

FACTORS CONTRIBUTING TO LOW LATRINE COVERAGE IN
HOMESTEADS BUTOBERE WARD CENTRAL DIVISION KABALE
MUNICIPALITY KABALE DISTRICT

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DECLARATION

I, Bijja Andrew declare that this research report is my original work done to the best of my knowledge and has **never been** submitted anywhere for any academic qualifications.

Signature:~-----

Date:22/03/2021

BIIJA ANDREW

APPROVAL

This research report entitled factors influencing low latrine coverage in Butobere ward Kabale Municipality, has been done under my supervision and is now ready for submission.

Signature.....

Dae....**20/03/2021**

Mr. Agensi Alexander

DEDICATION

I dedicate this research report to my wife and children who have been very supportive during the course of my studies.

ACKNOWLEDGEMENT

I would like to appreciate my supervisor Mr. Agensi Alexander who has whole heartedly guided me fruitfully throughout my research study.

Special thanks go to my financial supporters who funded my studies and were always in supply of any necessity.

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ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

FHI Family Health International

GoU Government of Uganda

HIV Human Immune Deficiency Virus

MDG Millennium Development Goals

JMPWS Joint Monitoring Programme on Water and Sanitation

MDP Municipal Development Plan

NSP National Sanitation Policy

ODF Open Defecation Free

U GX Uganda shillings

UN United Nations

UNICEF **United** Nations Children's Fund

UNDP United Nations Development Programme.

VHTS Village Health Teams

SOWC State of the World Children Report

WTD World Toilet Day

WHO World Health Organization

WSP World sanitation Policy

DEFINITION OF TERMS

Sanitation: The provision of facilities for the safe disposal of human feces and urine.

Open defecation: Disposal of human feces in fields, forests, bushes water bodies or other open spaces.

Latrine: Facility used for the safe disposal of human feces and urine.

Latrine use: Use of a latrine facility for the safe disposal of human waste. **Latrine**

coverage: Proportion of households having ownership of a toilet **Hygiene:** The practice

of keeping oneself and the surrounding environment clean.

ABSTRACT

The study was meant to investigate the factors contributing to low latrine coverage in Butobere ward Kabale Municipal. A cross-sectional survey design was used whereby out of the sampled 180 homestead heads were interviewed. This community cross-section study was utilized. The research design was used to provide valuable information pertaining to the level of a particular attribute of interest in this case the level of latrine coverage in a defined population of Butobere at a specified point of time.

The study reviewed about knowledge attitude social cultural attributes towards latrine construction. It also involved administrative gaps **in** the community towards latrine construction **in** the community. The research findings revealed that the environmental factors like vegetative cover, terrain and the soil types affected latrine coverage in the study area.

Findings showed that gender wise female to male ratio was high also respondents had low income low education levels and less employment mainly casual labor. Further on culture was less bothered by poor hygiene and thus some practiced open defecation. The study concluded that, respondents had less knowledge about latrine construction, environment not conducive for latrine construction, no cultural concern about hygiene community workers were very few and thus there was no law enforcement. The study therefore recommended that, there be community sensitization, law enforcement and more staff recruitment in addition to construction of community latrines and enhancement of government programs like Emyooga and NAADS to improve the economical status of the community members.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The chapter presents the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, scope of the study, significance of the study, justification of the study and conceptual framework.

1.1 Background of the study

Worldwide, the disease burden associated with poor water, sanitation and hygiene is estimated to account for 4.0% of all deaths and 5.7% of total disease burden in disability-adjusted life year. These diseases occur principally due to diarrheal diseases, schistomiasis, trachoma, ascariasis, trichiniasis and hookworm infections (WHO, 2015). Diarrhea accounts for the largest share of sanitation-related morbidity and mortality, causing an estimated 1.4 million deaths annually (Amboynas et al., 2012).

Universal access to adequate sanitation is a fundamental need and a human right. Securing access to proper sanitation and hygiene would go a long way in reducing illness and deaths, especially among children. A safe water supply basic sanitation and good hygiene are fundamental for healthy, productive and dignified life (JMPWS, 2006). Clean water, combined with safe sanitation and improved hygiene practices prevent diseases, save lives and transform communities. Sanitation and hygiene programmes aim to mitigate health burden prevalence, where interventions could make a major difference, and where the present state of knowledge is poor on cholera surveillance and prevention of other diarrheal related diseases (WHO and UNICEF, 2008)

In Africa more than 2.5 billion people the world are still lacking access to improved sanitation and more than half of these people reside in low and middle income countries. Globally, about 15% of the population still practice open defecation (UNICEF, 2012).

According to WEST ATLAS (2008), Zimbabwe is currently affected by recurring droughts and a declining economy with limited resources to maintain and operate sanitation facilities and services. This is negatively affecting the availability of safer sanitation and hygiene facilities. As a result, vulnerable populations are exposed to an increased risk of diseases as diarrhea, cholera and dysentery, further compromising the immunity of a population already affected by a high HIV/AIDS prevalence (UNICEF, 2010).

The National sanitation policy 1997 indicates that in only 12% of the Uganda's population had access to any type of improved sanitation 87.8% of these live in rural areas with latrine coverage in most districts below 50 % (WHO, 2000).

The constitution of the republic of Uganda 1995 chapter 3 article 17j states that every citizen in the country should have and protect a clean environment; this largely encompasses sanitation promotion, which has been marginalized both globally and in the country.

This contrary to the situation in Butobere ward where sanitation is a major challenge. In Kabale District, 91 % of the population has access to latrines and 9% of the population without toilets World Toilet Day, 2012).

However, Butobere ward with low latrine coverage, diarrhea and worm infestation remain among the top five leading causes of morbidity in the area (Municipal Development plan 2012).

Records show that in 2014, 12.8% of people were diagnosed with diarrhea, 9.7% in 2015 and 6.7% from January -july 2016. Out of these, 0.7% cases in 2016 and 1.2% in 2017 January-July were from Butobere Ward. This study will investigate the factors that contribute to low latrine coverage in Butobere Ward.

1.2 Problem statement

Low latrine coverage in Butobere ward continues to be a widespread health and environmental hazard. Latrine coverage in Butobere ward is generally low with the proportion of the population with latrine facilities being estimated at 19% (WSP,2014) According to the to the 2014 census report, majority (83%) of the population in Butobere ward practiced open defecation (GoU,2010a) due lack of latrines. In 2010, the ward was ranked the third last of the 47 sub counties with the lowest latrine coverage (GoU, 2011a).

Butobere ward is among the parishes in Kabale district with low latrine coverage. The population census 2016, articulates that Kabale district latrine coverage was 91 % of the population but mainly Butobere ward remains with the lowest latrine coverage at 19%.

Despite the various programmes like north Kigezi diocese water and sanitation, the existing laws like the constitution, local government act and bye laws, Kabale municipal council health department, all aimed at improving latrine coverage have however not been effective. This study will aim at finding out factors contributing to low latrine coverage with particular focus on Butobere ward Kabale Municipality.

1.4 Objectives of the study.

1.4.1 General Objective

To investigate factors contributing to low latrine coverage in homesteads in Butobere ward Kabale Municipality.

1.4.2 Specific objectives

1. To establish the knowledge and attitude about latrine construction among the communities in Butobere ward Kabale Municipality.
- ii. To find out environmental, cultural and social factors hindering latrine construction in Butobere ward Kabale Municipality.
- v. To find out any administrative gaps in implementing and enforcing laws and policies regarding health and sanitation in Butobere ward Kabale Municipality.

1.5 The research questions

- i What are the knowledge and attitude about latrine construction among the communities in Butobere ward Kabale Municipality?

- nu. What are the environmental, cultural and social factors hindering latrine construction in among the communities in Butobere Ward Kabale Municipality?
111. Are there any administrative gaps in implementing and enforcing laws and policies regarding health and sanitation in Butobere Ward Kabale Municipality?

1.6 Scope of the study

1.6.1 Geographical scope

The study was carried out in Butobere Ward Central Division Kabale Municipality Kabale district western part of Uganda.

1.6.2 Content scope

The study covered knowledge and attitude about latrine construction, environmental, cultural and social factors hindering latrine construction and administrative gaps in Implementing and enforcing laws and policies regarding health and sanitation in Butobere ward Kabale Municipality.

