A COMPARATIVE ANALYSIS OF CLIENT SATISFACTION AMONG PEOPLE RECEIVING HIV/AIDS CARE FROM PUBLIC AND PRIVATE HEALTH FACILITIES IN KABALE DISTRICT

BY DORIS KWESIGA

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Declaration

I, **KWESIGA DORIS**, hereby declare that the work submitted in this dissertation is original and a result of my own study except where otherwise acknowledged. This thesis has not been submitted for another degree award in this or any other university or institution.

Signature:……...

Date:……...

Supervisors' signatures

1) Dr. Noah Kiwanuka……

Date…….

2) Dr. Suzanne Kiwanuka……

Date…….

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ACRONYMS

ABC	Abstinence, Be Faithful, Use Condoms
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
G.O.U.	Government of Uganda
HCT	HIV Counselling and Testing
HIV	Human Immuno-deficiency Virus
HSSP	Health Sector Strategic Plan
MOH	Ministry of Health, Uganda
MTCT	Mother To Child Transmission of HIV
NGOs	Non Governmental Organisations
NSF	National Strategic Framework
OVC	Orphans and Vulnerable Children
PFPs	Private-for-Profit health facilities
PLWHAs	People Living With HIV/AIDS
PMTCT	Prevention of Mother To Child Transmission of HIV/AIDS
PNFPs	Private-Not-For-Profit health facilities
STIs	Sexually Transmitted Infections
UAC	Uganda AIDS Commission
UBOS	Uganda Bureau of Statistics
UHSBS	Uganda HIV/AIDS Sero-Behavioural Survey
UNAIDS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counselling and Testing for HIV
WHO	World Health Organisation

OPERATIONAL DEFINITIONS

Client satisfaction: For the purpose of this study, it will refer to the gap between what clients expect to receive as a service and what they actually get.

Good: Something satisfactory and of an acceptable standard.

HIV/AIDS care: In this study it will include counselling people who are HIV positive, determining the stage of illness (CD4 count, presence of opportunistic infections), evaluating eligibility for Antiretroviral Therapy (ART), giving ART, giving Cotrimoxazole Prophylaxis (Septrin) and treating opportunistic infections like tuberculosis, as well as cancers and sexually transmitted infections.

Prevalence of HIV/AIDS: Number of people with HIV/AIDS in a specified population at a specified time.

Private health facilities: Those that are owned and run by private individuals or organisations and offer HIV/AIDS care. They can be private for-profit or private not-for –profit.

Public health facilities: Those that are owned and run by the government and offer HIV/AIDS care.

Quality: Uganda's Ministry of Health defines quality as "Doing the right thing right, right away." In this study it will also refer to "How good the HIV/AIDS care services are".

Service providers: In this study it will mean facilities providing HIV/AIDS care, as well as the staff directly involved in this work – doctors, nurses, counsellors, laboratory technicians and managers.

ABSTRACT

Introduction: In Uganda in 2008, about 121,218 people were on ART, which was 40% of all persons eligible for it at the time. Despite increasing availability and accessibility to HIV/AIDS care services in Uganda, there are limited data on the effect of this scale-up on the quality of care and cost-effectiveness.

General objective: To determine whether client satisfaction with quality of HIV/AIDS care services differed between public and private health facilities in Kabale district, South Western Uganda.

Methods: A cross-sectional study using quantitative methods and an adapted SERVQUAL tool was conducted and 216 client exit interviews were done. Differences in mean scores between expected and perceived services were analyzed using paired t-tests and chi-square tests. A negative score implied that clients were not satisfied with the care they received. Logistic regression models were also used.

Results: Generally, clients were not satisfied with services, as shown by the average gap score of -0.06. There was no statistically significant difference in client satisfaction between the public and private health facilities (p=0.5000), though clients at the private facility scored higher (-0.03 compared to -0.09) thus better perceived quality. Tangibles was the worst rated dimension (-0.16) and responsiveness the best (0.00). The item 'employees give personal attention' had the highest score (0.04) while the biggest gap was 'up-to-date equipment' (-0.54). The odds of women respondents being satisfied were over two and a half times higher than that of men and this was statistically significant (Adjusted OR 2.56, 95% CI 1.33,4.95 and p=0.005).

Conclusion: HIV/AIDS care services at both facilities had gaps in quality as perceived by their clients, especially in the areas of physical facilities and equipment and ability of service providers to perform the service dependably and accurately. Managers and staff in both need to improve on these services and on overall quality of care.

1.0 INTRODUCTION AND BACKGROUND

In Uganda, the health system is decentralized and arranged into national referral hospitals, regional referral hospitals, general hospitals and health centres (HC) from HC IVs, HC IIIs, HC IIs and HC Is. The HCI does not have a physical structure but is made up of a team of people - the Village Health Team, according to the Ministry of Health (MOH) in Uganda. Different health services are provided at each of these levels of care. (MOH 2010). Health service delivery in Uganda is also made up of both the public and private sectors, of which each provides about 50% of reported outputs (MOH 2009).

The public sector consists of health facilities owned and run by the government, while the private one is made up of facilities that are Private For-Profit (PFP), Private Not-For Profit (PNFP), traditional and complimentary providers, as shown in the Health Sector Strategic Plan (HSSP) III (MOH 2010). That document goes ahead to report that the government of Uganda owns 2,242 health centres and 59 hospitals compared to 613 health facilities and 46 hospitals by PNFPs and 269 health centres and 8 hospitals by the PFPs. About 30,000 health workers are employed by the government and PNFPs altogether, while PFPs employ about 9,500. Dual employment is common, where people work in both the public and private sectors.

A minimum package of health services has been developed for all levels of health care for both the private and the public sector (MOH 2010). Average waiting time is recommended to be one hour (MOH 2004b) but a study in Uganda found a significantly longer waiting time in public health facilities than private ones (Jitta et al. 2008).

According to the HSSP III, user fees were abolished in public health facilities in 2001, making services free (curative, preventive, rehabilitative and promotive), except in the private wings of public hospitals (MOH 2010). All government health units are expected to open from 8am to 5pm daily on working days and hospitals and HC IVs are expected to open for 24 hours, including public holidays. However, many rural public facilities don't open as expected, with some closed on weekends and public holidays (Jitta et al. 2008). A time-motion study done in two public HIV clinics in Masaka and Mbarara districts in Uganda reported that out of an eight-hour work day, clinicians only spent about five hours in the clinic (Were et al. 2008).

In the private sector, there are facility-based PNFPs, common in rural areas, which provide both curative and preventive services and account for 41% of hospitals and 22% of lower level facilities. The non facility-based PNFPS mainly provide preventive, palliative and rehabilitative services. The PNFPs are subsidised by government and also depend on financing from donors. The PFPs are common in the urban and peri urban areas but their expansion has been chaotic and unregulated (MOH 2009). They provide mainly curative services, with preventive services limited except for family planning (MOH 2010). They charge money for their services and many of them operate on a 24-hour schedule.

According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), approximately 33.4 million people in the world were living with the Human Immuno-deficiency Virus (HIV), with an estimated 2.7 million new infections and 2 million

AIDS-related deaths in the year 2008 (UNAIDS/WHO 2009). Sub-Saharan Africa has faced the brunt of the pandemic, accounting for 67% of people with HIV worldwide and 72% of the world's AIDS-related deaths in 2008, according to the same report. The Uganda AIDS Commission (UAC) estimated HIV/AIDS prevalence in Uganda at 6-7% (UAC 2008).

According to the Government of Uganda (GOU) there is a wide availability of HIV/AIDS care services through out the country. These include HIV Counseling and Testing (HCT), Antiretroviral Therapy (ART), Prevention of Mother-To-Child Transmission of HIV/AIDS (PMTCT) and treatment of opportunistic infections (GOU 2008). In Uganda, HIV/AIDS care is provided by the government and a variety of partners. These include civil society organizations, community based organizations, faith based organizations, international organizations and donors and the private sector.
In 2008, the country had approximately 121,218 people with HIV/AIDS receiving ART (MOH 2008). In 2007, the UAC had estimated it to be 91,500 (39%) as shown in Uganda's National Strategic Plan for HIV/AIDS 2007/08-2011/12 (UAC 2007). The target for the year 2011/12 is to have this figure at 67%, which involves a high and ambitious expansion drive. Similarly, 57% of health facilities in Uganda from Health Centre IV and above are providing ART, with a target of 100% for the year 2011/12 as disclosed by the same report.

Nonetheless, there are few assessments of how the process of scale-up of HIV/AIDS care affects quality of care, efficiency and cost effectiveness (Wagner et al. 2007). Quality of

care has an important bearing on client satisfaction, a key component of health care delivery. Client satisfaction often determines whether a client seeks medical advice and care and adheres to a prescribed treatment schedule. Dissatisfaction with health services can have serious consequences, for example it may result in patients not following treatment regimens, failing to go for follow-up care and spreading negative information to discourage others from using a health service (Andaleeb et al. 2007). One of the output indicators of quality of service delivery in Uganda's Health Sector Strategic Plans – HSSP I and II (MOH 2000, MOH 2004a) is the proportion of the surveyed population that expresses satisfaction with the health services, with a target for the year 2009/10 of 80%. However, no baseline information is available and nationally, there is no agreed instrument to collect data on client satisfaction (Lochoro 2004).

A study looking at client satisfaction with general health services in Uganda reported that clients of private health facilities expressed higher satisfaction than users of government health facilities (Jitta et al. 2008). There is little information available on satisfaction among clients who receive HIV/AIDS care in Uganda, comparing public and private health facilities. It is necessary to find out the situation in each and perceived quality of care, especially since some HIV/AIDS services like ART are free even in the private facilities. This study measured client satisfaction in Kabale district where HIV/AIDS prevalence is 10% (District Health Officer, Kabale, 2008), which is higher than the country's national average of 6-7% (UAC 2008).

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Overtime in Uganda, there have been reports of problems in health facilities like hostile or negligent staff mistreating patients, gender discrimination, drug shortages, inadequate numbers of staff, absentee staff and high expenses (Bakeera et al. 2009). These have contributed to low utilisation of health facilities. For example, fewer pregnant women in Uganda deliver their babies from health centres. Many prefer to use traditional birth attendants, as reported by the Uganda Bureau of Statistics (UBOS) in its 2006 Uganda Demographic and Health Survey (UDHS). It revealed that 41% of births in the five years before the survey were at health facilities, while 58% took place at home (UBOS 2007). Anecdotal evidence exists about increasing use of alternative medicines like herbs and reflexology and all these imply dissatisfaction with formal health services. It is therefore necessary to follow up on these issues drawing upon information from studies already conducted and theories proposed about how to make services more attractive and satisfactory. The uncertainty about the exact number of private facilities in Uganda means that the government cannot regulate all of them effectively. There are an estimated 4,639 health facilities in Uganda, of which 2,154 (46%) are Private-For-Profit (Mandelli et al. 2005). The same study shows that 60% of Private-For-Profit health facilities (PFPs) offer HCT but only 4% have been accredited by the Ministry of Health to provide ART. This shows the importance of comparing public and private HIV/AIDS care.

2.2 THEORETICAL FRAMEWORK

Many models exist in the area of client or consumer satisfaction and although a number of them are in the marketing research discipline, they can also be applied in the area of health care. One of the models is the disconfirmation theory, which proposes that a client should compare a standard they have before using a service (usually their expectations) to their perceptions after use (Newsome and Wright 1999). The difference between the two becomes the disconfirmation and its size and direction define the extent of satisfaction. It suggests that when all things are constant, the higher one's expectations are, the harder it will be for the service to meet them, thus less satisfaction or negative disconfirmation.

Another model is the zone of tolerance theory (Newsome and Wright 1999). It proposes that consumers expect service provision to vary but there is a certain range within which they are willing to accept this variation, depending on the type of service. The range in which customers do not particularly notice service performance is the zone of tolerance. When performance falls outside this (either very high or very low) the customer is satisfied or dissatisfied.

Other models have also been described (Hom 2000). These include the multiple process model which posits that consumers use more than one standard of comparison to judge an experience with a service, while affective models posit that satisfaction with a service is influenced by emotion, liking and mood. According to the equity models, satisfaction is influenced by the consumer's belief that they have been fairly treated in return for their efforts or in comparison to other consumers' experiences.

Although client satisfaction may not only rely on expectations and perceptions, both articles cited emphasize that the disconfirmation theory is the most widely used in this area. In addition, the SERVQUAL framework is directly in line with this theory, so it will be the basis for this study.

2.3 HIV/AIDS CARE AND SUPPORT

This refers to services provided to People Living With HIV/AIDS (PLWHAs) and their families (WHO 2004a). Although for this study focus is on clinical care, the same source suggests that HIV/AIDS care includes:

- Clinical care: HCT, PMTCT, preventing and managing opportunistic infections, palliative care, nutritional support and ART.
- Psychosocial support: counselling, orphan care, community support services and spiritual care.
- Socio-economic support: material support, economic security and food security.
- Human rights and legal support: reduction of stigma and discrimination, succession planning and participation of PLWHAs.

The Uganda Service Provision Assessment Survey (MOH 2008) collected data from 491 representative health facilities of all levels in the country (Health Centre IIs up to hospitals). These included both public and private providers, who are expected to have similar HIV/AIDS packages. According to the survey,

- HIV/AIDS care and support services involve curative care for HIV/AIDS-related illnesses and provision of counselling to help PLWHAs.

- Clinical care and support services include providing ART, follow-up services for people on ART, treating opportunistic infections, palliative care like pain management and nutritional rehabilitation.

