adoption of control measures as noticed in the FGDs.

**5.2.4 Management of cholera patients.**

Ninety-three percent (93%) of the respondents reported hospital as place of treatment. However, in three out of five FGDs, it was reported that some people in the villages still keep cholera patients in homes. The discussants attributed this to the fact that some people fear shame associated with cholera. The members said some people laugh at cholera victims as people who are unhygienic in their homes (eat faeces). They however, said that others have poor attitude towards seeking hospital-based services. This attitude was made worse when the chairperson local council five said cholera victims should be punished after recovery.

The main treatment for those kept in homes was local herbs made of a mixture of many bitter leaves, roots and ash.

It was also noted that people who died due to cholera were mostly those who were kept in homes on local herbs.
This finding agrees with CDDP MOH, 2003 report that most deaths due to cholera occurred in the community due to poor care seeking behaviors of the affected persons and communities.

Seventy percent (70%) of the respondents reported that effective treatment for cholera is found in hospitals and that ORS can be given as first aid as the patient is been taken to hospital.

However, 30% reported use of herbs and this was more common among those who had never been to school.

The use of herbs found in this study agrees with the fact that many studies have indicated the use of herbal medicine in home management of diarrheal diseases in many parts of the world (WHO, 1998).

Though majority reported hospital as place of treatment for cholera patients, there is a need to sensitize the community about the need to immediately take cholera patients to hospital. This is because the onset of the disease is sudden and death may occur if treatment is not promptly given (Okware, 2003).

### 5.3 Attitudes.

Fifty-eight percent (58%) of the respondent reported cholera as being a problem in the area. Most of them were those who had got cholera patients in the last two months at the time of data collection.

The majority of the respondents, 78% said a person suffering from cholera is a danger to the public because the disease easily spreads from place to place. However, 15% said that the fact every one stays in his own house then some one with cholera is not a danger to the public. Most people who reported this were those who did not know how cholera spreads.

This attitude is therefore explained by lack of knowledge about ways through which
cholera spreads.

Many respondents, 95% said that cholera is treatable while 5% said; “if cholera has come for you and you are meant to die, you will die irrespective of what treatment you take”. Ninety three percent (93%) reported hospital as place of treatment, 6% home while 1% traditional healer (Table 4.5).

The majority of the respondents had poor attitudes towards adopting cholera control and preventive measures. In the FGDs, it was reported that many in the village say, “we have lived doing practices like drinking unboiled water, eating cold foods, eating foods and juices sold in markets and not using soap to wash hands and nothing has happened us”. Other respondents were quoted saying; “even health workers have been affected by cholera”. Therefore, such mentalities are likely to reduce the rate of adoption of control measures.

On the role of the district in control of cholera, many respondents said nothing has been done. However some especially those who had been to school reported seminars and workshops to local leaders, who then pass on information to the public.

5.4 Practices.

5.4.1 Health seeking behaviors.

Fifty percent (50%) of the respondents had either suffered or had a family member who suffered from cholera and 79% had witnessed cholera patients.

The majority of the respondents said their patients are taken to hospital for treatment. However, some, 6% said their patients are managed in homes and from two out five FGDs, it was reported that deaths due cholera were mostly among patients who were managed in homes.

The use of herbal medicine, though reported by only 30% of the respondents was
common. It was the main stem treatment among those who treated their patients from home. However, a few mentioned use of ORS as first aid as the patient is being taken to hospital.

Therefore, the mere fact that people still manage cholera patients in homes indicates poor health care seeking behaviors. This is responsible for death among cholera victims (Okware, 2003).

In three FGDs, it was reported that; poverty (people fear hospital because they lack resources and describe hospitals as places for the rich), shame (cholera is a disease of dirtiness) and ignorance as some of the factors that stop some people in the villages from seeking hospital care.

In a similar study done in Tanzania on health seeking behaviors, poverty, lack of knowledge and poor economic conditions were noted as hindering factors for seeking medical treatment (Hans et al, 1998).