1.6.3 Time scope.

The study was carried out in a period of one month from 15th Dec 2020 to 15th Jan 2021.

1. 7 Significance of the study

1.7.1 Community

The knowledge acquired through the study was to guide community development agencies on how to design, implement and monitor sanitation and hygiene projects for effective and sustainable community development.

1. 7 .2 Science

Academicians, researchers and consultants in the area of community development may also use the study findings as reference to train and equip staff/employees with knowledge and skills of sanitation and hygiene improvement.

The study will be a future reference to other post graduate students at the university perusing community based health education.

Furthermore, the study findings may guide project implementation by suggesting approaches to involving communities which would be paramount in ensuring sanitation and hygiene project sustainability and creating a sense of ownership.

1.8 Justification of the study

The world committed itself to halve the proportion of people without access to sanitation facilities by the year 2015; however this remains a pipe dream for many countries like Uganda which is one of the countries in Africa that is not on track to achieve the MGD goals on sanitation (WHO and UNICEF, 2014).

Therefore the study tried to investigate the underlying factors associated with low latrine coverage in Butobere ward to accelerate progress towards attainment of sanitation MDG targets in this marginalized area and be ushered in the new era of attaining SDGs regarding health and sanitation.

1.9 Conceptual framework

The Health Belief Model is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals (FHI, 1996).

The model is often used to explore a variety of long and short term health behaviors such as use of latrine facilities. The model is based on the understanding that a person will take a health-related action (i.e. latrine use). If a that person; feels that negative health condition (i.e. diarrhea) can be avoided, has a positive expectation that by taking a recommendation action, he/she will avoid a negative health condition (i.e. using a latrine will be effective at preventing diarrhea) and believes **that** he/she can successfully take a recommended health action (I.e. he/she can use a latrine comfortably and with confidence).

Independent Variables

and urine)

Latrine coverage and associated factors

Factors that promote latrine construction.

- High income levels.
- Suitable hydro-geological conditions
- Education.
- Latrine sanctions/law enforcement.
- Possession of latrine construction skills.
- Availability of latrine construction materials.
- Strong social support.

Factors that hinder latrine construction

- Lack of latrine construction skills
- Lack of latrine construction materials
- Lack of support from local leadership and key policy makers
- Poverty
- Illiteracy
- Socio-culture taboos
- Inadequate financing for the sanitation sector

Knowledge, attitudes and practices

- Knowledge on importance of latrines
- Knowledge on causes and prevention of diarrhea
- Attitudes on latrine use
- Hygiene practices related to latrines use



Latrine Construction

Defined as the construction of a latrine facility for the safe disposal of human waste (feces

figure 1: Conceptual framework for the study.

Adapted and modified for the study form; Family Health International, 1996.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter documents literature related to the study and is provided under various thematic headings namely; knowledge and attitude about latrine construction among the communities, environmental, cultural and social factors hindering latrine construction among the communities **and** administrative gaps in implementing and enforcing laws and policies regarding health and sanitation.

2.1 Knowledge and attitude about latrine construction among communities

Sanitation embodies; availability, accessibility, quality and use. Improving sanitation is not limited to physical-structural aspects but also includes having the coJlect knowledge on latrine construction, proper use and maintenance of latrine facilities as well as behavior change towards more hygienic practices. In this case the respondent's knowledge and attitude towards latrine construction will be investigated. Lack of knowledge on health and sanitation related issues have led to disease out breaks in communities. Globally 46% of the households don't a have adequate sanitation most of them due lack of knowledge and skills in providing the necessary sanitary facilities like latrines (WHO, 2004). The sanitation challenge turning commitment into reality, Switzerland. Lack of knowledge and attitude towards improved hygiene and sanitation caused an outbreak of diarrhea in Eritrea causing the death of 110 people (UN, 2013). According to National Environmental Sanitation Policy Kampala every household in Kampala is to have improved hygiene and sanitation in order to stop transmission of sanitation related diseases like cholera {GOU, 2016). A report from Diocese of Kigezi water department (2019), Sanitation and hygiene programme showed a decline in latrine coverage in the areas of their operation which include Butobere ward.

2.2. Environmental, cultural and social factors hindering latrine construction

Uganda domesticated its MDG targets for sanitation with an ultimate goal of reducing the incidence of sanitation-related diseases. These targets are such that by 2020 al1 households will be made aware of the importance of improved environmental sanitation and hygiene (ESH) practices for improved health; 90% of households will have access to hygienic, affordable and sustainable toilet facilities; and every school will have hygienic toilets and hand-washing facilities-

Or girls and boys separately (GoU,2010b). In addition to the above literature the environmental actors such as vegetation soil type, geographical location and terrain have a big impact on latrine construction and these create limitations and latrine coverage.

However, controlling for all these factors has shown that stronger social ties have a greater influence on latrine construction (Shaky et al, 2012). A household's decision to adopt the use of a latrine facilities has little to do with prevention of fecal-oral diseases (Jenkins, 2007). Despite the fact that sanitation is often perceived to be a household matter, the influence of wider community factors may not be overruled and an in-depth understanding of all factors promoting latrine use at all levels is valuable (World Bank, 2004).

Ownership of a latrine facility does not guarantee health benefits unless they said facility is utilized effectively. (Antenel & Kumie, 2010). However, many factors have been shown to promote latrine construction such as behavioral, demographic, geographic, climatic and economic (Lab Space-the Open University, n, d). Studies conducted in Tanzania and Ethiopia further indicated that sociodemographic and economic factors significantly promoted construction of latrine facilities in the household level (Kama, 2012, Awaoke&Muche 2013).

2.3. Administrative gaps in implementing and enforcing laws and policies regarding health and sanitation

Sanitation and hygiene are critical to health, survival, and development. Many countries are challenged in providing adequate sanitation for their entire populations as well as failing to facilitate administrations leaving implementation gaps in policy flame works and law enforcement concerning health and sanitation (UNICEF, 2013). This leaves people at the risk of water, sanitation and hygiene related diseases. Approximately 19,500 Ugandans, including 17,000 children under the age of five years, die each year from diarrhea (GoU, 2012). Diarrhea prevalence for children under the age of five years remains at 17% nationally, but disproportionally affects the poorest people in the population. Diarrheal diseases are the third most prevalent cause of mortality in Uganda resulting in 7% of all deaths in a year. Diarrhea is ranked third in most rural public health facilities. According to the Ministry of Health, approximately 80% of hospital attendance in Uganda is due to preventable diseases. About 50% of these diseases are sanitation and related

GoU, 2011d). Existing evidence suggest that diarrhea is slightly less common among children who used latrines compared with those who did not (WSP, 2013). Overall, 35% of children in Uganda suffer from moderate to severe stunting. Children stunting, which can affect both

educational and long-term productivity outcomes, has been linked to poor sanitation and hygiene and in particular open defecation practices (SOWC, 2013).

The continued neglect of the sanitation sector at all levels has been worrying (Water Aid, 2008). Overall, 80% of countries recognized right to water compared to just over 50% who recognized ght to sanitation (WHO, 2012a). Until 2010, the United Nations (UN) had not recognized access to safe sanitation as a basic human right(WHO,2012b) and therefore launched an advocacy initiative dubbed the "Sanitation Drive to 2015" in order to accelerate progress towards attainment **of** universal latrine coverage. Despite the intensive advocacy and lobby initiatives to raise the sanitation profile globally, the sanitation sector remains underfunded and a key challenge in most developing countries (WSP, 2012).

:-he United Nations MDG target 7c aims at halving the proportion of people without sustainable access to safe drinking water and basic sanitation by the year 2015. In this commitment, a target fur sanitation of 75% was set to be reached by 2015. However, it is estimated that as at end of 2001, the world had only attained 64% latrine coverage. Globally, an estimated 2.5 billion people lack access to improved sanitation which is more than 35% of the world population. Without Immediate acceleration in progress, the world will not achieve the MDG sanitation target if the current trends persist. Overall, 71 % of those who do not have latrines live in the rural areas where **90%** of all open defecation takes place (WHO and UNICEF, 2013). Slight progress has been made especially in sub-Saharan Africa where latrine coverage stands at 30%.