The survey reported that 61% of the facilities offered HIV/AIDS care and support while 57% offered clinical care and support. It was revealed that 98% of hospitals and 99% of health centre IVs offered both services. The figures were lower for health centre IIIs – 71% had HIV/AIDS care and 68% had clinical care, while health centre IIs had even less. Private facilities were more likely to offer either service than government ones.

This study made sure that the study sites chosen were offering both HIV/AIDS care and clinical care and support services as per the various definitions above. The availability of these services reflected good quality of care at the health facility and ensured that clients were interviewed about the care that they were actually supposed to receive.

2.4 INTERNATIONAL GUIDELINES FOR HIV/AIDS CARE

A set of standards was proposed by the World Health Organisation (WHO) to help member states develop national quality evaluation and accreditation programs for health care facilities providing HIV/AIDS care and to improve its quality (WHO 2004b). The standards fall under various categories, which include functions related to health care delivery; functions related to links with communities and functions related to service delivery.

Functions related to health care delivery include caregivers routinely assessing clients for the presence of opportunistic infections and tuberculosis and treating or referring them;

use of a transparent process to identify people who will receive ART; following standard management protocols based on national or WHO guidelines for PLWHAs; following guidelines for PMTCT and giving additional counselling to mothers with HIV/AIDS on other aspects like infant feeding and appropriate assessment and management of pain of PLWHAs. Functions related to service delivery include stocking an appropriate and high quality selection of medicine, reagents and supplies; ensuring their availability; providing adequate information to people getting drugs about their uses, doses and adverse reactions; availability of laboratory tests and well maintained laboratory equipment. These standards can be used for both accreditation and inspecting service quality. Although Uganda referred to these standards to develop accreditation criteria (WHO 2004b), little evidence is available on whether they have been used to measure client satisfaction with HIV/AIDS care as part of inspecting service quality.

A guide established to help countries monitor and evaluate their HIV/AIDS care and support programs (WHO 2004a) identified quality as one of the measurement challenges. It stated that for example, the indicators measure the availability of staff but not the quality of their training. In addition, the proposed indicators do not include feedback through methods like client interviews with PLWHAs. The guide recommends complementing indicators with questions related to the quality of care and support services by techniques like focus groups, client exit interviews and mystery clients. Nevertheless, data on client's opinions about HIV/AIDS services received in Uganda is not widely available hence the importance of this study.

2.5 UGANDA'S GUIDELINES FOR HIV/AIDS CARE

Uganda has a number of guidelines related to the provision of HIV/AIDS care.

The Uganda National Policy Guidelines for HIV Counselling and Testing (MOH 2005) give explicit information on different types of HCT, the HCT protocols, HIV testing algorithms, HCT for children, quality assurance and monitoring and evaluation as expected of service providers. However, ongoing counselling of PLWHAs is given very little attention and it is only briefly mentioned that people who provide care to PLWHAs should provide this service.

The Policy for Reduction of Mother to Child Transmission (MTCT) of HIV/AIDS (MOH 2003b) details the various benefits and risks of breast feeding and other methods likely to reduce MTCT and stresses that every HIV positive mother should be informed about these at the health facility. It also outlines the various types of ART given to reduce MTCT and specifies that health workers should be adequately trained in all these areas but it does not outline specific protocols to be followed.

The National ART and Care Guidelines for Adults and Children (MOH 2003a) are concise about ART. Areas emphasized include when to start ART, recommended regimens, when to change or stop therapy, challenges of ART, post-exposure prophylaxis, PMTCT and general HIV/AIDS care. Clear protocols are given on how to treat both adults and children living with HIV/AIDS, with different alternatives available for the health workers. However, little information is given on general HIV/AIDS care, and a ten point care program is only briefly mentioned.

In spite of all these guiding principles, good HIV/AIDS care cannot be given without adequate training of health workers, frequent refresher training and ensuring good service quality. A study done in Uganda (Kyayise et al. 2008) assessing HIV/AIDS care by PFPs reported that although most PFPs follow MOH guidelines and policies to provide HIV/AIDS and ART services, adherence to standards declines overtime. Nevertheless, that study only assessed PFPs, unlike this one which compared client satisfaction between public and private health facilities. Few such studies have been done and documented in Uganda thus the need for more information.

2.6 SERVICE QUALITY

The wide range of definitions of service quality and the fact that it is an abstract construct does not diminish its importance in the delivery of health care. Although governments may increase financing of health care, utilization can remain low as long as clients perceive the quality as poor (Lafond 1995).

The World Health Organisation defines quality of health care as "consisting of the proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have an ability to produce an impact on mortality, morbidity, disability and malnutrition". Uganda's Ministry of Health refers to quality as "doing the right thing right, right away" (MOH 2005). Quality in health care can also be divided into technical quality and functional quality (Babakus and Mangold 1992). They define technical quality, also referred to as "quality in fact", by basing on the technical accuracy of the diagnoses and procedures. Functional quality, on the other

hand, refers to the manner in which the health care service is delivered to the patient. This relies more on the patient's perception. It is similar to the definition which says quality can be perceived (consumer's judgment about an entity's overall excellence or superiority) or objective (Parasuraman et al. 1988). Various dimensions of quality exist, of which one of the most popular is the Donabedian model. According to the Institute of Medicine (IOM), the Donabedian model categorizes dimensions of quality into structure indicators - for example whether staff are qualified and facilities well equipped; process indicators - whether ART is given according to established protocols and outcome indicators – like rates of adherence to ART or patient satisfaction (IOM 1999).

2.7 CLIENT SATISFACTION

Client satisfaction is a multi-dimensional concept that has various definitions. According to Oliver, 1981, it is a summary psychological state as a result of the emotion surrounding disconfirmed expectations being coupled with the consumer's prior feelings about the consumption experience (as cited by Parasuraman et al. 1988). It has also been described as the gap between what clients expect to receive as a service and what they actually get (Lochoro 2004). According to the Health Boards Executive (HBE), satisfaction is easy to understand but hard to define. It is related with similar themes such as happiness, contentment and quality of life. A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved. It can also be attained when the patient/client's perception of the quality of care and services that they receive in the healthcare setting has been positive, satisfying and meets their expectations (HBE 2003).

By and large, it is a very subjective concept that can be hard to measure, but which is of great importance in health care. This is because it gives direct feedback to service providers, is an important indicator of quality of services and shows the relationship between services and treatment outcomes (Rapkin et al. 2008). It can also be a valuable competitive tool; helps to improve patients' quality of life and helps service providers determine customers' specific problems that require attention (Andaleeb et al. 2007). Client satisfaction is potentially a direct indicator of system performance (Hall and Dornan 1988). Participation of clients is increasingly being linked with improvements in the quality of health care and improved health outcomes (HBE 2003). Client satisfaction is a major outcome measure for health care so monitoring it is crucial. Generally, it helps clients get a say in health care provision, evaluation and improvement.

Different dimensions of client satisfaction have been assessed during various studies. For example, one set of dimensions includes clinical effectiveness and outcomes; access to services; organization of care; humanity of care and the environment (Lochoro 2004); while another includes tangibles; reliability; responsiveness; assurance and empathy (Parasuraman et al. 1988). For this study, client satisfaction was defined as the gap between what clients expect to receive as a service and what they actually get.

There is a difference between perceived service quality and client satisfaction. Perceived service quality is a global judgment or attitude relating to the superiority of the service while satisfaction is related to a specific transaction (Parasuraman et al. 1988). Nonetheless, the two are inextricably linked. Perceived service quality influences patient

behaviour like satisfaction, referrals, choice and usage to a great extent (Andaleeb 2001). In a study in Bangladesh, it was revealed that the dimensions of service quality assessed significantly explained patient satisfaction and they were recommended for use in evaluating hospital services from the patient's view point (Andaleeb 2001). However, that study was not done within a health facility setting, but rather, involved interviewing people from the general population who had used a hospital in the past 12 months. This study differed by interviewing a sample of clients currently using a health facility.

A study done in South Africa about client's perspectives on HIV/AIDS care and treatment and reproductive health services (Orner et al. 2008) reported that respondents at that particular health facility were very satisfied with services received. For women, this was because they were given enough time to talk and were taken seriously by providers, unlike other facilities where they were shouted at; there were staff shortages and long waiting times. For men, being well educated about HIV/AIDS and assured of confidentiality were shown to be factors influencing satisfaction. All these are aspects of service quality. However, the study was qualitative, thus a smaller sample size and it was only done at one public health facility. Not much information is available in relation to client satisfaction with HIV/AIDS care in Uganda and in Kabale district. This study sought to assess this aspect, by comparing public and private HIV/AIDS care to provide new information.

2.7 THE SERVQUAL FRAMEWORK

A range of studies have described client satisfaction differently and have used a variety of tools and dimensions to measure client satisfaction with health services (Whitworth et al. 1999, Jitta et al. 2008, Lochoro 2004, UBOS 2004, Roberts 2002, Bond and Thomas 1992). Many studies in both developed and developing countries have successfully used the SERVQUAL tool / framework, created by Parasuraman et al. in 1988. A study done in Bangladesh (Andaleeb et al. 2007) to identify determinants of patient satisfaction with public, private and foreign hospitals used a modified SERVQUAL framework. Variables that had the greatest impact on satisfaction were the doctor composite, tangibles, nurse composite and hospital procedures, but these varied between the types of hospitals. SERVQUAL has also been used to measure quality of dental health care in the United Kingdom, comparing private and public facilities (Palihawadana and Barnes 2004). The results were judged to be significant for the managing partners in the dental surgeries as they demonstrated patient expectations and perceptions. The authors recommended more research comparing similar public versus private sector practices, perhaps looking at price and experience as variables of interest.

The SERVQUAL tool is used to measure service quality by assessing five dimensions of a service provided, that can influence clients' satisfaction. Although originally developed as a marketing tool, it has been adapted by many authors for use in assessing patient satisfaction with health care. Generally, a diversity of areas of health care have been studied using SERVQUAL, including general health services; eye treatment; comparing group and solo clinic practices; chronic kidney disease screening; public and private

laboratory services for HIV related testing and HIV/AIDS clinical care in a government hospital (Lin et al. 2009b, Lin et al. 2004, Lin et al. 2009a, Mfinanga et al. 2008, Alemayehu et al. 2009).

Most of these studies identified SERVQUAL as being useful in measuring service quality and client satisfaction and recommended its use. Other advantages of SERVQUAL include the fact that it was tested and found to have strong reliability (total scale reliability often close to 0.9) and validity (face, content and convergent validity). In addition, it can be adapted or supplemented to fit the situation when necessary. Furthermore, its items cover a number of issues that affect client satisfaction, like 'the provider's humaneness', which in a meta-analysis of client satisfaction was found to be the most common feature of care asked about (Hall and Dornan 1988).

Overall, SERVQUAL has been demonstrated as an important tool in assessing service quality and client satisfaction in the health sector and has been validated for use in health care (Babakus and Mangold 1992). It was chosen for this study basing on the preceding reasons.

3.0 STATEMENT OF THE PROBLEM, JUSTIFICATION, CONCEPTUAL FRAMEWORK

3.0 STATEMENT OF THE PROBLEM

Many health facilities and organizations in Uganda now provide care for PLWHAs. However, hardly any information is available on whether client satisfaction differs between clients getting HIV/AIDS care from private health facilities and those getting it from public health facilities. Studies have shown that there are differences in utilization of and satisfaction with public and private health services in Uganda. A case in point is that although 72% of Ugandan households live within 5 km from a health facility (public or PNFP), there is low utilization of these services due to reasons like poor infrastructure and shortage of human resource (MOH 2009). According to Guldner and Rifkin (1993), the poor quality of services in the public sector in Uganda led to greater use of private providers (Andaleeb 2001). Additionally, with a disease like HIV/AIDS that has a lot of stigma, those who can afford to are likely to use private health services, which may be more convenient and provide confidentiality.

Causes of client dissatisfaction may include problems with staff reliability, limited range of services available, shortage of technical skills among staff, drug stock-outs and inadequate counseling and empathy from service providers. This may result in irregular attendance of follow up visits, poor adherence to medicine with its attendant consequences, frustration and loss of trust in the health system, dropping out of care, deterioration of one's illness and rise of drug resistant viruses.

This study was to provide more information on the clients' view points about services received in the two settings, in order to benefit both clients and service providers and also propose areas where quality of care given can be improved.

3.1 JUSTIFICATION

The study will reveal to service providers of HIV/AIDS care at these two study sites the functional quality of their services, that is, it will show the clients' views of the quality of care they are receiving. This is important because even the best technical competence is worthless if it does not satisfy clients. By understanding and documenting clients' views, providers will be more aware of what is required of them.

It will also identify which dimensions of service quality are rated worse by the clients, thus indicating areas in which the service providers have weaknesses and need to improve and those that are highly rated. This study will also identify in which areas of satisfaction the clients of the public and private facilities differ, so that the managers and staff can learn from each others' experiences.

It will contribute to policy by documenting good practices and help Kabale's policy makers to pick and apply lessons learned to ensure a successful strategy to fight HIV/AIDS and encourage patient-centered health programs. Another contribution will be towards baseline information for Kabale district regarding client satisfaction, in this case with HIV/AIDS care.

