UTILIZATION OF FORMAL HEALTH CARE SERVICES AND ASSOCIATED FACTORS IN UGANDA: A CASE STUDY OF LUWEERO DISTRICT

BY

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A DISSERTATION SUBMITTED IN (PARTIAL) FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH OF THE UNIVERSITY OF DAR ES SALAAM

2005

CERTIFICATION

The undersigned certify that he has read and hereby recommends for acceptance by the University of Dar es Salaam a dissertation entitled ***"Utilization of Health Care Services and Associated Factors in Uganda: A case Study of Luweero District"*** in fulfillment of the requirements for the degree of Master of Public Health of the University of Dar es Salaam.

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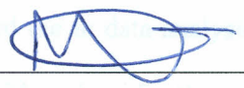
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DEDICATION

This work is dedicated to public health practitioners whose work makes a difference in the lives of millions of people around the world.

ABSTRACT

The level of utilization of health care services in Uganda remains very low. The low level negatively affects the quality of life of many Ugandans who remain outside the health care delivery system when ill. This descriptive cross sectional study was carried out to establish the level of utilization of health care services among residents of Luweero district and to determine what factors promote or hinder use of health care services in the formal health care system. The study was also carried out to establish the types of health facilities through which people got care. Consumer attributes, provider practices and social economic factors that influence health care seeking decisions were explored. Findings from this study show that whereas 82.0% (n=373) of the respondents sought some form of care, only 47% (n=176) of the people sought and got it from a health facility. Effectively, only 38.7% of the respondents got care from a health facility. The contribution of the public sector to direct delivery of health care services was 30% while private sector was 70%. These proportions indicate a decline from reported levels in the late 1980s of 56% for the public sector and an increase from 41% for the private sector.

The finding that 47% of the people sought care from health facilities and of these only 30% (n=52) went to public facilities means that the public sector effectively provides health care to 11% of the individuals who fall sick. Presence of a chronic condition (68.7%), perception of health status in comparison to others (51.5%), severity of the illness (50.9%), marital status and level of income were found to influence health care seeking behavior (p-value<0.05). Perceptions about cause of

disease and knowledge of services available were also found to influence health care seeking behavior. Credibility of health facilities and caring attitude of health care workers (56.8%), and availability of drugs and supplies were found to enhance health care seeking decisions. Lack of financial means and distance to health facilities were found to be a barrier to seeking care. Dependants were less likely to seek care than individuals who made their own decisions (p-value<0.05). Caring roles for other members of the household were found to have varying impact on health care seeking decisions. Whereas caring for the elderly and the chronically ill had an impact on health care seeking decisions (p-value<0.05), caring for under 5 children and the disabled did not (p-value>0.05). Similarly, education level was found to have varying impact on health care seeking decisions. Whereas the education level of individuals was found to influence health care seeking decisions (p-value < 0.05), education level of heads of households was not (p-value > 0.05). On the other hand, occupation, nature of guardianship, and sex of the respondents were found not to have a statistically significant relationship with health care seeking behavior (p-value>0.05). The study concluded that the level of utilization of health care services in Luweero district was not satisfactory. Alternative financing mechanisms, accessible to the rural poor, should be explored to address the financial barriers to seeking health care.

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Abbreviations

ANC	Antenatal Care
BOD	Burden of Disease
CBO	Community Based Organization
Col	Column
DDHS	District Director of Health Services
DS-SS	District Secretary for Social Services
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GOU	Government of Uganda
HC	Health Center
HCMC	Health Centre Management Committee
HCW	Health Care Worker
HF	Health Facility
HMIS	Health Management Information System
HS	Health Sector
HSSP	Health Sector Strategic Plan 2000/1-2004/5
IDI	In-Depth Interview
IUHPE	International Union of Health Promotion and Education
KI	Key Informant
LC	Local Council
MOFPED	Ministry of Finance, Planning and Economic Development
MOH	Ministry of Health
MUCHS	Muhimbili University College of Health Sciences