Despite the regional progress made, expansion of latrine coverage is uneven and marked with disparities. Uganda is equally not on the track to attain its MDGS for sanitation 2020, only 45% have access to latrine facility with over 5 million Ugandans practicing open defecation due to lack of latrines Poor sanitation is expensive, Uganda loses an estimated UGX 27 Billion each year due co poor sanitation (National Sanitation Day, 2019). A country-wide benchmarking report showed mat countries are losing millions of shillings due to poor sanitation yet eliminating open defecation would require much less money in enabling households to build and use latrine (WSP, 2014). Inadequate sanitation continues to strain the health care system with the economic burden of poor sanitation falling heavily on the poorest (WHO, 2008) who constitute nearly half of all Ugandans.

Accelerating latrine construction is both an economic and health gain (WHO, 2004). By meeting the sanitation **MDG** targets US\$ 60 billion annually will be earned with 90% of these economic benefits being attributed to the role of sanitation of sanitation alone, with Sub-Saharan African standing to benefit a great deal; universal latrine construction is expected to triple these benefits

WHO,2012b); Reaching the sanitation MDG targets will also improve health of workers by adding 3.2 billion annual working days worldwide while universal sanitation level would multiply **thus** benefit up to four times (UN University, 2010). Poor sanitation causes diarrhea, highly preventable disease which kills 1.5 million children annually, more than malaria, measles and **HIV** AIDS combined and is the second leading cause of death among children under the age of 5veUNICEF and WHO, 2009). Diarrheal diseases is a direct cause of 11 % of under- five mortality globally with developing countries especially Sub-Saharan Africa bearing the most consequences, the majority contributing factor being open defecation practiced by 1.1 billion people(UNICEF,2012).

Evidence from various cross-country studies indicates that sanitation remains one of the strongest determinants of child survival, its role being more superior to that played by water. Improved sanitation confers up to 37% reduction in childhood diarrhea compared to 12% reduction through improved water supply (Bartram et al; 2007). Esrey et al, (2001) reports similar findings of 35**40%** reduction in diarrheal diseases and a further reduction by half of childhood mortality through improved sanitation. Graham (2001) reports that partial improved latrine use (Possibly>50%) contributes to reduction in diarrheal diseases benefiting an entire community due to safer community environments. Further evidence indicates that the duration of latrine ownership has an impact on the occurrence of childhood diarrhea (Anteneh & Kumie, 2010). Providing appropriate facilities for defecation saves time, reduces health costs, increases returns on education investment and protects investments in improved water supply among many more benefits. Therefore the long neglected sanitation sector is a proved investment with high economic returns of improving health UN, 2008).

Increasing access to latrine facility is not only possible, it is essential for nations to prosper. Although Governments and other partners continue to make commitments to increase latrine coverage as well as funding for the sector, the efforts are not adequate to address the current low latrine coverage disparities. Without concerted action, the lack of sanitation will continues to impact the lives of millions of people and impend progress on development. With a focus now on attaining SDGs. more concerted efforts are required to improve the poor performance of the sanitation targets.

~""=iereas most studies conducted have focused on establishing the latrine coverage levels there is a clear gap in the investigation of factors contributing to low latrine coverage levels especially in Butobere ward. Therefore this study sets to address the factors contributing to low latrine coverage

imere ward, Kabale Municipality. In addition, supportive supervisory visits to households by **teit**. personnel, presence of school going children, peer pressure, social learning and living in **iese** proximity to a health institution have also been found to promote latrine construction (Meneh & Kumie, 2010).

However, controlling for all these factors has shown that stronger social ties have a greater influence on latrine construction (Shaky et al, 2012). A household's decision to adopt the use of latrine facilities has little to do with the prevention of fecal-oral diseases (Jenkins, 2007). Despite the fact that sanitation is often perceived to be a household matter, the influence of wider community factors may not be overruled and an in-depth understanding of all factors promoting latrine use at all levels is valuable (World Bank, 2004).

Availability of a latrine guarantees a wide range of benefits to an individual, the household and community at large. However many barriers exist at National level include lack of support from **local** leaders and key policy makers inadequate financing for the sanitation sector. Locally, lack of latrine construction skills, lack of latrine construction materials, poverty, and illiteracy.

Globally, the misunderstanding on the linkage between sanitation and health, institutional and policy shortcomings limited infrastructure and social taboos further pose additional barriers (UN University, 2010). In Uganda the main hindrances to up scaling latrine coverage have been reported to be low prioritization of sanitation by policy makers, inadequate funding for the sanitation sector, adverse hydro-geological conditions, flooding in low lying areas among others (WSP, 2004).

CHAPTER THREE

RESEARCH METHODOLOGY

3 Introduction

This chapter provides an over view of the materials and methodology details that are appropriate ~ the study. The chapter outlines study design, study population, area of study, sample size determination, sampling procedure, data collection tools, ethical considerations and data analysis procedures.

3.1 Research design

A community based cross sectional study design was utilized. This research design was used to provide valuable information pertaining to the levels of a particular attributes of interest (in this case level of latrine coverage) in a defined population (Butobere ward) at a particular point in time.

3.2 Study area

The study was undertaken in Butobere Ward Kabale, Municipality, Central Division. This study **area** is geographically placed in the southwestern region of the country at 130 degrees around 400 kilometers from Kampala. It borders Rukiga district in the north Rubanda district in the west then the country of Rwanda in the south and Rukiga district again in the east. The study location has 4 villages namely; Konyo, Karugashe, Makanga and Butobere.

3.3 Study population

The study population consisted of household heads or their representatives and key informants from the study area of Butobere ward. The location has total population of 3,300 people and 511 households.

3.4 Sample size determination

The sample size for the study will determined using the sample size determined using the sample size calculation designed by Fisher et al.(1998) as described below:

$$=Z'_{\text{paid}}$$

Where

r=sample size

=Standard Normal Deviation (1.96) which corresponds to 95% confidence interval.

M=Expected prevalence (0.19) Latrine coverage in Butobere ward is 19%

=1-q=0.81

d=Degree of accuracy =0.05

Therefore

=1.96' 0.19 ,0.81/(0.05)=236

Since the target population in Butobere ward is less than 10,000; a second formula of Fisher's et al. will be used.

$$f = \frac{z^2 M q}{(1 + \frac{z^2 M q}{N})}$$

where

f=the desired sample size when the population is less than 10,000 n=the desired sample size calculated using the first formula=236 N=the estimated of the population size =511 households.

Therefore

$$n = \frac{236^2}{511 + 236} = 161$$

The above sample size of 161 households was calculated using bare minimal for statistical significance calculations (representativeness and generalizability). A total of 180 household questionnaires were therefore collected during the study since any number above the calculated bare minimal is always preferred.

3.5 Inclusion criteria

Household heads above eighteen (18) years and were residents of the study area and those who consent to the study.

3.6 exclusion criteria

Household heads below eighteen (18) years of age and those that refuse to consent to the study.

37 Validity and reliability

Pretest of the research instruments was undertaken with an aim of checking the clarity, consistency and relevance of the questions in relation to the study as well as judge if the questions prompted the kind of responses expected. Ten percent of the household's questionnaires (18) were pretested and the results of the pretest were used to correct ambiguous questions, ideas and statements in the data collection instruments.

37 Data collection tools.

3.7.1 Household questionnaire

A structured household questionnaire was designed to collect data relevant to the objectives of the study from a total of 180 study respondents. The questions in the research instruments were divided into various thematic sections in line with the study objectives to provide information relevant to the study. All research instruments were translated into Rukiga and then back into English to ensure precision in the wording of the questions.

3.7.2 Observation checklist

Observation as a method of collecting research data was employed during the study and pertained physical outlook and inclusiveness of the researcher. This observation was used to generate data on observable features of the households mostly latrines and the level of hygiene practices by the facility users in this case as well as other information that when asked had the potential of arousing emotions, tensions or conflicts in the community. Systematic recording was made about the study and the research questions. Other key observable features of interest were, cleanliness, privacy of the latrine and presence of a hand washing facility near the latrine. All observations were immediately recorded in the observation check list as they were made to avoid recall bias.

38 Ethical considerations

Participation in the study was voluntary, informed consent was obtained prior to data collection, personally identifiable information such as participants names were not collected and maximum confidentiality of information gathered was assured to all participants throughout the study process.

39 Data Analysis.

a: field questionnaires were first checked for completeness, coded, entered into SPSS and cleaned before data analysis. The descriptive findings for the study were presented in form of numerical summaries, tables and charts for easy interpretation.