3.2 RESEARCH QUESTION

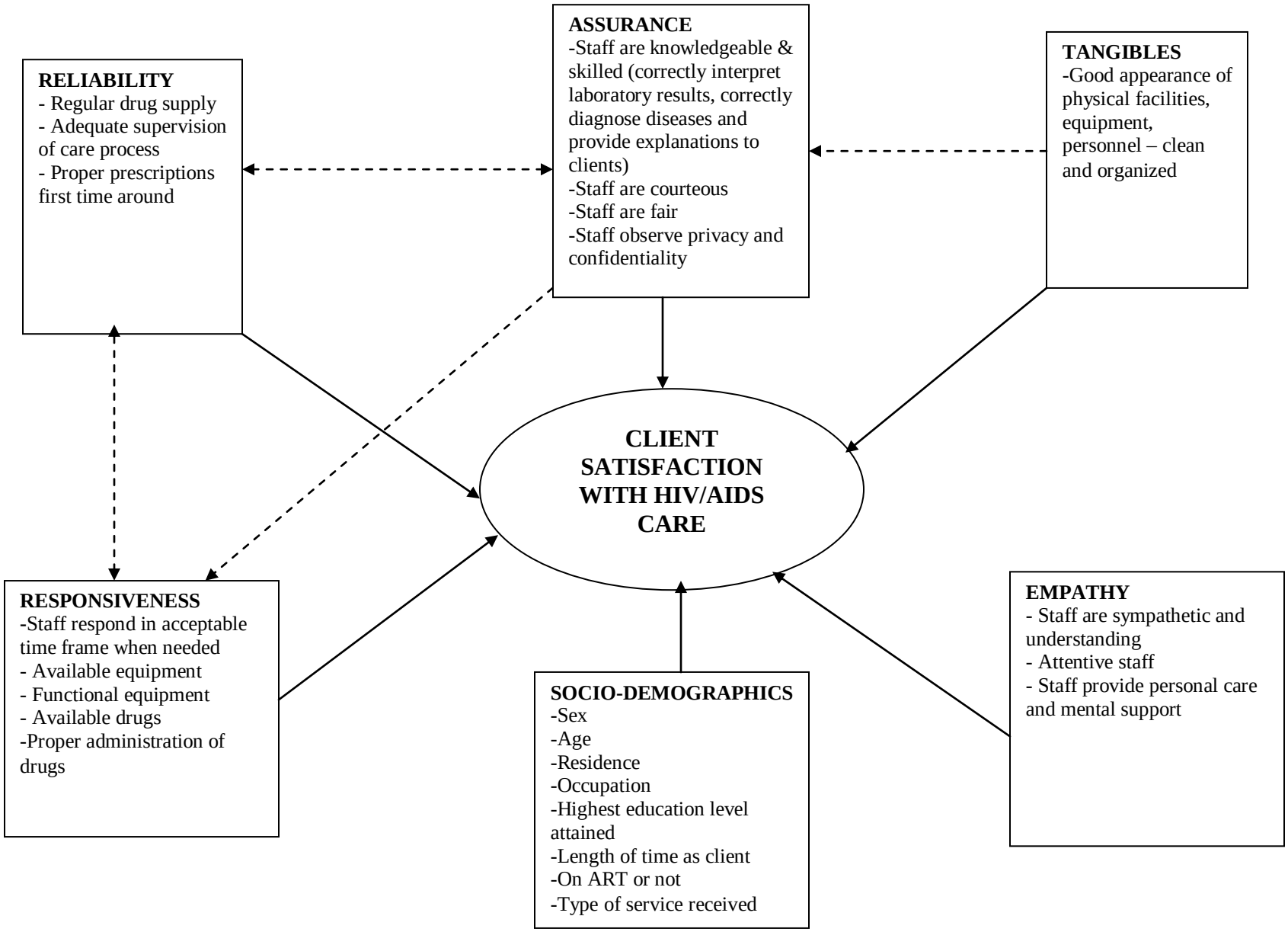
Are people in Kabale district who receive HIV/AIDS care from public health facilities more satisfied with the services than those who get care from private health facilities?

3.3 CONCEPTUAL FRAMEWORK

An adaptation of the SERVQUAL framework, established by Parasuraman et al in 1988 was used. The main dependent variable was 'Client satisfaction with HIV/AIDS care'. This was influenced by various predictors, that is, reliability of services, assurance of staff, tangibles within the health facility, staff responsiveness and empathy. These predictors influence the outcome as well as each other sometimes. For example, when a staff member makes proper prescriptions the first time (reliability) this may show that they are knowledgeable and skilled (assurance) while this knowledge is also needed before hand in order for them to make proper prescriptions.

Socio-demographics were also considered as important predictors. These included clients' sex, age, residence, occupation, highest education level, length of time as a client, whether the client was on ART or not and the type of service the client received at the health facility.

Figure 1: CONCEPTUAL FRAMEWORK: An adaptation of SERVQUAL, developed by Parasuraman et al. 1988



4.0 STUDY OBJECTIVES

4.1 General Objective

To determine whether client satisfaction with quality of HIV/AIDS care services differed between public and private health facilities in Kabale district, South Western Uganda

4.2 Specific Objectives

- To determine satisfaction amongst clients in Kabale district receiving HIV/AIDS care from private and public health facilities.
- To determine the relative importance of the different dimensions of the SERVQUAL tool in assessing satisfaction of clients receiving private or public HIV/AIDS care in Kabale district.
- To determine how socio-demographic characteristics influence client satisfaction with HIV/AIDS care in Kabale district.

5.0 METHODOLOGY

5.1 STUDY AREA

The study was conducted in Kabale district, south western Uganda. The district has a population of approximately 458,318 people, with an estimated average household size of 4.8 people. Of these, about 202,322 (44.1%) are aged at least18 years. Approximately 79,251 people (17.2%) reside within five kilometres from the health facility (UBOS 2005). The study was conducted in two health facilities – one public and the other private. The public study site was a health centre IV, a rural government health facility that has provided HIV/AIDS care since 2006.

5.2 STUDY POPULATION

The population in this study comprised clients receiving HIV/AIDS care in Kabale district. The number of people living with HIV/AIDS at all health facilities in the district is estimated to be 8,225 (District Health Officer, Kabale, 2008). The public study site had 610 clients receiving general HIV/AIDS care and 225 clients on ART. The other site was an urban private-for-profit health facility that had approximately 600 people receiving HIV/AIDS care.

5.3 STUDY DESIGN

The study was a cross-sectional survey to determine whether there are differences in satisfaction between people in Kabale district who receive HIV/AIDS care from public health facilities and those who get it from private health facilities so as to assess perceived quality of both services.

5.4 SAMPLE SIZE

Since this was a comparative study, the sample size was calculated using a suitable formula for determining the required number of respondents when working with two different populations. It involved calculating the difference between the means of two groups and the population standard deviation from the outcome. This method was preferred to that of comparing proportions because when you compare proportions, you get a smaller sample size. The necessary information had to be identified from existing literature on similar studies already done in this area, in countries whose situation was comparable to Uganda. However, no information from Uganda or Africa was readily available in the area of client satisfaction with HIV/AIDS care, comparing a public and a private health facility using SERVQUAL. Therefore to calculate the sample size, a study done in Bangladesh in 2007 by Andaleeb et al. was taken as the reference. Although that study focused on general hospital care and not HIV/AIDS care, it was chosen because it was similar in many ways to the current one, for example it was done in a developing country, comparing patient satisfaction (although this was with public, private and foreign hospitals) using SERVQUAL. The mean satisfaction with the local public hospital was 3.49 while that with the local private hospital was 3.95, giving a difference in means of 0.46. The standard deviation for the full sample was 0.89. The effect size was then calculated from the difference in means divided by the standard deviation and incorporated into the formula.

$$\text{Effect size} = \frac{\delta}{\sigma} = \frac{0.46}{0.89} = 0.5168$$

δ, the precision, is a specified difference in groups (in this case the difference in mean satisfaction between private and public hospitals)

σ is the population standard deviation from the outcome, which was satisfaction

These values were inserted into the adapted formula shown below (Friedman et al. 1998)

$$n = \frac{2(Z_{\alpha} + Z_{\beta})^2}{\text{Effect size}^2}$$

Where n = the sample size per group (assumed equal);

z_{α} = the (1- α/2) percentile of the standard normal distribution for two-sided test;
(1- α) percentile for 1-sided test;

z_{β} = the (1-β) = Power of the study

For this study, 95% confidence was used, making $Z_{\alpha} = 1.96$, while the power for the study was 90%, so $Z_{\beta} = 1.285$ (Daniel 2005). This power of 90% was important because it helped the researcher to correctly notice a difference that actually existed, thereby minimizing a type II error. When the above values were substituted into the formula,

$$n = \frac{2\ (1.96 + 1.285)^2}{0.5168^2} = 79$$

This gave a sample size of 79 participants from each facility, with a total of 158 respondents. However, there was the possibility that the difference in effect size could vary since this study was being done in a different country, so alternative sample sizes had to be calculated and one chosen. For this study, it was estimated that this difference in effect size could be 10% higher or 10% lower than 0.5168. Sample size estimates were done using different power levels as shown below.

Sample size calculations (per group)

Difference in effect size	**1-β=90%**	**1-β=80%**
0.5168	79	60
0.5684 (10% increase)	65	49
0.4651 (10% decrease)	97	73

The current study estimated that the difference in effect size was 10% lower and when power was set at 90%, the sample size for each facility was 97, with a total of 194 respondents. This needed to be adjusted for non-response, which was set at 10% (Israel 1992). This was done by the formula:

$$\frac{\text{Sample size}}{\text{1- \% of non response}} = \frac{194}{\text{1- 0.1}} = 216$$

Therefore the final total sample size was 216 respondents, with 108 from each facility.

5.5 SAMPLING PROCEDURE

The two study sites were purposively chosen because they serve many of the PLWHAs in Kabale district hence the potential for attaining the estimated sample size. Individual respondents were identified using systematic sampling, which was done by first determining the population receiving HIV/AIDS care in each facility, and then dividing this by the required sample size to get the sampling interval. This led to every 7^{th} client being interviewed in the public facility and every 5^{th} one in the private facility, with the starting point as the first client who came for care each day.

Inclusion criteria

- Clients who were receiving HIV/AIDS care at study sites, regardless of where they lived.
- Clients who were at least 18 years of age.

Exclusion criteria

- Eligible clients who were too ill to participate.

5.6 STUDY VARIABLES

5.6.1 Dependent variable

The dependent variable was "Client satisfaction with HIV/AIDS Care". It was a continuous variable measured by the SERVQUAL framework by subtracting the average expectations score from the average perceptions score to discover the average gap. The size of the gap dictated the extent to which the client was satisfied. This variable was later categorised into a binary variable, as explained in the data analysis section below.

5.6.2 Independent variables

In this study, variables considered as potential confounders or independent predictors on the outcome included reliability, tangibles, assurance, empathy and responsiveness. They were assessed as continuous variables, measured by the SERVQUAL framework using a five-point likert scale.

Other independent variables were socio-demographics, that is, sex, age, residence, occupation, highest education level, length of time as a client, being on ART or not

and the type of service received. Information on them was also collected and their influence on the dependent variable measured.

5.7 DATA COLLECTION

5.7.1 Study tools

Quantitative methods were used, in this case client exit interviews. The SERVQUAL tool (Parasuraman et al. 1988) was adapted for use in this study as a data collection tool in form of a structured questionnaire and administered by the interviewer. The questionnaire was translated back and forth into *Rukiga* (the predominant local language in Kabale district) and used as an alternative to the English one as per the respondent's choice.

The SERVQUAL tool is a multiple-item scale for measuring expectations and perceptions of consumers about service quality. It assesses five dimensions of service quality, with each addressing different items. The dimensions are:

- Tangibles: Physical facilities, equipment and appearance of personnel.
- Reliability: Ability to perform the promised service dependably and accurately.
- Responsiveness: Willingness to help customers and provide prompt service.
- Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Empathy: Caring, individualized attention the facility provides to its customers.

It has 44 items. The first 22 are intended to measure consumers expected level of service for a particular industry - in this case HIV/AIDS care (expectations). The other 22 matching items are intended to measure consumers' perceptions of the present level of service provided by a particular organization - in this case the public or private health facility (perceptions). The service quality gap is measured by subtracting average expectation scores from the average perception scores. Oliver, 1980 and da Silva et al. 1999 reveal that the extent to which the service meets or exceeds the client's expectations will dictate whether the client is likely to be satisfied (Palihawadana and Barnes 2004). For both the expectations and perceptions, statements 1-4 measure tangibles; 5-9 reliability; 10-13 responsiveness; 14-17 assurance and 18-22 empathy.

Although in the original tool half of the items are worded positively and the rest negatively (these have to be reverse coded for analysis), in this study all items were worded positively because this made it easier to understand and explain the tool and reduced on errors while using it. Also in the original tool, both sets of items were presented in seven-point likert response format, which ranged from "strongly agree" (7) to "strongly disagree" (1), with no verbal labels for points 2 to 6. However for this study, SERVQUAL was adapted to a five-point likert scale, which ranged from "strongly agree" (5) to "strongly disagree" (1) and verbal labels for all points in between, again for ease of use. The neutral point was 3, above which a person was satisfied with an item and below which they were dissatisfied.

5.7.2 Quality Assurance

Two research assistants were employed for the study. They were trained for two days to ensure that they thoroughly understood the study, the research tool and how to collect data from participants. Pre-testing was done to assess whether the questionnaire and its items were easily understood by study participants and to make any necessary changes before the main study began. This was done using ten respondents from each study site and minimal changes were made. At the end of each day, questionnaires were checked for errors and missing data in order to rectify this while still at the study site.

5.8 DATA MANAGEMENT AND ANALYSIS

5.8.1 Data Management

Data were entered using Epidata software version 3.1. The data were first checked for completeness and consistency. Before final analysis, data were cleaned and questionnaires with missing variables, information or mistakes were left out of the analysis. This resulted in exclusion of three questionnaires from the public facility data (2.7%) and six from the private facility (5.5%). Coding was also done at this stage.