**5.4.2 Source of water in households and use.**

The major source of water is Tap water, (56%). However, 44% of the respondents get water from unprotected sources (Table 4.6).

Although, 44% get water from unprotected sources, 90% of the respondents drink unboiled water (Figure 4.4), 10% of the respondents reported use of boiled water but this is also verbatim. Most likely, all the people drink unboiled water.

Many respondents had a poor attitude towards boiling water as they said, they have lived long drinking unboiled water and nothing has happened to them. Some said their children keep on moving and drinking any water they find so if they come back home and drink boiled water, they will become sick. Therefore, the fact that 44% get water from unprotected sources liable to faecal contamination since people in the villages still dispose faeces in the bush are at a great risk of contracting cholera. This therefore, call for a need to sensitize the community about the importance of drinking boiled water and the dangers of defecating in the bush.
5.4.3 Disposal of human faces in the area.

Most respondents, 94% reported use of latrines while 6% reported use of bushes. However, though 94% reported use of latrines, 27% households involved in the study had no latrines from all the five villages. On average 25% of the households have no latrines in the parish (Tables 4.7 & 4.8).

The use of bush is evidenced by the presence of faecal matter especially along pathways in all the villages and along banks of flowing rivers.

In four FGDs, it was noted that the youth and children who bath in rivers are responsible for disposal along banks of rivers.

Since 44% of the water sources are unprotected, they are liable to faecal contamination. In a survey done during the 1998 cholera epidemic in Kampala, 66% of the water sources were contaminated by faecal coliform bacteria (Urassa et al, 2000).

Despite the above observations, the majority of the people in the villages take unboiled water. This, and lack of latrines were confirmed a cholera risk in a survey conducted by MOH and KCC cholera task force in Kigali zone-Natete (Kampala). According to WHO, 1993, improvement of safe water supply and adequate sanitation are the main stem of long-term prevention of cholera.

Therefore, there is a need to sensitize the community not only about latrine use but also about the dangers of defecating in the bush and more especially near water sources.

5.4.4 Other home based practices.

The majority of the people in the parish still engage in activities that have been confirmed cholera risk factors (Figure 4.5) in a survey done by the MoH cholera task force (2002). Only 6% of the respondents reported hand washing with soap after latrine use or after handling human faeces. This was also verbatative because only 3% households visited had containers with water near the latrine but also only 1% had soap.

Twenty nine percent (29%) reported hand washing before eating any food. However most of them use water only and any water including dirty water. The practice of eating
without washing hands is common in village among all age groups (adults and children) and this is irrespective of the level of education as noted in the FGDs. Many respondents, 27% reported eating foods and juices sold in markets, 24% reported eating of unwashed fruits and vegetables and 14% reported eating of cold foods. All these are cholera risk factors.

6.1 CONCLUSION

The above results agree with those generated from a study done in Peru to access the effectiveness of cholera preventive education programmes in which 93% of the respondent knew how cholera spreads and it’s control measures but their practices were not consistent with their knowledge. In this study, 75% drank unboiled water and 91% ate unwashed vegetables both of which were identified as cholera risk factors (Quick et al, 1991).

This explains the need to conduct surveys during cholera outbreaks in order to identify the risk factors to design appropriate education programmes.

6.2 RECOMMENDATION

1. The district health department should undertake behaviour change communication programmes, especially in schools and other community gatherings.
CHAPTER SIX.

6.0 CONCLUSIONS AND RECOMMENDATIONS.

6.1 CONCLUSIONS.

- Generally, the community was aware about cholera.

- The level of knowledge about the cause (transmission) of cholera was high and it was not much influenced by the level of education.

- The majority of the people in the community have poor attitude towards adoption of cholera preventive and control measures.

- The major factor hindering adoption of cholera preventive measures was attitude followed by ignorance.

- The majority of the people in the community still engage in activities that have been confirmed cholera risk factors.