3.10 Limitations of the study and delimitations

Limited funds were a bottle neck to the field study; however the researcher fund raised from ends and reviewed the budget plan and adjusted a number of items making the field study achievable.

Lack of confidence among the respondents. Some respondents tended to relent on responding to the questions, this challenge was overcome by continuous motivation and encouragement for clarity and sincerity.

Language barrier was a challenge as some respondents spoke Kinyarwanda, however this limitation was solved by the acquisition of an assistant who knew the language. This helped in translation making the study possible.

Rainy weather was much of a limitation which brought about time wastage; this however was solved by acquisition of rain jackets and boots.

-time constraints that made it an easy to meet deadlines of the assignments.

Cultural and personal bias by some of the respondents who seemed would be reprimanded as a result of not having latrines.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

Introduction

This chapter consists of data interpretation presentation and analysis of findings for the study which was carried out in Butobere ward central division Kabale Municipality. The study was about the factors contributing to low latrine coverage in homesteads.

4.1 Demographic characteristics of the respondents

Table 1: Showing demographic characteristics of the respondents

| Gender | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
| Male | 70 | 38.9 |
| Female | 110 | 61.1 |
| Age of respondents | | |
| 8-28 | 51 | 28.3 |
| 28-38 | 60 | 33.3 |
| 38-48 | 41 | 22.8 |
| 48 and above | 28 | 15.6 |
| Marital status | | |
| Single | 40 | 22.2 |
| Married | 140 | 77.8 |
| Source of income | | |
| Salary earners | 42 | 23.3 |
| Casual earning | 49 | 27.2 |
| Business owners | 22 | 12.2 |
| Livestock keeping | 33 | 18.3 |
| Agriculture | 34 | 18.9 |
| Level of education | | |
| Non education | 52 | 28.9 |
| Primary | 60 | 33.3 |
| Secondary | 43 | 23.9 |
| Tertiary | 25 | 13.9 |

tsuurs from table 1 showed that 70(38.9%) were males,110(61.1%) were females,60 (33.3%) of 'IICCS?(I)ldents were in the blacket of 28-38 years, and 51(28.3%) in the age blacket of 18-28, **18%**) in the age blacket of 38-48 and 28(15.6%) were above 48 years.

marital status, out of 180 respondents 140(77.8%) were married while 40(22.2%) were single.

come 49(27.2%) were casual earners, 42(23.3%) salary earners, 33(18.9%) were earning livestock keeping while 22(12.2%) were business people. On education status, (60)33.3% of **te** respondents finished primary level 52(28.9%) had no formal education, 43(23.9%) finished **sedary** education, and 25(13.9%) had tertiary education. These findings were similar to those **-::x:r..ed** during FGDs where it was revealed that the majority of the respondents were females and **igitly** lower were males. One man said even here at this meeting when you count ladies are **aaty**, even the local council one (LCs) registration books showed that women were more than me in Butobere ward. Majority of the respondents were in the age group 28-38 years and slightly **mg hey** were in the age group 18-28 which is youthful age. This left other small groups to be the age blackets of 38-48 above 48 years. On marital status. The majority of respondents were **manied ieasing** a small percentage single. On education status it was found out that majority of respondents had finished primary level and many others had no formal education. Very few respondents had finished secondary and tertiary education.

0c !lcorne it was revealed majority was casual workers and other respondents were earning from **salary**, livestock keeping and small businesses. Kabale Municipal Council assessment report of **l!:120** showed that poverty levels in study area were high.

U Knowledge and attitude about latrine construction among the communities in Butobere ward

Kabale Municipality

42.1 Reasons for not having a latrine

| Reason | Frequency | Percentage% |
|---|-----------|-------------|
| Don't want one | 05 | 3.3 |
| It's not a priority | 05 | 3.3 |
| Don't have enough money | 15 | 10 |
| Don't know how to construct | 30 | 20 |
| Not applicable | 00 | 0 |
| Family has no land | 15 | 10 |
| Terrain is not appropriate | 25 | 16.7 |
| It's not part of culture | 15 | 10 |
| Lack of knowledge/skill on how to construct and use | 30 | 20 |
| Lack of construction materials | 10 | 6.7 |
| Others | | |
| TOTAL | 150 | 100 |

Table 2. Reasons for not having a latrine.

Out of 150 respondents who had no latrines, 20% said they lacked knowledge and skills on how to construct a latrine, 16.7% said terrain was not appropriate, 10% said a latrine was not part of their culture, 10% said no land, 3.3% said a latrine was not a priority, 3.3% said they want a latrine and

7, said they lacked construction materials. These findings were similar to those reported during GDs where the majority said they never had latrines because they didn't know how to construct latrines, another big number of respondents said the terrain was not appropriate, there was lack of money to finance construction of latrines. Another big group of respondents said they lacked skills and knowledge to construct and use latrines. Culture was mentioned to be one the reasons of not having latrines; some respondents said there was land scarcity. One female said the small piece of land that is available is for gardening so we cannot waste this small land to put up a latrine then we *suave*.

422 Where people defecate

| Pace | Frequency | Percentage% |
|----------------------------|-----------|-------------|
| e have a latrine | 30 | 16.7 |
| Sare with neighbors | 89 | 49.4 |
| + the bush | 61 | 33.9 |

Figure 3 above shows where people defecate. Out of 180 respondents, 30 respondents said they had latrines which is 16.7%, 89 respondents which is 49.4% said they were sharing with neighbours, while 61 respondents which is 33.3% said they were defecating in the bush. These findings are similar to those reported in FDGs where it was revealed very few households had latrine leaving the majority of households sharing with neighbors. Furthermore during observations very few households had latrine and feces were sighted in the open. Kabale Municipal Council health report _: September 2020 on sanitation and hygiene showed that latrine coverage in Butobere ward was low.

4.2.3 People with skills to construct a latrine

| Skill | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 80 | 44.4 |
| No | 100 | 55.6 |

Out of 180 respondents 44.4% had skill to construct a latrine while 55.5% said they lacked skill in constructing a latrine. These findings were similar to those reported during FDGs where the majority said they lacked skill to construct latrines, and one male respondent said I tried to construct a latrine but it collapsed before I finished it.

4.2.4 Gender responsibility in latrine construction

| Gender | Frequency | Percentage% |
|--------|-----------|-------------|
| Male | 150 | 83.3 |
| Female | 30 | 16.7 |

Table 2: Showing gender responsibility in latrine construction

Gender responsibility in latrine construction. 150 respondents said it was the responsibility of men to construct latrines while 30 respondents said it was a responsibility of women to construct latrines. These findings were similar to those reported during FDGs where majority of the

ssondents said it was a responsibility of men to construct latrines. One female said in our culture **en** are not supposed to construct latrine that's the work of men. Another female said we as **en** are supposed to go to gardens leaving the work of latrine construction to our husbands. **4"5How many people use latrine**

x.

| umber | Frequency | Percentage% |
|---------------|-----------|-------------|
| One to Three | 05 | 16.7 |
| Four to six | 10 | 33.3 |
| more than six | 15 | 50 |

Table 3: Showing how many people use a latrine.