5.8.2 Data analysis

General methods

Statistical analyses were done using Stata SE software version 8.2. Comparisons between continuous variables were done using t-tests while chi-square tests were used for binary variables and chi-square trend tests for categorical variables with more than two groups. Before bivariate and multivariable analyses could be done, the dependent

variable – client satisfaction (measured as a gap score) and which ranged from -1.68 to 1.54 was categorized into a binary variable with two groups. All those with negative gap scores were put into one group of "not satisfied respondents" (this group was coded as 0). Respondents who had a gap score of 0 and above were also grouped together as "satisfied" (this was coded as 1). The cut-off points for these groups were chosen basing on the fact that respondents whose perception scores were higher than or equal to their expectation scores did not express any negativity in the services they received. Their expectations were fulfilled, so they qualified to be grouped together. Those with perception scores lower than expectation scores were not satisfied so they were categorised together.

Since the outcome variable was binary, simple and multiple logistic regression models were used to assess bivariate and multivariable associations respectively. Variables found statistically significant at a p-value of 0.1 in bivariate analyses and those deemed to be biologically important predictors of the outcome were selected for inclusion in the multivariable logistic regression models. Using this approach, sex, occupation, highest education level, type of service received and age were included in multivariable regression.

Analysis per objective

<u>Objective 1:</u>

- Respondents' baseline characteristics were described by calculating frequencies, percentages, means and medians.

- At the univariate analysis level, differences in distribution of respondents' characteristics between the public and private facilities were analysed. Statistical significance was measured with an alpha of 5% ($p<0.05$).
- The total perception scores for all respondents were calculated and then divided by 22, which was the number of items in the questionnaire, in order to get an average. Therefore, the average score could range from 1 to 5. This was done for each item and for each health facility. The same was done for the expectation scores. Client satisfaction was then calculated by subtracting average expectation scores from average perception scores for each client interviewed to get a service quality gap score and then calculating the mean for each health facility (mean scores analysis). Negative figures showed that clients experienced dissatisfaction, while gap scores equal to or above zero were positive, showing satisfaction.
- T-tests were used to check whether the difference between the means of the two facilities was significant. When the mean scores were compared by group using the variance ratio test, the variances for the t-test were found unequal, thus the use of the unequal variance option for the t-test. Statistical significance was measured with an alpha of 5% ($p<0.05$).
- At the end of the questionnaire there was a single question asking about overall satisfaction, but this was not part of SERVQUAL. The percentage of people reporting overall satisfaction was calculated and compared to the information collected by SERVQUAL.

Objective 2:

- Expectations and perceptions were categorized into the five service dimensions of SERVQUAL.
- Quality along each of the five dimensions was assessed by averaging the difference scores on items making up the dimensions for each facility (mean scores analysis). This showed the effect of each dimension and each item on client satisfaction.
- Paired t-tests were done to establish whether the gap between expectation and perception scores was different overall, within the dimensions and by comparing items ($p<0.05$).

Objective 3:

- Bivariate analysis was done to evaluate the associations between the outcome variable (client satisfaction) and each socio-demographic characteristic. The alpha of 10% ($p<0.1$) was used in order to have less restriction for variables that would be used at the multivariable level. 95% confidence intervals were used at this stage. Because all independent variables were categorical they were broken down into dummy variables, to ensure that the different categories were analysed separately. This was in order to avoid missing out on important information since some of the categories could be statistically significant even if the variable when taken as one might not be.
- Multiple logistic regression gave results as odds ratios. With the clinic type (public or private) as the main exposure, logical model building was done by looking at how odds ratios of the main exposure changed as other variables

were included in the model. For these analyses, statistical significance was determined by an alpha of 5% ($p<0.05$) and 95% confidence intervals.

- Confounding was checked for by observing whether variables included in the model caused a change in the odds ratio of the main exposure by at least 10%. Another method was by checking whether a variable that was insignificant at the bivariate stage became significant at the multivariable level.
- The Pearson goodness-of-fit test was performed on the logistic model for satisfaction, to assess how good the model constructed was.

5.9 ETHICAL CONSIDERATIONS

The study was approved by the Higher Degrees, Research and Ethics Committee at Makerere University School of Public Health on behalf of the Uganda National Council for Science and Technology. Further approval was got from the Kabale District Health Officer and from the directors of the study sites and finally written informed consent from participants themselves. The study involved minimal risks and privacy was ensured by carrying out interviews in an area separate from where the other clients were waiting for services. Confidentiality of data was kept by using identification numbers rather than names and limiting access to the data. The actual names of the study sites have been left out in order to avoid creating suspicion about the quality of care provided.

6.0 RESULTS

6.1 DESCRIPTIVE ANALYSIS

The baseline characteristics of the respondents are shown in Table 1. The final number used in the analysis was 207 respondents, of which 105 (50.7%) were from the public health facility and 102 (49.2%) were from the private one. Almost three quarters (71.9%) of the respondents were females. The majority of the respondents totalling 176 (85.0%) were employed as farmers. The ages were categorized into intervals of ten in order to identify any differences within the groups. Respondents' ages ranged from 18 to 65 years, with a mean age of 40.5 (SD 9.3). Concerning the education status, there were 115 people (55.5%) whose highest education level was primary school.

The average length of time that the respondents had spent receiving HIV/AIDS care was 38 months (SD 30.3). Most of them (76.8%) had spent between one and five years receiving HIV/AIDS care. However, some of the respondents (11.5%) had spent more than five years getting it, so they may have previously been clients at other clinics since these study sites have not been providing HIV/AIDS care that long. In addition, 158 respondents (76.3%) who took part in the study were receiving ARVs. The service received by most study participants on the interview days was ARVs, as shown by the fact that 91 of them (43.9%) had come to pick up only ARVs.

Over half of the respondents (60.8%) were living within Kabale district, made up of the counties of Rubanda, Rukiga, Ndorwa and the Municipality. The other category had respondents whose residences were not readily identifiable as being in the Kabale counties and those residing outside Kabale (Kisoro and Mbarara districts).

Table 1: Baseline characteristics of respondents (n=207)

Characteristic	Number(N)	Percentage(%)
Clinic type		
Public	105	50.7
Private	102	49.2
Sex		
Male	58	28.0
Female	149	71.9
Age		
18-28	21	10.1
29-39	76	36.7
40-50	87	42.0
51 and above	23	11.1
Occupation		
Farmer	176	85.0
Professional	15	7.2
Other	16	7.7
Highest education level		
No education	70	33.8
Primary	115	55.5
Secondary or more	22	10.6
Length of time as a client		
Less than one year	24	11.5
One to five years	159	76.8
More than five years	24	11.5
On ART or not		
No	49	23.6
Yes	158	76.3
Service received		
ARVs only	91	43.9
Septrin only	45	21.7
ARVs and septrin	22	10.6
Other	49	23.6
Residence		
Kabale district	126	60.8
Other	81	39.1

6.2 COMPARING THE TWO FACILITIES

The response rate was 96% at the public facility and 97% at the private one. There were statistically significant differences between respondents of the public and private health facilities with regard to age, as shown by the p-value of 0.014. The age of respondents in the public health facility was lower, with a range of 18 to 65 years and an average of 38.2 (SD 9.5). In comparison, the age in the private health care facility ranged from 24 to 64 years, with 42.9 as the average (SD 8.4). This may cause differences in client satisfaction between the two facilities.

A statistically significant difference was also noted when looking at the type of service received, with a p-value of 0.000. A slightly higher number of respondents had come for ARVs only at the public health facility compared to the private one (45.7% and 42.1% respectively). A higher number (32.3%) had also come to the public facility for cotrimoxazole only compared to 10.7% at the private health facility. However, the private health facility had a higher percentage of respondents (37.2%) that came for 'other' services compared to 10.4% in the private health facility. The other services included health education, treatment, CD4 testing and getting both ARVs and counselling. This could be due to the fact that some of the private health facility's respondents were interviewed on days when there were outreaches, which included a lot of heath education that specifically attracted people. This may also cause differences in client satisfaction between the two facilities.

In addition, a statistically significant difference was seen when looking at the place of residence, with a p-value of 0.002. A larger percentage (71.5%) of the respondents from the private health facility was residing in Kabale as compared to the public

health facility (50.4%). However, this may be explained by the fact that many of the respondents whose residences could not be identified were from the public health facility, which led to the differences.

There were no statistically significant differences between clients at the two health facilities when compared in terms of sex, occupation, highest education level, length of time as a client and whether respondents were on ART or not.

Table 2: Univariate analysis comparing the two facilities (n=207: Public=105, Private=102)

	Public	Private	P-value
Variable	**Number(%)**	**Number(%)**	
Sex			
Male	33 (31.4)	25 (24.5)	0.268
Female	72 (68.5)	77 (75.4)	
Age			
18-28	16 (15.2)	5 (4.9)	0.014*
29-39	42 (40.0)	34 (33.3)	
40-50	40 (38.1)	47 (46.0)	
51 and above	7 (6.6)	16 (15.6)	
Occupation			
Farmer	90 (85.7)	86 (84.3)	0.638
Professional	6 (5.7)	9 (8.82)	
Other	9 (8.5)	7 (6.86)	
Highest education level			
No education	35 (33.3)	35 (34.3)	0.574
Primary	61 (58.1)	54 (52.9)	
Secondary or more	9 (8.5)	13 (12.7)	
Length of time as a client			
Less than one year	13 (12.3)	11 (10.7)	0.080
One to five years	85 (80.9)	74 (72.5)	
More than five years	7 (6.6)	17 (16.6)	
On ART or not			
No	22(20.9)	27(26.4)	0.350
Yes	83(79.0)	75(73.5)	
Service received			
ARVs only	48 (45.7)	43 (42.1)	0.000*
Septrin only	34 (32.3)	11 (10.7)	
ARVs and septrin	12 (11.4)	10 (9.8)	
Other	11 (10.4)	38 (37.2)	
Residence			
Kabale	53 (50.4)	73 (71.5)	0.002*
Other	52 (49.5)	29 (28.4)	

*p<0.05

6.3 DETERMINING CLIENT SATISFACTION

Table 3 shows client satisfaction as determined by the SERVQUAL tool and outlines the clients' expectations, perceptions and service quality gaps for both health facilities and overall.

Expectations

Overall, the highest expectation was 4.97 for 'well dressed employees', lowest was 4.87 for 'clients get individual attention' and the average was 4.93. Respondents at the public health facility had higher expectations about how HIV/AIDS services should be delivered, with many items getting a five, the highest score. Their average was 4.98, with their lowest as 4.94 for the item 'employees well supported to work'. For the private health facility, the highest was 4.95 for 'accurate records', lowest was 4.78 for 'have clients' interests at heart' and an average of 4.88.

Perceptions

Overall, the highest perceptions score was 4.98 for 'say exactly when services will be done' lowest was 4.4 for 'up-to-date equipment' and the average was 4.86. The public health facility's respondents had lower perceptions of service delivery compared to the private ones for items 'up-to-date equipment; facilities keep promises; provide services at promised time; employees always willing to help and employees well supported to work', but higher for the other 17 items. Their highest was 5 again for items 'sympathetic and reassuring; say exactly when services will be done; clients feel safe with employees and employees give personal attention'. Their lowest was 4.2 for 'up-to-date equipment' and an average of 4.88. For the private health facility, the highest was 4.97 for 'say exactly when services will be done' and 'employees always

willing to help'. The lowest was 4.60 for 'up-to-date equipment' and the average was 4.84, lower than that of the public one.

Service quality gaps

The overall satisfaction score was -0.06, showing that respondents were dissatisfied with services received. However, although both had a negative SERVQUAL score, those at the public health facility were even less satisfied than respondents at the private one (-0.09 compared to -0.03 respectively). It is to be noted that in most cases the public health facility's clients had higher perceptions of services than the private ones, which on its own would have implied more satisfaction, but because they also had higher expectations, they ended up with a lower gap score. This fits in with the disconfirmation theory, which posits that the higher one's expectations are, the harder it will be for the service to meet them, thus less satisfaction or negative disconfirmation.

Overall, gap scores were positive for nine items, thus satisfaction on the respondents' part. These were the items 'sympathetic and reassuring; say exact time for services; prompt service from employees; employees always willing to help; clients trust employees; clients feel safe with employees; polite employees; clients get individual attention and employees give personal attention (this had the highest score at 0.04)'. The rest were negative, with the biggest gap / dissatisfaction for 'up-to-date equipment' at -0.54 and the smallest negative gap at -0.03 for 'well dressed employees; facilities match services; accurate records and prompt response to clients requests'.

When the two health facilities were compared, the private one had more positive SERVQUAL scores for the items than the public facility did (nine and five respectively), further showing that the private health facility's clients were more satisfied. Both of them had positive scores for 'sympathetic and reassuring; say exactly when services will be done; clients feel safe with employees and clients get individual attention'. For the private health facility, other positive scores were for 'prompt services from employees; employees always willing to help; clients trust employees; polite employees and convenient operating hours'. The other positive score for the public one was on the item 'employees give personal attention'.

The highest positive score at the private health facility was 0.08 for 'employees always willing to help', while respondents at the public one scored highest with 0.11 for 'employees give personal attention' In both health facilities, respondents were most dissatisfied with 'up-to-date equipment' which had a gap score of -0.76 for the public facility and -0.33 for the private one.