- The community members are not involved in cholera control activities.

6.2 RECOMMENDATIONS.

1. The district health team should initiate cholera educational programmes focusing on behavior change. The educational programmes should focus on the transmission, management and control of cholera.

35
2. The district health team and community leaders should encourage the community members to be active in cholera control and management activities through formation of community cholera task forces.

3. Continuous monitoring and sensitization on sanitation in homes should be done by the district health team and community health workers.

4. The district health team should involve the community members in planning and implementation of cholera control programmes.
REFERENCES


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MOH, 1998; Cholera Uganda emergency support.

MOH, 2003; Control of diarrhoeal diseases programme (CDDP) department of community health.

Okware Sam, 2003; update on cholera in Uganda.


WHO facts, 1993; Guidelines on cholera control.

Appendix i: Informed consent.

The study is being carried out on people’s knowledge, attitudes and practices on control and management of cholera. The information will be necessary to combat this problem in this area and the district at large. Your participation and responses are therefore very pertinent. All your responses will be kept confidential and you are free to refuse to participate or answer any questions asked. You are free to ask any questions about the study and your role in the study. Having understood the study and it’s importance, I........................................ Signature............................ Date.............................., agree to participate in the study. However, am free to ask questions for clarity or quit the study any time during the course of answering questions and I will not be punished for my actions.
Appendix ii: DATA COLLECTION TOOLS.

TITLE: COMMUNITY KNOWLEDGE, ATTITUDE AND PRACTICE ON MANAGEMENT AND CONTROL OF CHOLERA IN KIBANDAMA PARISH KILEMBE SUB-COUNTY KASESE.

The study is being carried out on people’s knowledge attitudes and practice on control and management of cholera. The information will be necessary to combat this problem in this area and the district at large. Your response is therefore important and will be kept confidential. Only code numbers will be used and you are free to refuse to answer any of the questions asked.

Interview No........................................ Date........................................

Village ........................................

Demographic information.

1. Age (in years)............................... 2 Sex (1) Male. (2) Female

2. Marital status.
   (1) Married (2) Single (3) divorced (4) widowed .................................

3. Religion.
   (1) Catholic (2) Protestants (3) Moslem (4) Others specify.....................

4. Education status.
   (1) None (2) Lower primary (P1-P4) (3) Upper primary (P5-P7)
5. Occupation.
(1) Peasant   (2) Civil servant   (3) Businessman   (4) Housewife

Information On Knowledge.

6. Have you ever heard of a disease called cholera?
(1) Yes   (2) No

7. From, where did you hear it?
(1) Radio   (2) Newspapers   (3) Posters   (4) Friends   (5) Health center
(6) Community health worker   (7) Others specify

8. Do you know of a disease called cholera?
(1) Yes   (2) No

9. How do people get affected with cholera?
(a) By drinking water that has been contaminated with human faces
(b) Eating food that has been contaminated with human faces
(c) Eating unwashed vegetables
(d) Eating food without washing your hands after visiting the latrine
(e) Eating foods and juices sold in markets and streets
(f) Eating cold foods.
   (1) All the above are correct   (2) None is correct

10. Have you seen somebody suffering from cholera?
(1) Yes   (2) No

11. If yes, what were the signs and symptoms?
12. Where did the person go for treatment?
   (1) Hospital  (2) Health center  (3) Private Doctor
   (4) Traditional healer  (5) Self medication  (6) Others specify

13. Do you know some of the treatments used in cholera?
   (1) Yes  (2) No

14. Has any one lever suffered from cholera in this home?
   (1) Yes  (2) No

15. If yes, what did you do?

16. What should be done to a person who gets cholera?
   (1) Take him to Hospital  (2) Take her to a traditional healer
   (3) Buy drugs for him at home  (4) I don’t know

17. How do you control and prevent cholera in this home.

17. Is cholera a problem in this area?
   (1) Yes  (2) No.
18. Can the disease be treated?
   (1) Yes,       (2) No.

19. If yes, by whom

..........................................................
..........................................................