Table 6 how many people used a latrine, Out of 30 respondents who had latrines, 50% said that more than six people shared a latrine, 33.3% said four to six people shared a latrine, and 16.7% said **e** to three people shared a latrine. These findings were similar to those reported during FDGs --!:ere majority said more than six people were using one latrine. Kabale Municipal Council report r September on hygiene and sanitation showed that pupil: stance ratio in schools was at 1 :40 which very high compared to the recommended national figure of 1 :25

4.2.6 latrine sharing with other households

| | | |
|-----|----|------|
| No | 10 | 1333 |
| Yes | 20 | 66.7 |

Table 4: Showing latrine sharing with other households

Table 7. Sharing a latrine with other households, out of 30 respondents 20 respondents which is 66.7% said they were sharing a latrine with other households while 10 respondents said they were not sharing a latrine with other households. These findings were similar to those reported during FGDs where majority said households were sharing latrines. Two females said we normally go to our neighbor latrines. The operation on sanitation done by local leaders of Butobere ward and health staff of Kabale Municipal Council in August 2020 found out many defaulters of latrines

4.2.7 Households share a latrine

| Households | Frequency | Percentage |
|---------------|-----------|------------|
| One to three | 5 | 25 |
| Four to six | 5 | 25 |
| More than six | 10 | 50 |

Table 5: How many households share a latrine

-- ~ g on the number of households sharing a latrine out of 20 respondents, 10 respondents said **12** than six households shared a latrine, 5 respondents said four to six households shared a **arr me**, and 5 respondents said one to four households shared a latrine. These findings were similar

~ reported during FGDs where the majority of respondents said many households were ... gone latrine. One male respondent said I have decided to put padlock on my latrine because a my neighbors come to use it. It was found out during study from LCs that many cases of people complaining how people from other families used their latrines were handled

«28 People in households who never used a latrine

| | Frequency | Percentage |
|------------|-----------|------------|
| No | 5 | 16.7 |
| Yes | 25 | 83.3 |

Table 6: Showing if there were people in households who never used a latrine

-c..-e 9 showing if there were people not using a latrine in households, out of 30 respondents 25 respondents said some people were not using a latrine while 5 respondents said none. These findings were similar to those reported during FGDs where majority said some people were not using latrines. One female said I always see faces in the bushes meaning that some people are not

ng latrine. During Open defecation free exercise conducted by Kabale district environmental health staff in Butobere *in* April 2020 found out faces in open.

429 People who were not using a latrine

| Person | Frequency | Percentage% |
|---------------------|-----------|-------------|
| Children under five | 04 | 16 |
| Men | 03 | 12 |
| Women | 05 | 20 |
| Sick people | 04 | 16 |
| Don't know | 08 | 32 |
| Pregnant women | 01 | 4 |

Table 7: Showing people who were not using a latrine

f :role 10 Showing people who were not using a latrine in households. Out of 25 respondents 8 respondents said they didn't know, 5 said women were not using the latrine, 4 said sick people were not using a latrine. 3 said men were not using it 4 said children below five years were not using latrines and 1 said pregnant women were not using latrines in the households. These findings were he similar to those reported during FGDs 20 respondents said women were not using latrines

mseed they use bushes, and majority of sick people don't use latrines due to less energy going to ..a;:-_s. A big number of respondents said they didn't know people who were not using latrines. *me* male said children less than five years were not using latrine due to fear of falling into the pit. a- ough observation during the study faces were seen around latrines and along the way in some

4210 If latrine was currently being used

| | Frequency | Percentage |
|-----|-----------|------------|
| >> | 04 | 13.3 |
| Yes | 26 | 86.7 |

Table 8: Showing if latrine was currently being used.

Table II Showing whether latrine was currently being used. Out of 30 respondents 26 respondents said the latrines were being used while 4 respondents said latrines were not being used. These ndings were similar to those reported during FGDs where majority of respondents said they were using their toilets compared to few who said their latrines were not being used.

42.11 Reason why latrine was not being used

| Reason | Frequency | Percentage% |
|---------------------------|-----------|-------------|
| Latrine collapsed | 04 | 75 |
| The pit is already filled | 00 | 00 |
| Poor cleanliness | 01 | 25 |
| latrine is too far | 00 | 00 |
| Poor privacy | 00 | 00 |

Table 9: Showing reason why latrine was not being used

Table 12 Showing reasons why the latrine was not being used, out of 4 respondents who said latrines were not being used,3 respondents gave the reason that latrine collapsed, and 1 respondent said it was because of not being clean, flies and bad smell. These findings are similar to those reported during FGDs where they said their latrines had collapsed and this caused them not to use diem fearing to fall into them .One man said at times he opts to use bushes because his latrine is dirty and smells.

4.2.12 Source of money for latrine construction.

| Source | frequency | Percentage |
|--------------|-----------|------------|
| Own resource | 30 | 100 |
| Loan | 0 | 00 |
| Others | 0 | 00 |

Table 10: Showing source of money for latrine construction.

ie 13 Showing financing construction of current latrine, all 30 respondents said they financed !::
 a:nstruction of their latrines. These findings were similar to those reported during FGDs where a
 respondents said they financed the construction of their latrines without any external support

«213 Motivation for constructing the latrine

| Motivation | Frequency | Percentage |
|---|-----------|------------|
| C motivation | 15 | 50 |
| Dsease prevention | 10 | 33.3 |
| ih <u>u</u> ence from neighbor/social -r <u>s</u> sure | 05 | 16.7 |
| Health education | 0 | 00 |
| Don't know | 0 | 00 |

Table 11: Showing motivation for constructing the latrine

-zble 14 Showing main motivations for constructing latrines, out 30 respondents 15 said there was .
 motivation, 1.0 said for disease prevention 5 said they were influenced by the neighbors and social pressure.
 From the FGDs the findings indicated that the community's motivation for _::n,structing and using latrines
 inclined towards health benefits of preventing diseases. A female participant clearly elaborated that when it
 rains, the faces are canied by rain into our rivers and other sources of water where we fetch our drinking
 water so if any one drinks this water, they can get diarrhea but if we all have latrines and we do not use the
 bushes for defecation then we can prevent diarrhea and this is why I decided to construct my latrine order to
 avoid diarrheal diseases

4.2.14 Main benefits of having a latrine.

| Benefit | Frequency | Percentage% |
|--------------------|-----------|-------------|
| No benefit | 12 | 6.7 |
| Privacy | 30 | 16.7 |
| Convenience | 35 | 19.4 |
| Disease prevention | 60 | 33.3 |
| Status or prestige | 27 | 15 |
| Don't know | 16 | 8.9 |

Table 12: Showing main benefits of having a latrine.

~5 Showing main benefits of having a latrine, out of 180 respondents 60 said disease **e**ion, 35 said convenience, 30 said privacy, 27 said prestige or status 16 said they don't and 12 said no benefits. These findings were similar to those reported during the various community wide discussions in the FGDs where majority said the benefits of having a latrine were disease prevention compared with respondents who said convenience and privacy.

at215 people who promoted latrine construction

| People | Frequency | Percentage% |
|---------------------|-----------|-------------|
| e | 95 | 52.8 |
| neighbor | 07 | 3.9 |
| Community volunteer | 10 | 5.6 |
| Government | 20 | 11.1 |
| Local leaders | 15 | 8.3 |
| NGOS | 30 | 16.7 |
| Don't know | 03 | 1.7 |
| Others | | |

Table 13: Showing people who promoted latrine construction

able 16 Showing people who promoted latrine construction in the communities, out 180 respondents 95 respondents said none, 30 said NGOS ,20 said Government ,15 said local eaders, 10 said community volunteers ,7 said neighbors 3 said they didn't know. These findings --e similar to those reported during the various community wide discussions in the FGDs where Non-Governmental Organizations were mentioned to be main promoters of latrine construction compared to government. Letters from local leaders to higher local levels requesting for community workers were seen during FGDs.

4.2.16 If there were factors known to negatively influence latrine construction in the communities.

| | Frequency | Percentage |
|------------|-----------|------------|
| No | 30 | 16.7 |
| Yes | 150 | 83.3 |

Table 14: Showing if there were factors known to negatively influence latrine construction in the communities.

y.

Showing factors known to negatively influence latrine construction, out 180 respondents said there, 30 said there were not there. The findings were similar to those reported during FGDs where majority said there were factors known negatively affecting latrine constructions in their communities.

" Factors negatively influencing latrine construction

| Factor | Frequency | Percentage |
|------------------------------|-----------|------------|
| Social | 40 | 26.7 |
| Cultural | 25 | 16.7 |
| Religious and administration | 40 | 26.7 |
| Environmental | 45 | 30 |

15: Showing factors negatively influencing latrine construction

18 showing some factors known to negatively influence latrine construction. Out of 150 respondents, 40 said social factor, 40 said religious and administration, 25 said culture, 45 said environmental. A report from Kabale Municipal environment department of August 2020 showed much of the area in Butobere ward is hilly and rocky. A report from department of community Kabale Municipal council of September 2020 showed men spent many hours in bars and other social gatherings late night and opt for open defecation in the bushes when going home at night.