Table 3: Client satisfaction with HIV/AIDS services

STATEMENT	PUBLIC			PRIVATE			OVERALL		
	P	E	*P - E*	P	E	*P - E*	P	E	*P - E*
1.Up-to-date equipment	4.20	4.96	***-0.76***	4.60	4.93	***-0.33***	4.40	4.94	***-0.54***
2.Visually appealing facilities	4.93	4.99	***-0.06***	4.85	4.90	***-0.05***	4.89	4.94	***-0.05***
3.Well dressed employees	4.98	5.00	***-0.02***	4.90	4.94	***-0.04***	4.94	4.97	***-0.03***
4.Facilities match services	4.97	5.00	***-0.03***	4.85	4.89	***-0.04***	4.91	4.94	***-0.03***
5.Facilities keep promises	4.76	5.00	***-0.24***	4.78	4.92	***-0.14***	4.77	4.96	***-0.19***
6.Sympathetic and reassuring	5.00	5.00	0.00	4.92	4.90	0.02	4.96	4.95	0.01
7.Dependable	4.94	5.00	***-0.06***	4.91	4.92	***-0.01***	4.92	4.96	***-0.04***
8.Provide services at promised time	4.82	5.00	***-0.18***	4.88	4.93	***-0.05***	4.85	4.96	***-0.11***
9.Accurate records	4.95	4.97	***-0.02***	4.92	4.95	***-0.03***	4.93	4.96	***-0.03***
10.Say exactly when services will be done	5.00	5.00	0.00	4.97	4.91	0.06	4.98	4.95	0.03
11.Prompt services from employees	4.95	4.96	***-0.01***	4.89	4.88	0.01	4.92	4.92	0.00
12.Employees always willing to help	4.92	5.00	***-0.08***	4.97	4.89	0.08	4.94	4.94	0.00
13.Prompt response to clients requests	4.96	5.00	***-0.04***	4.86	4.89	***-0.03***	4.91	4.94	***-0.03***
14.Clients trust employees	4.99	5.00	***-0.01***	4.91	4.88	0.03	4.95	4.94	0.01
15.Clients feel safe with employees	5.00	5.00	0.00	4.94	4.88	0.06	4.97	4.94	0.03
16.Polite employees	4.96	4.99	***-0.03***	4.92	4.86	0.06	4.94	4.92	0.02
17.Employees well supported to work	4.66	4.94	***-0.28***	4.76	4.87	***-0.11***	4.71	4.90	***-0.19***
18.Clients get individual attention	4.96	4.96	0.00	4.80	4.79	0.01	4.88	4.87	0.01
19.Employees give personal attention	5.00	4.89	0.11	4.86	4.89	***-0.03***	4.93	4.89	0.04
20.Employees know clients' needs	4.80	4.96	***-0.16***	4.68	4.88	***-0.20***	4.74	4.92	***-0.18***
21.Have clients' interests at heart	4.83	5.00	***-0.17***	4.63	4.78	***-0.15***	4.73	4.89	***-0.16***
22.Convenient operating hours	4.85	5.00	***-0.15***	4.83	4.81	0.02	4.84	4.90	***-0.06***
Totals	*107.46*	*109.63*	*-2.18*	*106.67*	*107.54*	*-0.86*	*107.04*	*108.52*	*-1.48*
Average	*4.88*	*4.98*	***-0.09***	*4.84*	*4.88*	***-0.03***	*4.86*	*4.93*	***-0.06***

Figures in bold indicate negative P-E gaps, thus service quality gaps

The variance ratio test to establish whether the means of the two facilities' gap scores were significantly different showed that the variances differed (p was significant at 0.000), so a t-test for unequal variances was done. The difference in means was -0.05, with a 95% confidence interval of -0.14 to 0.02 and a p-value of 0.1760, which was not statistically significant (not shown). There was therefore no evidence that the two sets of respondents differed significantly in their average gap scores.

Table 4 shows client satisfaction with the different dimensions of the SERVQUAL tool. The dimensions were also divided according to total perceptions, total expectations, the service gaps, average perceptions, average expectations and average service gaps.

Tangibles

Overall, perceptions were rated at 4.78, expectations at 4.95 and -0.16 was the service gap. This dimension had the largest service gaps for either facility as well as overall, indicating that respondents were the least satisfied with it. At the public health facility, average perceptions and expectations for this dimension were at 4.77 and 4.98 respectively, with a service gap of -0.21. Respondents at the private one had an average of 4.80 for perceptions, 4.91 for expectations and a service gap of -0.11.

Reliability

Overall scores were 4.89, 4.96 and -0.06 for average perceptions, expectations and gap score respectively. Again, this showed dissatisfaction on all fronts. Average perceptions for reliability at the public health facility were 4.89, with expectations at 4.99 and a service gap of -0.09. At the private one, respondents' average perceptions were at 4.88, expectations at 4.92 and -0.04 as the gap score.

Responsiveness

Overall, the average perceptions and expectations had the same score of 4.94, leading to a service gap of 0. This dimension was the only one with two sets of positive scores and the only one where overall, respondents were satisfied with services received. The scores for this were 4.95, 4.99 and -0.03 respectively for average perceptions, expectations and the service gap at the public health facility. Conversely, at the private one perceptions were higher than the expectations (4.92 compared to 4.89), resulting in a positive service gap of 0.02. Their respondents were therefore satisfied with responsiveness.

Assurance

Overall there was a negative gap score (-0.03), as a result of perceptions being at 4.89 and expectations at 4.92. Nonetheless, this was the lowest of the negative scores in comparison to other dimensions. At the public health facility, average perceptions for assurance were at 4.90, expectations at 4.98 and a gap score of -0.07. Once again, respondents at the private health facility had their average perceptions higher than their expectations (4.88 and 4.87), thus a positive service gap of 0.01, indicating satisfaction with this dimension.

Empathy

Again, respondents showed that they were not satisfied with this dimension of HIV/AIDS care. Overall, they expressed dissatisfaction with this dimension as shown by the gap score of -0.06 (perceptions 4.82 and expectations 4.89). The same negative gap score as the one for assurance was realised at the public health facility (-0.07), although the perceptions and expectations differed at 4.89 and 4.96 respectively. At the private health facility, perceptions were rated 4.76 and expectations 4.83 leading to a gap score of -0.06.

Table 4: Client satisfaction with the various dimensions of SERVQUAL

STATEMENT	PUBLIC			PRIVATE			OVERALL		
	P	E	*P - E*	P	E	*P - E*	P	E	*P - E*
TANGIBLES									
1.Up-to-date equipment	4.20	4.96	***-0.76***	4.60	4.93	***-0.33***	4.40	4.94	***-0.54***
2.Visually appealing facilities	4.93	4.99	***-0.06***	4.85	4.90	***-0.05***	4.89	4.94	***-0.05***
3.Well dressed employees	4.98	5.00	***-0.02***	4.90	4.94	***-0.04***	4.94	4.97	***-0.02***
4.Facilities match services	4.97	5.00	***-0.03***	4.85	4.89	***-0.04***	4.91	4.94	***-0.03***
Totals	*19.09*	*19.95*	*-0.85*	*19.21*	*19.67*	*-0.45*	*19.15*	*19.81*	*-0.65*
Average	*4.77*	*4.98*	***-0.21***	*4.80*	*4.91*	***-0.11***	*4.78*	*4.95*	***-0.16***
RELIABILITY									
5.Facilities keep promises	4.76	5.00	***-0.24***	4.78	4.92	***-0.14***	4.77	4.96	***-0.18***
6.Sympathetic and reassuring	5.00	5.00	0.00	4.92	4.90	0.02	4.96	4.95	0.01
7.Dependable	4.94	5.00	***-0.06***	4.91	4.92	***-0.01***	4.92	4.96	***-0.03***
8.Provide services at promised time	4.82	5.00	***-0.18***	4.88	4.93	***-0.05***	4.85	4.96	***-0.11***
9.Accurate records	4.95	4.97	***-0.02***	4.92	4.95	***-0.03***	4.93	4.96	***-0.03***
Totals	*24.48*	*24.97*	*-0.48*	*24.42*	*24.62*	*-0.20*	*24.45*	*24.80*	*-0.34*
Average	*4.89*	*4.99*	***-0.09***	*4.88*	*4.92*	***-0.04***	*4.89*	*4.96*	***-0.06***
RESPONSIVENESS									
10.Say exactly when services will be done	5.00	5.00	0.00	4.97	4.91	0.06	4.98	4.95	0.03
11.Prompt services from employees	4.95	4.96	***-0.01***	4.89	4.88	0.01	4.92	4.92	0.00
12.Employees always willing to help	4.92	5.00	***-0.08***	4.97	4.89	0.08	4.94	4.94	0.00
13.Prompt response to clients requests	4.96	5.00	***-0.04***	4.86	4.89	***-0.03***	4.91	4.94	***-0.03***
Totals	*19.83*	*19.96*	*-0.12*	*19.69*	*19.57*	*0.11*	*19.76*	*19.77*	*0.00*
Average	*4.95*	*4.99*	***-0.03***	*4.92*	*4.89*	*0.02*	*4.94*	*4.94*	*0.00*

Table 4: Continued

	PUBLIC			PRIVATE			OVERALL		
	P	**E**	***P - E***	**P**	**E**	***P - E***	**P**	**E**	***P - E***
ASSURANCE									
14.Clients trust employees	4.99	5.00	***-0.01***	4.91	4.88	0.03	4.95	4.94	0.01
15.Clients feel safe with employees	5.00	5.00	0.00	4.94	4.88	0.06	4.97	4.94	0.03
16.Polite employees	4.96	4.99	***-0.03***	4.92	4.86	0.06	4.94	4.92	0.02
17.Employees well supported to work	4.66	4.94	***-0.28***	4.76	4.87	***-0.11***	4.71	4.90	***-0.19***
Totals	*19.61*	*19.93*	*-0.31*	*19.53*	*19.50*	*0.03*	*19.57*	*19.71*	*-0.14*
Average	*4.90*	*4.98*	***-0.07***	*4.88*	*4.87*	*0.01*	*4.89*	*4.92*	***-0.03***
EMPATHY									
18.Clients get individual attention	4.96	4.96	0.00	4.80	4.79	0.01	4.88	4.87	0.01
19.Employees give personal attention	5.00	4.89	0.11	4.86	4.89	***-0.03***	4.93	4.89	0.04
20.Employees know clients' needs	4.80	4.96	***-0.16***	4.68	4.88	***-0.20***	4.74	4.92	***-0.18***
21.Have clients' interests at heart	4.83	5.00	***-0.17***	4.63	4.78	***-0.15***	4.73	4.89	***-0.16***
22.Convenient operating hours	4.85	5.00	***-0.15***	4.83	4.81	0.02	4.84	4.90	***-0.06***
Totals	*24.46*	*24.81*	*-0.35*	*23.82*	*24.16*	*-0.34*	*24.14*	*24.49*	*-0.34*
Average	*4.89*	*4.96*	***-0.07***	*4.76*	*4.83*	***-0.06***	*4.82*	*4.89*	***-0.06***
Totals	*107.46*	*109.63*	*-2.18*	*106.67*	*107.54*	*-0.86*	*107.04*	*108.52*	*-1.48*
Average	*4.88*	*4.98*	***-0.09***	*4.84*	*4.88*	***-0.03***	*4.86*	*4.93*	***-0.06***

6.4 PAIRED T-TESTS

In order to find out whether the gaps between average perception and expectation scores for the dimensions were significantly different, paired t-tests were done, as shown in Table 5. Statistical significance was determined at $p<0.05$.

Table 5: Paired t-tests for SERVQUAL dimensions

DIMENSIONS	PERCEPTIONS	EXPECTATIONS	SERVICE GAPS	PAIRED T-TEST	
				t	P-value
Tangibles	4.78	4.95	-0.16	-5.64	**0.0000**
Reliability	4.89	4.96	-0.06	-2.66	**0.0084**
Responsiveness	4.94	4.94	0.00	-0.06	0.9506
Assurance	4.89	4.92	-0.03	-1.25	0.2116
Empathy	4.82	4.89	-0.06	-1.75	0.0807
Total	*4.86*	*4.93*	*-0.06*	*-3.17*	***0.0017***

The p-values in bold show where statistically significant differences were found for the gap between average perceptions and average expectations. This was only realised for the two dimensions of tangibles and reliability. In addition, the overall gap difference was also found to be statistically significant.

The same thing was done for the gap differences of individual items, as shown in Table 6. Statistically significant gap differences ($p<0.05$) were found for items 'up-to-date equipment; facilities keep promises; provide services at promised time; employees well supported to work; employees know clients needs and employees have clients interests at heart'. None of the positive gap differences was found to be statistically significant.

Table 6: Paired t-tests for items

DIMENSIONS	PERCEPTIONS	EXPECTATIONS	SERVICE GAPS	PAIRED T-TEST	
				t	P
TANGIBLES					
1.Up-to-date equipment	4.40	4.94	***-0.54***	-6.66	**0.0000**
2.Visually appealing facilities	4.89	4.94	***-0.05***	-1.72	0.0858
3.Well dressed employees	4.94	4.97	***-0.02***	-1.17	0.2402
4.Facilities match services	4.91	4.94	***-0.03***	-0.98	0.3282
RELIABILITY					
5.Facilities keep promises	4.77	4.96	***-0.18***	-3.20	**0.0015**
6.Sympathetic and reassuring	4.96	4.95	0.01	0.37	0.7064
7.Dependable	4.92	4.96	***-0.03***	-1.15	0.2508
8.Provide services at promised time	4.85	4.96	***-0.11***	-2.33	**0.0204**
9.Accurate records	4.93	4.96	***-0.03***	-1.04	0.2983
RESPONSIVENESS					
10.Say exactly when services will be done	4.98	4.95	0.03	1.90	0.0576
11.Prompt services from employees	4.92	4.92	0.00	0.00	1.0000
12.Employees always willing to help	4.94	4.94	0.00	0.00	1.0000
13.Prompt response to clients requests	4.91	4.94	***-0.03***	-0.94	0.3465
ASSURANCE					
14.Clients trust employees	4.95	4.94	0.01	0.31	0.7527
15.Clients feel safe with employees	4.97	4.94	0.02	1.28	0.2016
16.Polite employees	4.94	4.92	0.02	0.41	0.6813
17.Employees well supported to work	4.71	4.90	***-0.19***	-3.02	**0.0028**
EMPATHY					
18.Clients get individual attention	4.88	4.87	0.01	0.10	0.9177
19.Employees give personal attention	4.93	4.89	0.04	0.91	0.3601
20.Employees know clients' needs	4.74	4.92	***-0.18***	-2.62	**0.0094**
21.Have clients' interests at heart	4.73	4.89	***-0.16***	-2.03	**0.0435**
22.Convenient operating hours	4.84	4.90	***-0.06***	-1.09	0.2747

6.5 OVERALL SATISFACTION

At the end of the questionnaire, there was a question asking about overall satisfaction. This question was not on a likert scale like the others. It was phrased as 'overall, are you satisfied with the services at this facility? Yes/No'. Respondents who were not satisfied were asked for their reasons why.