20. Are there traditional drugs for treating cholera in village?

..........................................................
..........................................................

21. Do you think a person suffering from cholera is a danger to the public?

..........................................................
..........................................................

22. Has the district done anything in this area to control cholera?

..........................................................
..........................................................

23. If no what do you want them to do.

..........................................................
..........................................................

   Practice.

24. From what source do you fetch water?
   (1) River    (2) Lake    (3) Stream    (4) Well    (5) Tap.
25. How do people in this village store water.

26. How do you treat water for drinking in this community?
   (1) Boiling    (2) Treating with chlorine    (3) None    (4) Others specify

27. How do people in this village dispose human feces?
   (1) Latrines    (2)Bushes    (3) Rivers    (4) Others specify

28. Do the people in this village do the following practices?
   (a) Hand washing before and after eating any food
   (b) Hand washing with soap every after visiting the latrine or after handling human excreta.
   (c) Eat hot food.
   (d) Eat cold food.
   (e) Eat unwashed vegetables and other foods.
   (f) Eat foods and juices sold in markets and streets.

29. Where do people who suffer from cholera in this village go for treatment

30. Has any body close to you ever suffered from cholera?
   (1) Yes    (2) No.

31. If yes, what was done for that person?

.................................
32. Are there any cholera control measures in this village?
   (1) Yes  (2) No

33. If yes, what do you do to control cholera in this village?

34. Are there any factors hindering the control measures? Explain
GUIDE LINES FOR FOCUS GROUP DISCUSSION.

TITLE: COMMUNITY ATTITUDE AND PRACTICE ON CONTROL AND MANAGEMENT OF CHOLERA IN KIBANDAMA PARISH KILEMBE SUB COUNTY KASESE.

The study is being carried out on people's knowledge attitude and practice on control and management of cholera. The information will be necessary to combat this problem in this area and the district at large. Your responses are therefore important and will be kept confidential. You are free to refuse to answer any of the questions asked.

Knowledge.

1. What causes cholera?
2. How is cholera acquired?
3. Can cholera be treated?
4. Is there a place for such treatment?, If yes, where?
5. How can you tell that some body has cholera?
6. How is cholera controlled?
7. Do you know of any drugs used locally to treat cholera?
8. Are their any factors hindering control of cholera in this village?

Attitudes

9. Is cholera a problem in this community?
10. What do people in this village believe about cholera?
11. Is a person with cholera a danger to the public in this community?
12. Can cholera be prevented?
13. Can cholera be treated?
14. Do you think there should be cholera control measures in this village?

Practice.
16. Has any body close to you ever suffered from cholera?, If yes what was done for that person?
18. How do people in this village control and prevent cholera?
19. Are there any cholera control measures in this village?
20. How is the community involved in the control of cholera?
21. What do you do in your home to control cholera?
22. Where do you take a person who gets cholera in this village?
23. Are there any factors hindering the cholera control measures in this village?
22 January 2004

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Re: ..................................................................................................................

I would like to take this opportunity to introduce to you the above named BSc. Nursing 4th Year student.

He/She is required to prepare an individual research project as part of his/her requirement for the fulfillment of the award of a degree of Bachelor of Science in Nursing, Makerere University.

The purpose of this letter, therefore, is to request you to grant him/her permission to access relevant units/areas in your facility for collecting information for her/his study.

We further request you and your staff to provide the necessary support and guidance to enable her/him complete the research project.

Yours faithfully,

[Signature]
M.S. Mbabali
Ag. HEAD/DEPARTMENT OF NURSING
Appendix v: MAP OF UGANDA SHOWING KASESE DISTRICT.
Appendix VI: MAP OF KASESE DISTRICT SHOWING KILEMBE SUB-COUNTY AND KIBANDAMA PARISH-STUDY AREA.