42.18 Obstacles to latrine construction

| Obstacle | Frequency | Percentage% |
|--|-----------|-------------|
| Culture | 23 | 12.8 |
| Finances | 25 | 13.9 |
| Unsuitable hydro geological conditions | 42 | 23.3 |
| Lack of skills/Knowledge | 65 | 36.1 |
| Lack of space | 15 | 8.3 |
| Don't know | 10 | 5.6 |

Table 16: Showing obstacles to latrine construction

Table 19 Showing major obstacles to latrine construction, out of 180 respondents, 65 respondents said lack of knowledge and skills, 42 said unsuitable hydro geological conditions, 25 said finance 23 said culture, 15 said lack of space 10 said they didn't know. The findings were similar to those reported during FGDs where majority of the respondents said there were obstacles for latrine construction in their communities. One male respondent said am poor I can't afford putting up a

ire I don't have a job no one in my family is having any job. Another male respondent said I t have enough land so I can't waste my small piece of land to construct a latrine it's for arming

«z19If there were any risk of getting diarrhea if a neighbor didn't have a latrine.

| | Frequency | Percentage |
|------------|-----------|------------|
| O | 95 | 52.8 |
| Yes | 85 | 47.2 |

ble 17: Showing if there were any risk of getting diarrhea if a neighbor didn't have a latrine.

Ie 20 Showing any risk of getting diarrhea if a neighbor had no latrine, out of 180 respondents,85 said they were at risk of getting diarrhea ,95 said they were not at risk. These findings were similar to those reported during FGDs where majority of respondents said they were **a** risk of getting diarrhea for neighbors who had no latrines. Disease surveillance report of November 2020 from the health department Kabale Municipality showed diarrheal diseases was high on the table.

4.2.20 Effect of open defecation

| Effect | Frequency | Percentage |
|----------------------|-----------|------------|
| Causes shame/disgust | 80 | 44.4 |
| Causes diseases | 50 | 27.8 |
| Don't know | 50 | 27.8 |

Table 18: Showing effect of open defecation

Table 21 Showing effects of open defecation, out of 180 respondents, 80 said it causes shame and disgust, 50 said diseases and 50 said didn't know. These findings were similar to those reported during FGDs where majority of respondents said open defecation caused shame and disgust, and a big number still said it causes diseases and still some respondents didn't know effects of open defecation. A report from department of water Kabale Municipality revealed that there was high fecal contamination of water sources in Butobere ward.

«z2 If children faces could cause diarrhea

| | Frequency | Percentage |
|-----|-----------|------------|
| | 102 | 56.7 |
| res | 78 | 43.3 |

Tale 19: Showing if children faces could cause diarrhea

— e22showing *if* children faces could cause diarrhea, out of 180 respondents, 102 said no while **said** yes. These findings were similar to those reported during FGDs where majority of rondents said children faces could not cause diarrhea. One female respondent said I can even **mu** the faces for my child because *it* is harmless.

- ,, U human faces were **Principle** source of diarrhea.

| | Frequency | Percentage |
|----------|-----------|------------|
| O | 61 | 33.9 |
| Yes | 110 | 61.1 |
| D't know | 09 | 5 |

Table 20: Showing if human faces were principle source of diarrhea.

le 23 Showing if human faces were principle cause of diarrhea. Out of 180 respondents, 110 sad it could cause diarrhea, 61 said it couldn't cause diarrhea. These findings were similar to these ported during FGDs where the majority of respondents said human feces were principle causes

diarhoea. One male respondent said i can't touch human feces because they contain germs. A **port** on diarrhea outbreak 2019 in Butobere ward by health department Kabale municipal ouncil revealed that the cause was from contaminated water source by sewage leakages into water odies.

4.2.23 What could be attributed to lack of latrine facilities in the communities.

| Problem | Frequency | Percentage |
|-------------------------|-----------|------------|
| one | 50 | 27.8 |
| Diseases | 30 | 16.7 |
| Sigma | 10 | 5.6 |
| dignity | 5 | 2.8 |
| Shame | 5 | 2.8 |
| Medical expenses | 9 | 5 |
| Absenteeism in schools | 3 | 1.7 |
| Smell | 27 | 15 |
| Flies | 37 | 20.6 |
| Loss of productive time | 0 | 0 |
| Don't know | 4 | 2.2 |

Table 21: Showing what could be attributed to lack of latrine facilities in the communities. Table 24 Showing what problems could be attributed to lack of latrine in the communities, out 180 respondents, 50 said none, 37 said flies, 30 said diseases, 27 said smell, 10 said stigma, 9 said medical expenses, 5 said indignity, 5 said shame, 4 said didn't know, 3 said absenteeism in schools. These findings were similar to those reported during FGDs where majority of respondents said nothing was attributed to lack of latrine facilities in their communities. One male respondent said I have leaved without a latrine and none of my family members has ever suffered from any diseases. Another female respondent said these flies which come to my food are from faces in the open environment and they can cause diseases. A report on diarrhea outbreak in Butobere ward showed a decline in school attendance in 2019. One male respondent said the health worker told me that I will continue spending in hospitals if I don't construct a latrine so I have decided to put up one.

4.2.24 which diseases were suffered by any members of the household in the past 2 weeks

| Disease | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Malaria | 60 | 33.3 |
| Diarrhea | 32 | 17.8 |
| Skin related | 20 | 11.1 |
| Eye infection | 30 | 16.7 |
| Respiratory tract infection | 33 | 18.3 |
| T.B Hiv/Aids | 5 | 2.8 |

22: Showing which diseases were suffered by any members of the household in the past weeks

Figure 25 Showing diseases suffered by members of households within the past 2 weeks, out of 180 respondents, 60 said malaria, 33 said respiratory tract infections, 32 said diarrhea, 30 said eye infections, 20 said skin related and 5 said T.B, HIV/AIDS. These findings were similar to those reported during FGDs where a big number of respondents said their family members had suffered in diarrhea and eye infections.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS 5.0

Introductions

This chapter provides an in-depth discussion and key deductions made from the significant findings that emanated from this study in addressing the study objectives and research questions. The chapter also details the main conclusions and recommendations drawn from the significant findings of the study as well as the areas for further research

5.1 Discussion.

5.1.2 Demographic findings.

Although the study recorded more female than male headed households, latrine construction was observed to be higher among male headed households than female headed households. Similar findings were reported by UNDP (2006), Kema, (2012), Awoke and Muche (2013) who observed that male headed households had high latrine coverage.

The study further established that in this community, men bear the burden of constructing latrines. More gender awareness on shared responsibilities in latrine related matters may be necessary to bridge this apparent gap.

The type of occupation of the household head provides useful insights into the economic status of the household which ultimately affects the key decisions made for the household. The study found out that majority of the people in the study area were casual labourers. It was reported by the majority in the FGDs that the livelihood of the study community was casual laboring, an occupation characterized by periodic migration from place to place looking for jobs. Latrine construction was lowest among casual workers which could be attributed to their way of life. As reported by a male participant in the FGDs. Due to their movement searching for jobs, the study community hardly constructs latrines as they are accorded very low priority.

The level of education of the household head has a direct bearing on the health related decision made for the household as well as adoption of good latrine related practices.

The study population exhibited high illiteracy rates; latrine construction was higher among households with either primary or secondary level of education compared to those without any formal education. This could be attributed to the impact that education makes in decision for ultimate behavior change and adoption of good latrine practices at the household level.

According to the Public Health Office Kabale Municipality, the low latrine coverage rates for the study area could be attributed to low literacy rates of the study population which was a major impediment to the overall development of the study area.

On marital status of household head, the study showed the majority of respondents were married and this meant exhibiting responsibilities in families reflected by presence of latrines in these households. In households where respondents were single latrine construction was not a priority.

On age group of the household head, the study showed latrines were less in the age brackets of 28-38 and 18-28, this could be because these people were still in the youthful age spending most of their time engaging in other activities like social activities, job searching leaving the work of latrine construction to the older persons.

5.2.1 Knowledge and skill on latrine construction.

The study found out that generally, where latrines were absent the majority of the respondents lacked knowledge and skills in latrine construction. During FGDs one male said, I don't know how to construct a latrine and have never put one. People attitude towards latrine construction was negative where during FGDs one male respondent said a latrine is not a priority.

5.2.2 Findings about administrative gaps

The administrative gaps in implementing, enforcing laws and policies regarding health and sanitation in Butobere ward Kabale Municipality the study found out that the local leaders never promoted, sensitized the community about the problems related to health and sanitation issues, no enforcement carried out on law and policies concerning health and sanitation issues and lack of community leaders and VHTs. It was also found that few NGOs operated in the area. 60 people said that nobody was promoting issues on health and sanitation, 10 said government was involved.