In the public health facility, all 105 respondents said that they were satisfied with the services they had received. However, they did give reasons for being a little dissatisfied, including spending four weeks without drugs; lack of food and yet some other hospitals occasionally give rations; drugs weakening them at times; being asked to buy drugs sometimes; unavailability of some machines for example for checking the chest and remaining a bit sick despite the treatment. At the private health facility, only two respondents out of 102 reported that they were not satisfied. For one, this was because sometimes there were no drugs and the other said it was due to the lack of improvement in their condition. The rest were satisfied with the services in general, although they also said that occasionally there was no septrin and they lacked some basic needs.

When client satisfaction was converted into a binary variable, analysis showed that in the public health facility about 58% of respondents were satisfied while about 41% were not. In the private facility, about 64% were satisfied and just over 35% were not, meaning that they had a larger number of satisfied respondents than the public facility did. However, the chi square test gave a chi square of 0.95 and a p-value of 0.329, which showed that there was no statistically significant difference in client satisfaction between respondents at the two facilities ($p>0.05$). This further confirmed the results from the earlier t-tests that assessed for a difference in mean scores between the two health facilities. Overall,

the unsatisfied respondents were 80 in number, which was 38.6% of the total sample. The satisfied respondents were 127, accounting for the other 61.4% (not shown).

6.6 BIVARIATE ANALYSIS

Simple logistic regression between the main exposure, which was the type of clinic (either public or private), and the dependent variable gave an odds ratio of 1.32 (95% CI 0.75 to 2.31), but this association was not statistically significant, as shown by the p-value of 0.329 ($p>0.1$).

Sex was found to have a statistically significant association with client satisfaction. With an odds ratio of 2.58 (95% CI 1.39 to 4.81) and a p-value of 0.003, it showed that the odds of women respondents being satisfied with HIV/AIDS care were two and a half times higher than that of men being satisfied.

Under occupation, one of the dummy variables, that is, 'others' had a statistically significant association with client satisfaction. This category comprised businesspeople, artisans, housewives and the unemployed. The odds ratio was 0.34 (95% CI 0.11 to 0.98) and the p-value was 0.047. This meant that the odds of people in that category being satisfied with HIV/AIDS care were 66% lower than that of farmers, which was the reference category.

In addition, for the variable 'highest education level', one of the dummies showed statistical significance. This was the group of respondents with secondary education and/or higher. With an odds ratio of 0.38 (95% CI 0.14 to 1.01) and a p-value of 0.054, it showed that compared to respondents who had never gone to school, the odds of

satisfaction with HIV/AIDS care among respondents who had secondary education and/or higher were 62% lower.

Finally, a statistically significant association was realised between client satisfaction and one of the categories under the type of service received. This was the group of respondents who received both ARVs and Septrin, with an odds ratio of 0.43 (95% CI 0.16 to 1.10) and a p-value of 0.080. Therefore the odds of satisfaction with HIV/AIDS care among this group were 57% lower than the odds of satisfaction among those who got only ARVs, the reference category.

There was no statistically significant association between client satisfaction and the other socio-demographics, that is, age, length of time as a client, whether a client was on ART or not and residence.

6.7 MULTIVARIABLE ANALYSIS

The main exposure (type of clinic – public or private) was the first independent variable to be entered into the model after client satisfaction, the dependent variable. Sex was then entered. Although it reduced the odds ratio of the main exposure from 1.32 to 1.25, this was still not statistically significant. However, sex itself remained statistically significant (p=0.003). Occupation had no major effect on the odds ratio of the main exposure and the category under occupation (others) that was statistically significant at bivariate level now achieved borderline statistical significance (OR 0.34; 95% CI 0.11 to 0.99; p=0.050). While education increased the odds ratio of the main exposure to 1.36, this still was not statistically significant. Nonetheless, the category under education that was significant at bivariate level (secondary education and higher) remained so, with an odds ratio of 0.36

(95% CI 0.13 to 0.98) and a p-value of 0.047. In the case of the service received, all categories under it became insignificant. Although it reduced the odds ratio of the main exposure from 1.32 to 1.29, this still remained statistically insignificant. When all these variables were put into a model together, sex remained statistically significant (p=0.010), while one category under service received that had been significant at bivariate level (both ARVs and Septrin) became significant again (p=0.045). The main exposure, occupation and education were not statistically significant.

When age was included in the model with the main exposure only, it increased the odds ratio of the main exposure to 1.43, an increase of more than 10%, but this was still not statistically significant (p-value 0.225). This showed that age may be a confounder. The other variables, which were insignificant at bivariate level remained so when included into the model with the main exposure only one at a time.

Another model was constructed that included the clinic type, sex, education, the service received, occupation and age. Only sex and having received both ARVs and Septrin remained statistically significant. Therefore the final model had the dependent variable and main exposure, while adjusting for sex, the type of service received and age, as shown in Table 7.

The model shows that there was no statistically significant difference in client satisfaction with HIV/AIDS care between respondents who went to the public or private facilities in Kabale district (p=0.5000). However, the odds of women respondents being satisfied with HIV/AIDS care were over two and a half times higher than that of men being satisfied, which was statistically significant (OR 2.56; 95% CI 1.33 to 4.95, p=0.005). Under the

type of service received, the odds of satisfaction with HIV/AIDS care among respondents who received both ARVs and Septrin were 64 % lower than odds of satisfaction among those who got only ARVs (OR 0.36; 95% CI 0.13 to 0.98, p=0.046). Although none of the categories under age were statistically significant, the variable was included in the model due to being a possible confounder and a biologically plausible predictor of client satisfaction.

The Pearson test for goodness-of-fit of the model gave a p-value of 0.4400, which shows the model is good because p>0.05 and the low chi square value of 37.64. The log likelihood of -130.4 further proves this.

Table 7: Multivariable model showing factors affecting client satisfaction

Independent Variables	Unadjusted OR(95% CI)	P-Value	Adjusted OR(95% CI)	P-Value
Clinic type				
Public (ref)	1		1	
Private	1.32 (0.75-2.31)	0.329	1.24 (0.65-2.36)	0.5000
Sex				
Male (ref)	1		1	
Female	2.58 (1.39-4.81)	0.003*	2.56 (1.33-4.95)	0.005**
Service received				
ARVs only	1		1	
Septrin only	0.70 (0.33-1.47)	0.354	0.63 (0.28-1.40)	0.262
ARVs and septrin	0.43 (0.16-1.10)	0.080*	0.36 (0.13-0.98)	0.046*
Other	0.88 (0.43-1.83)	0.752	0.78 (0.36-1.70)	0.543
Age				
18-28	1		1	
29-39	0.42 (0.14-1.29)	0.133	0.52 (0.16-1.67)	0.279
40-50	0.48 (0.16-1.45)	0.197	0.59 (0.19-1.88)	0.382
51 and above	0.48 (0.13-1.79)	0.280	0.57 (0.14-2.37)	0.446

* $p<0.05$, $p<0.01$

7.0 DISCUSSION

Preliminary results showed that respondents of the private health facility were more satisfied than those of the public health facility. This is similar to a study looking at quality of STD care by private practitioners in Uganda, which reported that participants were happy with private clinics because of long opening hours, unlike the public ones (Walker et al. 2001). This may be because in the current study, the private facility had a positive gap score for 'convenient opening hours', while the public facility scored negatively. This also agrees with results of a study assessing patient satisfaction with health services in Bangladesh using a modified SERVQUAL tool (Andaleeb et al. 2007).

However, this difference was not statistically significant. Overall, clients of both facilities were not satisfied with services, as shown by the mean scores analyses. To my knowledge, no published literature is readily available about studies assessing client satisfaction with HIV/AIDS care in a public and private facility using SERVQUAL, with which this study can be compared. They may have been done in-house by health facilities, but their results are not available in the public domain. Nevertheless, these findings agree with a study done in Vietnam, which reported that patient satisfaction was similar between clients of the public and private health facilities (Tuan et al. 2005). But the current study disagrees with one done in Uganda, where users of private health facilities expressed higher levels of satisfaction with all dimensions than those in government ones (Jitta et al. 2008).

When overall satisfaction was assessed by creating a binary variable, although many respondents were satisfied, over one third were not (38.6% - 80 respondents). This is a large number of people who are not satisfied, especially since they are repeat clients who visit the facility often and are on medication for the rest of their lifetime. A similar trend was observed in a study done in Ethiopia, evaluating the quality of HIV/AIDS clinical care in a referral hospital. Although 78% of patients expressed satisfaction, the other 22% did not (Alemayehu et al. 2009). This is inconsistent with results of a study done in South Africa that found high levels of patient satisfaction with ART-related services in the public sector (Wouters et al. 2008). This difference may be because clients in South Africa were satisfied with things like cleanliness of the facilities, yet in the current study, appearance of physical facilities scored very low.

For the dimensions measured, both facilities had service quality gaps and dissatisfied clients, particularly with the tangibles dimension, which had the worst rating in both cases. The public facility also scored low on the reliability dimension. These results are in agreement with a study done in Bangladesh (Andaleeb 2000), comparing service quality in public and private hospitals using a modified SERVQUAL tool. It established that patients in both facilities were not happy with the services received as their mean scores were generally near the scale's midpoint and so both of them were below standard. Nonetheless in the current study, the responsiveness dimension got the best rating in both facilities, showing that clients were satisfied with it, especially in the private facility where there was a positive gap, as well as overall. All other dimensions had negative gaps overall. These

findings may imply that the management of the facilities is not putting enough concentration and resources towards these aspects of service quality.

There were some cases in which one facility's clients showed satisfaction, and yet the other's clients were dissatisfied. An example is with the dimensions of responsiveness and assurance, where the private facility actually had a positive score while the public one had a negative one. There are also many items where the public facility had higher perceptions than the private one and actually scored 5, the highest, for example 'staff being sympathetic and reassuring' and 'employees give clients personal attention'. This implies that each facility invests more in certain aspects of quality compared to others.

Furthermore, respondents at the public facility tended to have much higher expectations and perceptions than did their counterparts attending the private clinic. This could have been because the public facility is the only one of its kind in that area, which is predominantly rural, so the clients regard it as being of a high standard. On the other hand the private facility, based in the town, is one among many offering the same service, so its clients may also have gone to the others and been able to make comparisons.

There are some instances of what in the marketing literature is referred to as super-pleasing the customers or delivering superior performance. This is when the perception levels of the service are higher than the expectations (Palihawadana and Barnes 2004), resulting in positive gap scores and showing good performance. For example items 'sympathetic and reassuring; say exactly when services will be done; prompt services from employees and

employees always willing to help' for the private facility and item 'employees give personal attention' for the public facility. A similar trend was seen for the responsiveness and assurance dimensions for the private facility. This may mean that the facilities have invested more effort and resources in these areas.

The multivariable analysis showed that women had much higher odds of being satisfied with HIV/AIDS services. One of the reasons for this may be that if women getting HIV/AIDS care are pregnant, they tend to get a lot of care, contact, attention and information through antenatal visits, which may increase their satisfaction and indeed many of the women in the study were in the reproductive age group (15-49 years). Another possible reason may be the fact that 71% of this study's respondents were women. A study in Pakistan aimed to assess and improve patient satisfaction at a rural health facility reported that one's sex significantly affected overall client satisfaction (Shaikh et al. 2008). On the other hand, a study measuring patient satisfaction in health facilities run by Uganda Catholic Medical Bureau did not find a statistically significant difference in satisfaction between males and females (Lochoro 2004). These contradictions may be because women have unique concerns that are not specifically addressed in client satisfaction surveys. Examples of these are the quantity, content or style of communication (Copeland and Scholle).

In addition, the type of service received also showed that people who got both ARVs and Septrin were much less satisfied than those who received ARVs only. This could be because they probably were experiencing longer waiting times as both drugs were arranged

and packed for them. Although waiting time was not asked about explicitly, it was included in the questionnaire through various items like ‘provide services at promised time’ and ‘prompt response to clients’ requests’, which had negative scores. Waiting time has been found to be a critical factor in determining patient satisfaction with various types of health services and has often been cited as contributing to satisfaction or dissatisfaction among clients (Mfinanga et al. 2008, Wouters et al. 2008).

For the current study, age of the respondents was thought to be a confounder because it increased the odds ratio of the main exposure. This is in contrast to findings of a study in Tanzania on patient dissatisfaction with public and private laboratory services in conducting HIV related testing (Mfinanga et al. 2008). It found out that age groupings showed no significant association with dissatisfaction with laboratory services in all satisfaction indicator variables. Similarly, age had no significant effect on overall satisfaction of respondents in Pakistan (Shaikh et al. 2008).

Although at the bivariate level people with secondary education and higher were less satisfied than those without any formal education and this was statistically significant, this difference did not persist. This is in line with Shaikh et al. 2008, who found no significant association between education and overall satisfaction in Pakistan.

Drug availability was shown to be important among respondents because some of them mentioned drug shortages as one of the problems they faced, while some of those who refused to be interviewed said it was because they had not got drugs for a while and

sometimes clients are also asked to buy drugs. This stock-out was reported in both the public and private facilities. These findings agree with those of another study in Uganda where users were dissatisfied with the inconsistent drug supply in government health facilities (Jitta et al. 2008).

The importance of PLWHAs consistently taking their drugs – whether ARVs, Cotrimoxazole Prophylaxis (CP) or any other, cannot be over stated. It is generally recommended that once PLWHAs start taking CP, it should be done indefinitely, due to its effectiveness in disease prevention (WHO 2009). Similarly, ARVs are a life-long treatment and not adhering to the dose as required results in drug resistance. The consequences of drug resistance include treatment failure, increased direct and indirect health costs associated with the need to start more costly second-line treatment for patients, the spread of resistant strains of HIV and the need to develop new anti-HIV drugs (www.who.int). According to WHO, one of the key interventions for preventing and managing HIV drug resistance is ensuring an adequate and continuous drug supply (WHO 2009). It's therefore alarming that there were drug shortages in these health facilities and yet the majority of the clients still reported satisfaction with services. Perhaps this could be due to ignorance about the seriousness of interruptions in taking drugs, or maybe the clients are resigned to the situation, since most of them are farmers who don't earn much money and cannot afford to but these drugs regularly.

The study had strengths in terms of methods used, like the fact that two health facilities were compared that were providing similar services, which helped to get a more

representative sample and thus better information. The big sample size was also advantageous as was the high response rate of 96% (four people at the public facility refused to be interviewed, while at the private one, two refused and one dropped out halfway).

There were some limitations, for example the study may have missed out on important information from some of the clients attending the private health facility because certain clients at this private site ensured that they only get ART from the director. It was therefore not possible to interview this group and yet they may have had different characteristics, expectations and perceptions from the others who participated, thus some bias but we still got good information from clients of this facility whom we interviewed. In addition, patients might have withheld information about their negative experiences and instead expressed satisfaction - like at the public facility some respondents said they had spent four weeks without drugs and yet they had high perception scores. Also, the study was cross-sectional, which has its associated limitations.

Furthermore, there is no mention of the availability of drugs in the SERVQUAL tool. In the conceptual framework, it was put under the responsiveness dimension, while having a regular drug supply was under the reliability dimension. It could also possibly fit within the tangibles dimension but it would still be good to have it explicitly mentioned as an item on its own. The tool also did not explicitly define some issues like waiting time which is crucial in client satisfaction.

Finally, the SERVQUAL tool that was used in this study had not been validated for use in Uganda, but since it was validated in other similar countries and different areas of health care, this challenge was seen as minimal.

8.0 CONCLUSION

When the question asking about overall satisfaction was analysed, everybody in the public facility was satisfied, while two people in the private one were not. Nevertheless, it was through this question that the clients were able to report drug shortages that they were experiencing. Drug shortages played a key role in causing dissatisfaction among clients in both facilities. However, this finding showing that people were satisfied overall presents a contradiction with other results showing dissatisfaction. By looking at the negative results of both facilities, we see that some clients in the public facility were not satisfied with some aspects of the HIV/AIDS care they received and also some in the private one were not satisfied with certain things.

When the SERVQUAL tool was used, clients of the private facility had higher satisfaction scores (-0.03) compared to the public facility's clients (-0.09). However, the t-test comparing means showed that there was no statistically significant difference in client satisfaction between public and private health facility clients. When the continuous dependent variable was converted into a binary one, the chi-square test also showed that there was no statistically significant difference in satisfaction between people getting HIV/AIDS care from the public health facility and those getting it from the private one.

In general, the clients identified problems in both health facilities for different aspects of care, especially in the areas of tangibles, which focused on up-to-date equipment, visually appealing facilities, well dressed employees and facilities matching the services they provide, which got the worst rating.

In some cases, respondents' perceptions were higher than their expectations, meaning that the facilities performed well in these aspects, so not all the quality of care was perceived as poor.

The association between sex and client satisfaction consistently remained statistically significant throughout all analyses, which shows the importance of this variable in this study. Other important socio-demographics included receiving both ARVs and Septrin and the age of respondents.

9.0 RECOMMENDATIONS AND POLICY IMPLICATIONS

The district health officer of Kabale and the directors in charge of these two health facilities will be provided with a copy of this report. The directors should then be able to improve on the functional quality of the HIV/AIDS services they are offering, especially in the areas that were identified as weakest, which include physical facilities, equipment and appearance / presentation of personnel. The managers and staff of the two health facilities can identify problems from the patients' view point and make improvements. This is because client satisfaction influences whether clients continue to use the health facility, to adhere to treatment and if they refer other users.

It is important to establish a system of regularly getting clients' feedback on different aspects of the services provided, in order to improve on them and serve clients better.

People in charge of health and HIV/AIDS services in Kabale district can also learn that these are priority areas which can be improved on when funds and other resources are available.

Managers can also use the results to study each others' strengths and assess those areas in which the other facility's patients showed satisfaction, especially if their own patients were dissatisfied. For example in the public health facility, respondents were satisfied with the personal attention given by the staff, while respondents of the private facility were not satisfied. On the other hand, the private facility's respondents were satisfied with staff always being willing to help, but this was the opposite in the public health facility.

The drug shortages played a key role in influencing client satisfaction and also in some clients' decisions to participate in the study, which is a very concerning situation. It is crucial that the management of the facilities, district health staff and all those concerned with drug procurement and management study the circumstances and understand what causes this problem for Kabale district in particular. The district should then be supported to ensure a more constant and reliable drug supply for PLWHAS. Close supervision of drug management is also necessary and staff can be trained in better drug management. All this will help to avoid the rise of ART-resistant viruses and reduce morbidity and mortality.

In addition, studies could be carried out stratified by sex right from the beginning, in order to find out whether the association between this variable and client satisfaction remains statistically significant.

Furthermore, client satisfaction survey tools should ask about aspects of health care that are particularly important to women, for example ease of communication. Women are very important because they play a key role in health care seeking, not only for themselves, but also for their families.

Generally, providing and managing HIV/AIDS care is a complex process, because people need life-long care, counselling and monitoring so they can take their drugs consistently and correctly and live positively to avoid further problems. Therefore, health facilities that are the focal point of this care need to ensure that it is of good quality and satisfactory to clients.

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APPENDIX 1: SERVQUAL QUESTIONNAIRE (English)

Good morning / afternoon,
My name is……., from the School of Public Health, Makerere University. We are assessing the level of satisfaction among clients receiving HIV/AIDS care from this health facility. The information you give will enable us to understand the level of quality you expect to receive from health facilities providing HIV/AIDS care and how happy you are with the current services. We will also be able to know which areas are most important to you.

I promise to keep all the information confidential.

Thank you for your cooperation

SEX…….
AGE…….
RESIDENCE……...
OCCUPATION……
HIGHEST EDUCATION LEVEL…….
LENGTH OF TIME AS A CLIENT……..
ON ART OR NOT……..
SERVICE RECEIVED……..

NAME OF HEALTH FACILITY……
PUBLIC OR PRIVATE……..
QUESTIONNAIRE NUMBER……..
INTERVIEWER NAME.....

DIRECTIONS: This survey deals with your opinions of HIV/AIDS care services. Please show the extent to which you think health facilities offering HIV/AIDS care services should possess the features described by each statement. Pick one of the five numbers next to each statement. If you strongly agree that these facilities should possess a feature, circle the number 5. If you strongly disagree that they should possess a feature, circle 1. If your feelings are not strong, circle one of the numbers in the middle. There is no right or wrong answer.

	1 (Strongly Disagree)	**2 (Disagree)**	**3 (Neutral)**	**4 (Agree)**	**5 (Strongly Agree)**
E1. They should have up-to-date equipment.	1	2	3	4	5
E2. Their physical facilities should be visually appealing.	1	2	3	4	5
E3. Their employees should be well dressed and appear neat.	1	2	3	4	5
E4. The appearance of the physical facilities should be in keeping with the type of services provided.	1	2	3	4	5
E5. When these facilities promise to do something by a certain time, they should do so.	1	2	3	4	5
E6. When customers have problems, these facilities should be sympathetic and reassuring.	1	2	3	4	5
E7. These facilities should be dependable.	1	2	3	4	5
E8. They should provide their services at the time they promise to do so.	1	2	3	4	5
E9. They should keep their records accurately.	1	2	3	4	5
E10. They should tell customers exactly when services will be performed.	1	2	3	4	5
E11. Customers should expect prompt service from employees of these facilities.	1	2	3	4	5
E12. Their employees always have to be willing to help customers.	1	2	3	4	5
E13. They should respond to customer requests promptly.	1	2	3	4	5
E14. Customers should be able to trust employees of these facilities.	1	2	3	4	5
E15. Customers should be able to feel safe in their transactions with these facilities' employees.	1	2	3	4	5
E16. Their employees should be polite.	1	2	3	4	5
E17. Their employees should get adequate support from these facilities to do their jobs well.	1	2	3	4	5
E18. These facilities should give customers individual attention.	1	2	3	4	5
E19. Employees of these facilities should be expected to give customers personal attention.	1	2	3	4	5
E20. Employees should know what the needs of their customers are.	1	2	3	4	5
E21. These facilities should have their customers' best interests at heart.	1	2	3	4	5
E22. They should have operating hours convenient to all their customers.	1	2	3	4	5

DIRECTIONS: The following set of statements relate to your feelings about this health facility. For each statement please show the extent to which you believe this health facility has the feature described by the statement. Once again, circling a 5 means that you strongly agree that this health facility has that feature and circling a 1 means that you strongly disagree. You may circle any of the numbers in the middle that show how strong your feelings are. There is no right or wrong answer.

	1 (Strongly Disagree)	**2 (Disagree**	**3 (Neutral)**	**4 (Agree)**	**5 (Strongly Agree)**
P1. The health facility has up-to-date equipment.	1	2	3	4	5
P2. Its physical facilities are visually appealing.	1	2	3	4	5
P3. Its employees are well dressed and appear neat.	1	2	3	4	5
P4. The appearance of its physical facilities is in keeping with the type of services provided.	1	2	3	4	5
P5. When it promises to do something by a certain time, it does so.	1	2	3	4	5
P6. When you have problems, it is sympathetic and reassuring.	1	2	3	4	5
P7. The health facility is dependable.	1	2	3	4	5
P8. It provides its services at the time it promises to do so.	1	2	3	4	5
P9. It keeps its records accurately.	1	2	3	4	5
P10. It tells customers exactly when services will be performed.	1	2	3	4	5
P11. You receive prompt service from its employees.	1	2	3	4	5
P12. Its employees are always willing to help customers.	1	2	3	4	5
P13. Its employees are not too busy to respond to customer requests promptly.	1	2	3	4	5
P14. You can trust employees of this health facility.	1	2	3	4	5
P15. You feel safe in your transactions with its employees.	1	2	3	4	5
P16. Its employees are polite.	1	2	3	4	5
P17. Its employees get adequate support to do their jobs well.	1	2	3	4	5
P18. This health facility gives you individual attention.	1	2	3	4	5
P19. Its employees give you personal attention.	1	2	3	4	5
P20. Its employees know what your needs are.	1	2	3	4	5
P21. This health facility has your best interests at heart.	1	2	3	4	5
P22. This health facility has operating hours convenient to all their customers.	1	2	3	4	5

Overall are you satisfied with the services at this facility? (Yes / No) .....

APPENDIX 2: SERVQUAL QUESTIONNAIRE (Rukiga)

EBIBUZO AHARYABO ABARIKUCONDOZIBWAHO

Oreiregye/osibiregye

Eizina ryangye ndi ……. Ninduga omu School of Public Health, Makerere University. Turiyo nitushujuma oku abantu barikureeba obuhereza ahabikwatireine nendebererea yakakooko kamunywengye (HIV/AIDS) omwijanjabiro eri. Ebyoratugambire nibija kutubasiisa kwetegyereza orurengo rwobuhereza, iwe obworikutekateka kutunga kuruga omumajanjabiro agarikureeberera abeine akakooko ka munywengye; kandi nokureeba yaba nimushemererwa obuhereza obu oburiho. Nikiija kutubasiisa kumanya nibintuki ebimurikutwara nkabikuru.

Ninkuraganisa kuninyija kurinda ebiwangambira nkebihama

Webare kukwatanisa neitwe

OBUHANGWA BWAWE (SEX)……

EMYAKA …….

AHORIKUTURA ……..

OMURIMO GWAWE ……

OKASHOMA KUHIKAHE ……

OMAZIRE BWIREKI ORIKUTUNGA BUHEREZA?…….

ORI AHAMIBAZI (ART) NEINGA TORIHO?…….

NOTUNGA BUHEREZA KI ?……..

EIZINA RYEIJANJANABIRO ……..... ……

EIJANJABIRO NERYA GOVERNMENT NEINGA NERYOMUNTU? ……..

EBIBUZO NUMBER EHA ……..

EIZINA RYOWABUZA ……..