5.2.3 Findings about the cultural, environmental and social economic factors.

The study found out that the culture regarded human faces harmless for example one respondent responded that (faces of children are not harmful). In addition, the findings found out that socially people in the community spent a lot of time drinking at night and coming home late at night which encouraged open defecation. In addition, the environment favored open defecation in a way that the thick vegetative cover provided hiding places encouraging open defecation, the terrain being sloppy in addition to rocky parent material made it difficult for latrine construction.

5.3 Conclusion.

There was found to be a big number of the respondents who had less knowledge and skills of constructing latrines thus required external support to have latrines constructed.

About the altitude, *in* homesteads within the study area, some respondents were okay with any population size sharing latrine facilities making them of low latrine coverage in the study area .

3» Environmentally, the study area is covered with tree forests which created an opportunity for those with no latrines to practice open defecation underneath the vegetation cover. Also the terrain of the area and rocky soils hindered latrine construction in the study area.

Culturally, the communities does not penalize or prohibit low hygiene engagements, this therefore negatively motivates latrine construction hence low latrine coverage in the study area. Furthermore the community lacked knowledge about dangers of open defecation, e.g. one respondent stated that children's faces are harmless. The study came up with a conclusion that culturally, men were responsible for latrine construction making low latrine coverage

5) Socially the community members take more hours in social leisure centers leaving for home late in the dark hours and at most times having over consumed alcohol making them consistently engage in open defecation in the bushes. This has been found greatly contributing to failure of latrine construction hence bringing about their low coverage in the study area. It was also found out that sharing a latrine had no harm.

6) Administratively, the local councils were never sensitizing the community about the problem; there was no law enforcement in relation to the problem. Also it was concluded that there were no community workers or VHTs in the study area.

5.4 Recommendations

From the above conclusion, the study came up with the following recommendations:

- Sensitizing the communities about construction of latrines knowledge and appropriate construction technology.
- 2) Giving positive motivation strategies like health benefits of acquiring a latrine to the community.
- 3) Engage members of predisposing elements of open defecation like contamination of water sources and diseases like cholera among others.
- 4) Equip local councils with health manuals to sensitize the community members about the need for latrines in their respective homesteads.
- 5) Reinforcement of health laws and policies by the district authorities to strengthen the latrine construction capacities.
- 6) Further recommendations are that there should be negative rewarding of the homestead heads that lack latrines.
- 7) Recruitment of community workers and training of village health teams(VHTS) in the communities where the study took place.
- 8) Construction of community latrine facilities where the population is high and land is minimal for each one homestead to own a latrine.
- 9) On a large note the government should implement its programs in both health and rural development to boost people's income so that they can afford construction of latrines.

5.5 Areas for further research.

- 1)The study recommends that an in depth formative research be under taken to explore how existing latrine construction barriers can be addressed in order to upscale latrine coverage in the study area.
- 2) There is need to initiate research on alternative technologies in latrine construction as an approach towards scaling up latrine coverage in the study area.

REFERENCES

- Anteneh,, A.& Kumie, A.(2010). Assessment of the impact of latrine utilization on diarrheal diseases in the rural community of Hulet Ejju Enesseie Woreda, East Gojjam Zone, Amhara Region. *Electronic Ethiopian Journal of Health Department*, 201 0; 24(2); 110-118. Retrieved 29 November, 2012, from <http://www.ajol./index.php/ejhd/article/view/62959>.
- Awoke W.& Muche S.(2013). A cross sectional study; latrine coverage and associated factors among rural communities in the District of Bahir Dar Zaria, Ethiopia. *Electronic Journal of Biometric Central Public Health*, 1471-2458/13/99. Retrieved 29 November, 2012, from <http://www.biomedcentral.com/l 471-2458/13/99>
- Bartram J.,Lewis K,. Linton R. and Wright A.(2005). Focusing on improved water and sanitation for health. *Electronic Journal of Lancet*, 365(9461);(810-812). Retrieved 29 November 2012 from <http://www.thelancet.co/journals/lancet/article/PIIS0 140-6736%280%291 7991-/fulltex>.
- Esrey S.A,. Anderson I., Hillers A. and Sawyer R. (2001). Closing the Loop. Ecological Sanitation for Food Security. Mexico; Swedish International Development Cooperation Agency. Retrieved 1 December, 2012, from <http://www.gwpforum.org/gwpef/wfmain.nsf/Publications>.
- Family Health International (FHI). (1996) .Behavior Change- a summary of four major theories; health beliefs model, AIDS risk reduction model, stages of change and theory of reasoned action. Retrieved 25 November, 2012, from <http://pdf.usaid.gov/docs/PNABZ712.pdf>.
- Government of Uganda (GoU).(2016b). National Environmental sanitation and Hygiene Policy. Kampala; GoU
- Government of Uganda (GoU).(2016-2012a). National Health Sector Strategic Plan. Kampala GoU.
- Government of Uganda (GoU).(2016-2012). Kabale Municipal Council Development Plan.
- Government of Uganda (GoU).(2016a).The 2016 Uganda Population and Housing Census.Kampala:Uganda National Bureau of Statistics.
- Government of Uganda (GoU).(2012a).District Public Health Records. Butobere Ward.
- Government of Uganda (GoU). (2010b).Public Health Act Chapter 281.Kampala:GoU.

The African Ministers Council on Water (AMCOW).(2008).The eThekweni Declaration Retrieved 17June,2013 from

<http://www.wsp.org/sites/wsp.org/files/publications/eThekweniAfricaSan.pdf>

United Nations. (2008). Fact Sheet: Sanitation generates economic benefits.

Retrieved 2 December, 2012, from

<http://esa.un.org/iys/docs/1YS%20Advocacy%20kit%20ENGLISH/Fact%20sheet%202.pdf>

United Nations (UN).(2013).The Millennium Develop Goals Report 2013.New York:UN. The

United Nations Children's Found (UNICEF)/World Health

Organization(WHO).(2009).Diarrhea: Why Children are still dying and what can be done.

Retrieved December

2012, from <http://www.unicef.org/media/files/Final-Diarrhoea-Report-October-2009-final.pdf> United

Nations Children Fund(UNICEF).(2012).Committing to child survival: A promise renewed. New York: UNICEF.

United Nations Children's Fund (UNICEF) and World Health Organization

(WHO).(2013).Progress on Sanitation and Drinking-Water 2013 Update. Finance: UNICEF.

United Nations Children's Fund(UNICEF).(2013). The State of the World's Children (SOWC)

2013.New York: UNICEF.

United Nations Development Programme (UNDP). (2006). Human Development Report, Beyond scarcity: Power, poverty and the global water crisis. New York: Palgrave Macmillan.

United Nations Development Programme (UNDP). (2009). Human Development Report 2009:

Overcoming barriers-Human mobility and development. New York: Palgrave Macmillan.

United Nations University.(2010).Sanitation as a Key to Global Health: Voices from the Field

Retrieved 2 December, 2012,

from <http://www.inweh.unu.edu/documents/2010-Sanitation-PolicyBrief.pdf>

Water Aid.(2008).Tackling the silent killer: The case for sanitation. Retrieved 10 December, 2012 from

<http://www.wateraidamerica.org/includes/documents/cm-docs/2008/t/tacking-the-silent-killer-the-case-for-sanitation-1.pdf>

World Health Organization (WHO). (2004). The Sanitation Challenge: Turning Commitment into Reality. Switzerland: WHO.

World Health Organization (WHO). (2008). Safer water, better health: Costs, benefits and sustainability of interventions to protect and promote health. Geneva: WHO.

World Health Organization (WHO). (2012a). Global costs and benefits of drinking- water supply and sanitation interventions to reach the MDG target and universal coverage. Geneva: WHO

World Health Organization (WHO). (2012b). UN-water global annual assessment to sanitation and drinking-water (GIAAS) report: the challenge of extending and sustaining services. Switzerland: WHO.

Water Supply and Sanitation Collaborative Council (WSSCC). (2004). The Campaign: WASH Facts and Figures. Retrieved 10 June, 2013 from <http://www.wsscc.org/dataweb.cfm?edit-id=292&CFTOKEN=70205233>.