ENDAGIRIRO: Okucondoza oku nikuza kushujuma antekateka yawe ahabuhereza bwabeine akakooko kamunywenge (HIV/AIDS). Noshabwa kworeka entekateka yawe oku amarwariro agarikuha obuhereza ahabwakakooko ka munywengye gashemereire kugira obubonero obwashobororwa burikihandiko.Torana eshura emwe omuritano ezayorekwa omuburi kihandiko waba noikiririza kimwe ngu amajanjabiro aga gashemeriere kugira akabonero aka, yoreka eshura yakatano. Kandi kuwakuba otarikwikiririza kimwe ngu gashemereire kugira akabonero, yoreka eshura yokubanza. Kandi entekateka yawe yaba etari yamani, yoreka emwe hashura zahagati. Tihariho kugarukamu okuhikire neinga okugwire.

	1. Okuteikiririza Kimwe	**2. Okuteikiriza**	**3. Kutagira Rubaju**	**4. Kwikiriza**	**5. Kwikiririza Kimwe**
E1. Bashemereire kugira ebyoma byomurembe	1	2	3	4	5
E2. Amajanjabiro gabo gashemereire kuba nigarebeka kurungyi	1	2	3	4	5
E3. Abakozi bashemereire kuba bajweire kurungi kandi bari abayonjo	1	2	3	4	5
E4. Endebeka yamajanjabiro gabo eshemereire kwikirizana nobuhereza obubarikuha	1	2	3	4	5
E5. Amajanjabiro aga gashemereire kuhikiriza eshaha ezibaraganise kukoremu obuhereza	1	2	3	4	5
E6. Abarikwenda obuhereza baba beine ebizibu, amajanjabiro gashemereire kubagirira esasi kandi bakabahumuriza	1	2	3	4	5
E7. Amajanjabiro aga gashemereire kugira obuhereza burikwesigwa kandi bwamazima	1	2	3	4	5
E8. Gashemereire kuhayo obuhereza aha shaha ezibaraganise	1	2	3	4	5
E9. Bashemerieire kubikagye ebihandiko byabo	1	2	3	4	5
E10. Bashemereire kugambira abu barikuha obuhereza obwire bwo bwenyine obubarahe obuhereza	1	2	3	4	5
E11. Abarikuronda obuhereza bashemereire kumanya kuhariho obuhereza bwahonaho kuruga omubakozi	1	2	3	4	5
E12. Abakozi baabo burijo bashemerire kwereka okwehayo ahabarikuronda obuhereza	1	2	3	4	5
E13. Burijo bashemerire kugarukamu ebyetago byabarikuronda obuhereza ahonaho	1	2	3	4	5
E14. Abarikuronda obuhereza barebeke beine obwesigye omumajanjabiro aga	1	2	3	4	5
E15. Abarikuronda obuhereza bashemereire kuhurira beine obwesigye omubirikukorwa omumanyanjabiro nomubakozi	1	2	3	4	5
E16. Abakozi bashemereire kutwaza kurungyi	1	2	3	4	5
E17. Abakozi bashemereire kuhebwa obuhagizi burukumara, kuruga omumajanjabiro, baboone kukoragye emirimo yabo	1	2	3	4	5
E18. Buryomwe orukwija kuronda obuhereza ashemereire kukorwaho wenka	1	2	3	4	5
E19. Abakozi abamajanjabiro aga bashemereire kuha buri muntu obuhereza bwe wenka	1	2	3	4	5
E20. Abakozi bashemereire kumanya ebyetengo byabarikuronda obuhereza	1	2	3	4	5
E21. Amajanjabiro aga burijo gashemeireire kutaho omwete ahabarikuronda obuhereza	1	2	3	4	5
E22. Amajanjabiro gashemereire kutaho eshaha ezirikubasikira abarikuronda obuhereza boona	1	2	3	4	5

ENDAGIRIRO: Ebihandiko ebirikuza kukurataho, nibyoreka entakateka yawe ahaijanjabiro eri, yoreka oku orikwikiriza, ngu eijanjabiro eri riine akabonero akashobororwa ekihandiko eki. Omurundi ogundi, yoreka eshura yakatano, yaba noikiririza kimwe ngu eijanjabiro eri rine akabonero ako. Kandi wayoreka enshura emwe, nikimanyisa ngu torikwikiririza kimwe nakabonero ako, nobasa kworeka enamba endijo yoona kwereka ebitekateko byawe okubiri. Tihariho okugarukamu okuhikire nari okugwire.

	1. Okuteikiririza Kimwe	**2. Okuteikiriza**	**3. Kutagira Rubaju**	**4. Kwikiriza**	**5. Kwikiririza Kimwe**
P1. Eijanjabiro rine ebyoma byomurembe	1	2	3	4	5
P2. Amajanjabiro nigarebeka kurungi	1	2	3	4	5
P3. Abakozi bajweiregye kandi babayonjo	1	2	3	4	5
P4. Endebeka yamajanjabiro gaabo neikirizana nobuhereza bwabo	1	2	3	4	5
P5. Burijo kubarikuraganisa kukora ekintu omubwire, nibakihikiriza	1	2	3	4	5
P6. Waba oine ebizibu, nibakwereka esaasi kandi bakuhumuriiza	1	2	3	4	5
P7. Eijanjabiro niryesigwa	1	2	3	4	5
P8. Nirihereza obuhereza omubwire obubaraganise	1	2	3	4	5
P9. Nibabika gye ebihandiko byabo	1	2	3	4	5
P10. Nibagambira abarikuronda obuhereza eshaha zonyine ezibakoreraho	1	2	3	4	5
P11. Notunga abuhereza bwajuba kuruga ahabakozi	1	2	3	4	5
P12. Abakoozi babo burijo nibayamba abarikuronda obuhereza	1	2	3	4	5
P13. Abakoozi baabo, burijo nibaboona obwire bwokugarukamu abo boona abarikwenda obuhereza ahonaho	1	2	3	4	5
P14. Nobaasa kwesiga abakozi beijanjabiro eri	1	2	3	4	5
P15. Burijo nohurira otarikwerarikirira omuribyorikukora nabakoozi baabo	1	2	3	4	5
P16. Abakoozi baabo bibatwazagye	1	2	3	4	5
P17. Abakoozi baabo beine obushagiki burikumara kukora kurungi emirimo yabo	1	2	3	4	5
P18. Eijanjabiro eri nirikuha obuhereza bwawe nkomuntu wenka	1	2	3	4	5
P19. Abakoozi nibakuha obuhereza bwawe nkomuntu	1	2	3	4	5
P20. Abakoozi nibamanya ebyetengo byaawe	1	2	3	4	5
P21. Eijanjabiro eri niritaho omwete ahabyetengo byawe	1	2	3	4	5
P22. Eijanjabiro riine eshaaha zokukoreramu ezirikubasikira buryomwe orikurondayo obuhereza	1	2	3	4	5

Omukutwarira hamwe nohurira omazirwe nobuhereza oburikuhebwa ahaijanjabiro eri? …..

APPENDIX 3: INFORMED CONSENT DOCUMENT (English)

Research description
This is a study focusing on people receiving HIV/AIDS care including Antiretroviral therapy, treatment of opportunistic infections, counselling and other such services within Kabale district. Its main aim is to compare satisfaction with services among those receiving care from a public facility to those getting it from a private one. This will help improve quality of services. Information will be collected for a month through interviewing clients at these facilities.

Risks
There will be no foreseeable risks to you since the study only involves interviews.

Benefits
There will be no special benefits to you. However, the management of the facilities will get the final report and be able to identify which areas they need to improve on according to your views.

Confidentiality
Privacy during interviewing and confidentiality of information are guaranteed. You will be interviewed separately from other clients. In case you know one of the researchers, you can be interviewed by someone else or withdraw from the study. You are not required to give your name so information cannot be traced back to you. The information collected will only be accessible to the research team.

Compensation
No compensation will be available for your time and any inconvenience but we are very grateful to you for taking part in this study.

Contacts
If you have any questions now please feel free to ask me. In case you have any later on, you can contact the principal investigator, Doris Kwesiga, on the telephone number - 0755 421989.
If you have any issues pertaining to your rights and participation in the study, please contact the Chairperson of the Institutional Review Board, Makerere University School of Public Health on the telephone number 0312-297565.

Voluntary Participation
Participating in this study is voluntary. You have the right to refuse to take part and can withdraw at any point without any penalty.

Participant: I understand all the conditions above and have agreed to take part in this study of my own free will.
(Signature / mark)……..
Researcher / research assistant's signature……
Any other witness……..

APPENDIX 4: INFORMED CONSENT DOCUMENT (Rukiga)

EKIHANDIKO KIRIKWEREKA OKUMANYA KWAWE HAZA OBWO OYEKUNDIRE

OKUSHOBORORA AHA KIRIKUCONDOZIBWAHO
Okucondoza oku kukwatireine nahabantu abarikuheebwa endeberera ya kakooko kamunuwengye (HIV/AIDS), otwarireinemu emibazi yokucendeza ahabukooko bwamunywengye omumubiri; okujanjaba endwara ezindi ezirikwiziramu ahabwakakooko ka munywengye; okuhaburwa nokuhumurizibwa hamwe nobundi buhereza omu district ya kabale. Okucondoza oku nikuza kutwara okwezi kumwe, obwo abarikuronda obuhereza omumarwariro agagambwaho barikubuzibwa ebirkubakwataho.

HARIHO AKABI OMUKUCONDOZA OKU?
Tihariho akabi koona akarukwija kubaho akakuba okucondoza oku kurimu okubuza ebibuzo kwonka.

OKUGANYIRWA OKURIMU
Tihariho okuganyirwa kuhango okurimu ahariwe orikubuzibwa ebibuzo kwonka abebembezi bamarwariro agagambwaho nibeija kutunga ekihandiko (ripoota) ekirarugemu, haza kibabasiise kumanya okubakubasa kutungura obuhereza, kurugirira omubitekateko byawe orikutungayo obuhereza.

Niheija kubaho okweherera, nokurinda ebihama byawe. Kuwokushangwa orikumanyana nomwe omubacondozi, nobaasa kubuzibwa ondijo muntu nainga oruge omukucondoza oku. Torikwetenga kuhayo amaziina gawe. Nahabwecho tihariho okuwakumanya ebirikukukwataho. Ebirarugye omukucondoza oku, nibiza kuba binwe omucondiza hamwe nabahwezi be kusha.

OKUSHASHURWA
Tiharukuza kubaho okushashurwa ahabwobwire bworikubuzibwa nokuteganisibwa, kwonka omucondoza nakusiima ahabwokwetaba omukucondoza oku.

AHOKUBURIZA
Kuhakuba hariho ekibuzo hati, nobaasa kumbuza. Ahanyima, nobaasa kubuza omucondoza Doris Kwesiga ahasimu egi 0755 421989.
Kuhakuba hariho ekibuzo ekikwatireine nebyobugabe byawe omuri ebyobuziibwe nobaasa kubuza mukuru w'entebe yekitongore eki ahasimu egi 0312-297565.

OMUKUCONDOZA OKU NOZAMU OYEKUNDIRE
Okucondoza oku nokwo omuntu oyekundire. Oine obugabe kwanga kandi nobasa kurugamu akeire koona otarikujunanwa.

Orikwetaba omukucondoza oku: Ninyetegyereza ebiri omukihandiko eki kandi neikiriza kweteaba omukucondoza oku obwe nyekundire nyenka.

Omukono/Akamanyiso ……..

Omucondozi/Omuhwezi womucondozi ……

Ondijo owaba ariho ……..

APPENDIX 5: WORK SCHEDULE

To be completed by (weeks)

Tasks	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Pilot test	→	→	→											
Data Collection			→	→	→	→	→							
Coding and data entry						→	→	→	→					
Data analysis									→	→	→	→		
Write draft report												→	→	
Write final report														→

APPENDIX 6: PROPOSED BUDGET FOR RESEARCH

ITEM	QUANTITY	UNIT COST (Ug.Shs.)	TOTAL COST (Ug.Shs.)
PREPARATION			
Travel to site	3 trips	50,000	150,000
Stationery	1 ream of paper	12,000	12,000
Translation of questionnaire and consent form	2	250,000	250,000
Photocopying questionnaires for pre-testing	40	400	16,000
Communication (airtime)	50,000	50,000	50,000
Laptop computer	1	2,500,000	2,500,000
Subtotal			**2,978,000**
FIELDWORK			
Travel to site	4 trips	50,000	200,000
Accommodation	1 month	30,000	930,000
Stationery	1 ream of paper	12,000	12,000
Photocopying of questionnaires	428	400	171,200
Research assistant's per diem	2	500,000	1,000,000
Personal per diem	1	500,000	500,000
Communication	100,000	100,000	100,000
Subtotal			**2,913,200**
ANALYSIS			
Data entrants fee	1	301,000	301,000
Subtotal			**301,000**
REPORT WRITING			
Stationery	I ream of paper	12,000	12,000
Photocopying drafts and dissertation	5	10,000	50,000
Binding	5	20,000	100,000
Subtotal			**162,000**
TOTAL			**6,354,200**

Budget Justification

*****All prices are in Uganda Shillings (Ug.Shs.)

*A one-way bus trip to Kabale is 25,000 Ug.Shs.

*The forward and back translation by a language expert in Kabale district cost 100,000shs. for each

document. Each document was certified as correctly translated for 50,000 shs. each

*Each questionnaire, with a consent form included had 4 pages so it cost 400 Ug.Shs. to photocopy one
*An equal number of questionnaires in both English and Rukiga was necessary for both facilities because the number of people who would answer in either language could not be predicted. So 216 questionnaires were printed in either language, thus a total of 430. The same applied to the pre-testing stage.
*Accommodation was at the rate of 30,000 Ug.Shs. per day for a month
*Two research assistants helped to collect data at a cost of 25,000Ug.Shs.per day for a month. This would include their lunch and transport allowances

*Personal per diem was the same as that for the research assistants
*The data entrant was paid 700 Ug.Shs. per questionnaire entered so the figure in the budget was for 430 questionnaires.