APPENDICES

Appendix 1:

Informed Consent form

Hi .My name is Biija Andrew, a bachelor's Degree in environment Health Science student at Kabale University and am here to conduct a study on latrine Coverage and associated factors in Butobere W

The study is in partial fulfillment of my academic requirements. By participating in the study, you will provide vital information that might help your community, local partners or stakeholders and the government officials to undertake appropriate latrine programmes suitable for the Butobere Ward community with an understanding of the underlying latrine coverage associated factors.

It is for this purpose that I am kindly requesting for your participation by answering a few questions related to the study which may take about **30 minutes** of your time. In case you choose to participate, your name or identity will not be revealed to anyone. In addition, your participation in this study will not attract any financial rewards but will be on **voluntary** basis, you can choose not to answer some of the question(s). Just like those who may choose not to participate in answering any of these questions, their decision will be respected. We assure you that the information you give will only be used for purposes of this academic study.

Signature:

I have read/been read to the above consent statement and understood that my decision to participate or not to participate in the study is voluntary and that I will not get financial benefits by participating in this study.

Please, fill the following sub-section (If **YES, proceed to Q1, if No, terminate session by thanking the community member**):

YES. I have agreed to participate:

Signature/Right thumb Print

NO. I have refused to participate.

Signature/Right thumb Print

Person Administering Consent:

I , confirms that the above consent was
and signed in my presence:

Signature/Right thumb Print

Appendix ii

Household Questionnaire

| | | | |
|----------------------|--|------------------------|--|
| Interviewer Initials | | Date | |
| Household Number | | Questionnaire Code No. | |
| Village | | Cell | |

SECTION A: DEMOGRAPHIC INFORMATION

1. The household head is

☐ Male ☐ Female

2. Age of household head in complete year-----

3. Marital status Single Married
.....

4. What is the occupation of the household?

| | | | |
|------------------------------|--|-------------------|--|
| Formal Employment (Salaried) | | Livestock Keeping | |
| Informal Employment(Casual) | | Agriculture | |
| Trading/Business | | Other (specify) | |

5. What is the highest level of education of the household head?

| | | | |
|------------------------|--|-----------|--|
| No Formation Education | | Secondary | |
| Primary | | Tertiary | |

6. What is the household's average income per month in Uganda Shillings?

7. How many people in total live permanently in this household?) -----

SECTION B: LATRINE Coverage

1. **If your household does not have a latrine**, what are the main reasons why your household does not have a latrine?

| | | | |
|----------------------------------|--|---|--|
| Don't want one | | The family does not own the land | |
| It is not a priority | | Terrain is not appropriate | |
| Don't have enough money | | It's not part of culture | |
| Don't know how to construct | | Lack of knowledge/skills on how to construct/use it | |
| Don't have enough physical space | | Lack of construction materials | |
| Not Applicable | | Others (Specify) | |

2. Where do you defecate? (Observe and confirm if household has latrine facilities)

| | |
|-------------------------|--|
| We have a latrine | |
| We share with neighbors | |
| In the bush | |
| Others (specify) | |

3. Does your household have skills?

Necessary for constructing

Latrines

No

Yes

4. Who is responsible for constructing latrines in your Household?

Men

Women

THE FOLLOWING QUESTIONS (5 TO 13) ARE ONLY FOR THOSE HOUSEHOLDS WITH A LATRINE. IF THE HOUSEHOLD HAS NO LATRINE, SKIP THE FOLLOWING QUESTION AND GO TO SECTION C

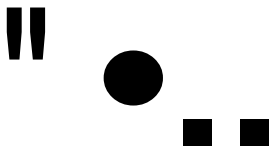
5. Overall, how many people use this latrine facility?

One to Three

Four to Six

More than Six

6. Do members of your household **Share** this latrine facility with other household?



7. With how many households do you share this latrine facility with?

One to Three

Four to Six

More than Six



8. Are there people in your household **who do not use latrine?**

No

Yes
(go to Q9)

9.If yes, who in your household does not use this *latrine-Multiples answers allowed*

| | | | |
|-----------------------|--|-------------------------|--|
| Children (Under Five) | | Sick people | |
| Men | | Don't know | |
| Women | | Others (Specify) | |
| Pregnant women | | | |

10. Is the latrine currently being *used? -check through observation*

No
(go to Q 11)

Yes



11. If no, why is the latrine not being used?

| | | | |
|---|--|------------------------------|--|
| The latrine is collapsed/fear of collapsing | | Latrine is too far | |
| The pit is already filled | | Poor privacy | |
| Poor cleanliness (insect, bad smell, etc) | | <i>Other(specify)</i> | |

12. How did you finance the construction of your current latrine?

| | | | |
|-----------------------|--|-------------|--|
| Own Resources | | Loan | |
| Others-specify | | | |

13. What was the Main Motivation for constructing this latrine?(Probe-do not promote)

| | | | |
|--|--|---------------------------|--|
| No Motivation | | Health education received | |
| Disease prevention | | Don't know | |
| Influence from my Neighbor/social pressure | | Others (Specify) | |

**SECTION C: LATRINE COVERAGE ASSOCIATED FACTORS THE FOLLOWING
QUESTIONS ARE FOR ALL HOUSEHOLD WITH OR WITHOUT A LATRINE FACILITY**

14. What do you consider to be the **Main Benefits** of having a latrine?-(Probe do not promote)

| | | | |
|-------------------------|--|--------------------|--|
| No Benefits | | Disease prevention | |
| Privacy | | Status or prestige | |
| Convenience | | Don't Know | |
| Others (Specify) | | | |

15. Who are some of the people who promote construction of latrines in your community?

| | | | |
|----------------------|--|-------------------------|--|
| None | | Local Leaders | |
| Neighbor | | NGOs | |
| Community volunteers | | Don't Know | |
| Government | | Others (Specify) | |

16. Are there any factors that are known to **negative influence latrine construction** in your community?

| | | | |
|-------------------------------|--|--------------------------------|--|
| No (go to Q 18) | | Yes (go to Q 17) | |
|-------------------------------|--|--------------------------------|--|

17. if yes, please tell me what are some of the factors that are known to negatively influence latrine construction **in your community-(multiple answers allowed. Probe does not prompt)**

| | |
|---|--|
| Social Factors List and explain all factors mentioned | |
| Culture Factors List and explain all factors mentioned | |
| Religious Factors List and explain all factors mentioned | |
| Others Specify list and explain all factors mentioned | |

18 .In your opinion, what are the Major Obstacles to latrine construction in your community?-(multiple answers allowed)

| | | | |
|--|--|--------------------------|--|
| Culture | | Lack of Skills/Knowledge | |
| Finances | | Lack of land/Space | |
| Unsuitable hydro-geological conditions | | Don't Know | |
| Other (Specify) | | | |

19. Do you think you at risk of getting diarrhea if your neighbor does not have a latrine that is practices open defecation?

| | | | |
|----|--|-----|--|
| No | | Yes | |
|----|--|-----|--|

20. What is the effect of open defecation?

| | | | |
|----------------------|--|------------------|--|
| Causes shame/Disgust | | Don't know | |
| Causes diseases | | Others (Specify) | |

20. Do you think Children's feces can cause diarrhea?

| | | | | | |
|----|--|-----|--|------------|--|
| No | | Yes | | Don't know | |
|----|--|-----|--|------------|--|

21. Do you think human feces are a principle sources of diarrhea?

| | | | | | |
|----|--|-----|--|------------|--|
| No | | Yes | | Don't Know | |
|----|--|-----|--|------------|--|

22. In your opinions, what problems could be attributed to lack of latrine facilities in your

| | | | |
|------------------|--|-------------------------|--|
| None | | Absenteeism from school | |
| Diseases | | Smell | |
| Stigma | | Flies | |
| Indignity | | Loss of productive time | |
| Shame | | Don't know | |
| Medical Expenses | | Other (Specify) | |

23. Which diseases have members of your household suffered from in the past 2 weeks?

| | | | |
|--------------------------|--|---------------------------------|--|
| Malaria | | Eye infections | |
| Diarrhea diseases | | Respiratory Tract Infections | |
| Skin related Diseases | | TB, <i>HIV</i> and AIDS | |
| Others (Specify) | | | |

Appendix v Map showing the study area. Z.