MUK	Makerere University Kampala
NBST	National Bureau of Statistics, Tanzania
NGO	Non-Governmental Organization
NHS	National Health Service
OPD	Out-Patient Department
PEAP	Poverty Eradication Action Plan
PFP	Private-for-profit
PI	Principal Investigator
PNFP	Private-not-for-profit
SH	Secretary for Health
SPHSS	School of Public Health and Social Sciences
TB	Tuberculosis
UAC	Uganda AIDS Commission
UDHS	Uganda Demographic and Health Survey
UN	United Nations
USA	United States of America
UNDP	United Nations Development Program
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 Background

Uganda, which is regarded as the Pearl of Africa, is one the three East African countries. The country is geographically divided into 56 districts. Organizational structure in the country includes districts, counties, sub-counties or town councils, parishes and villages (Local Government Act, 1997). Uganda has an estimated population of 24.7 million people (2002), of which 51% are females. The annual population growth rate is estimated to be 3.4. Life expectancy was estimated at 43 years in 1999. The national fertility rate is 6.9 children per woman. About 90% of the Ugandan population lives in rural areas and depend on agriculture to earn a living. The annual income per capita of the rural population is less than $200 per annum. The real Gross Domestic Product (GDP) per capita is estimated at Ugshs371,300/=, which is less than US$300. By end of 2000, 35% of Ugandans lived below the poverty line.

Infant mortality rate in Uganda stands at 88 per 1,000 live births, under 5 mortality rate is 152 per 1,000, and the maternal mortality ratio is 505 per 100,000 live births (UDHS 2000/1). In an effort to improve health care delivery, a decentralized health system was introduced under the 2000/1-2004/5 Health Sector Strategic Plan (HSSP). The public resource envelope available to the health sector is approximately US$7.83 per capita (MOH 2004).

A health facilities inventory taken in May 2004 indicated that there were 2,731 health facilities in the country. Of these, 1,855 (67.9%) were owned by the government, 600 (22.0%) by NGOs (PNFP) and 274 (10.1%) by the private-for-profit sector. The inventory further indicated that there were 108 hospitals, 106 HC IVs, 873 HCIIIs and 1,593 HC IIs (see section 3.13). According to the Uganda Social Sector Strategic Report of 1997, an estimated population per health facility in the country was 13,954. The ratio varies according to the population of a particular district and the number of health facilities. The population per hospital bed ratio is estimated at 800:1 (MOFPED 2003). The population per doctor is estimated to be 19,759, whereas every nurse is estimated to serve 4,730 people (UAC 1998). The proportion of people living within 5 kilometers distance from a public or PNFP health facility is 49%. Government is responsible for providing 40% of the curative health services, while the remaining 60% are provided by the private sector (UAC 1998).

1.2 Statement of the Problem

According to Blanchard-Horan (2003), improvement in utilization of health care services saves lives (see definition in section 3.13). Studies show that more than 50% of the population seeks care outside the formal health care system. Of those who seek care from modern health care system, 40% obtain services from government facilities, 35% from private clinics and 25% from NGOs (White Paper on Health 1993 quoted in UAC 1998). Despite marked improvement in utilization rates over the past few years, the utilization level remains low (Nabyonga, Desmet, Karamagi, et al 2005). Previous work has not made a broad and sufficient analysis

of what determines utilization. In the absence of such analysis, there is a tendency to conclude that levels are generally satisfactory based on the trend generated from routine HMIS data. Such data do not take into account the broader social, political and economic environment. Also, routine data do not consider increases in population and emerging conditions like HIV/AIDS, TB and malaria on the numbers of people reporting to seek care from health facilities.

According to Gish (1990), many people never encounter the formal health system in their lives. This negatively affects their quality of life. The failure to use essential health care services suggests that the general assumptions of coverage and use do not apply.

This study therefore sought to establish whether; first, there exists considerable unmet need for health care services among residents of Luweero District see section 3.13), secondly why some people seek care from health facilities when ill while others don't, and finally whether there is disparity in responsiveness of health facilities between people of different gender or age.

1.3 Conceptual framework

According to Hussein and Mujinja (1997), factors that determine utilization of health services can generally be classified into socioeconomic characteristics of the patients, direct costs and patient perception of quality of care at health facilities.

In order to develop additional concepts, the study therefore established factors that influence utilization of health care services. In this study, the provider was understood as the institutions and individuals that provide health care together with policy-making institutions at the district level. The consumer level included attributes of individuals and households. The graphical representation of the conceptual framework is presented in Figure 1 below:

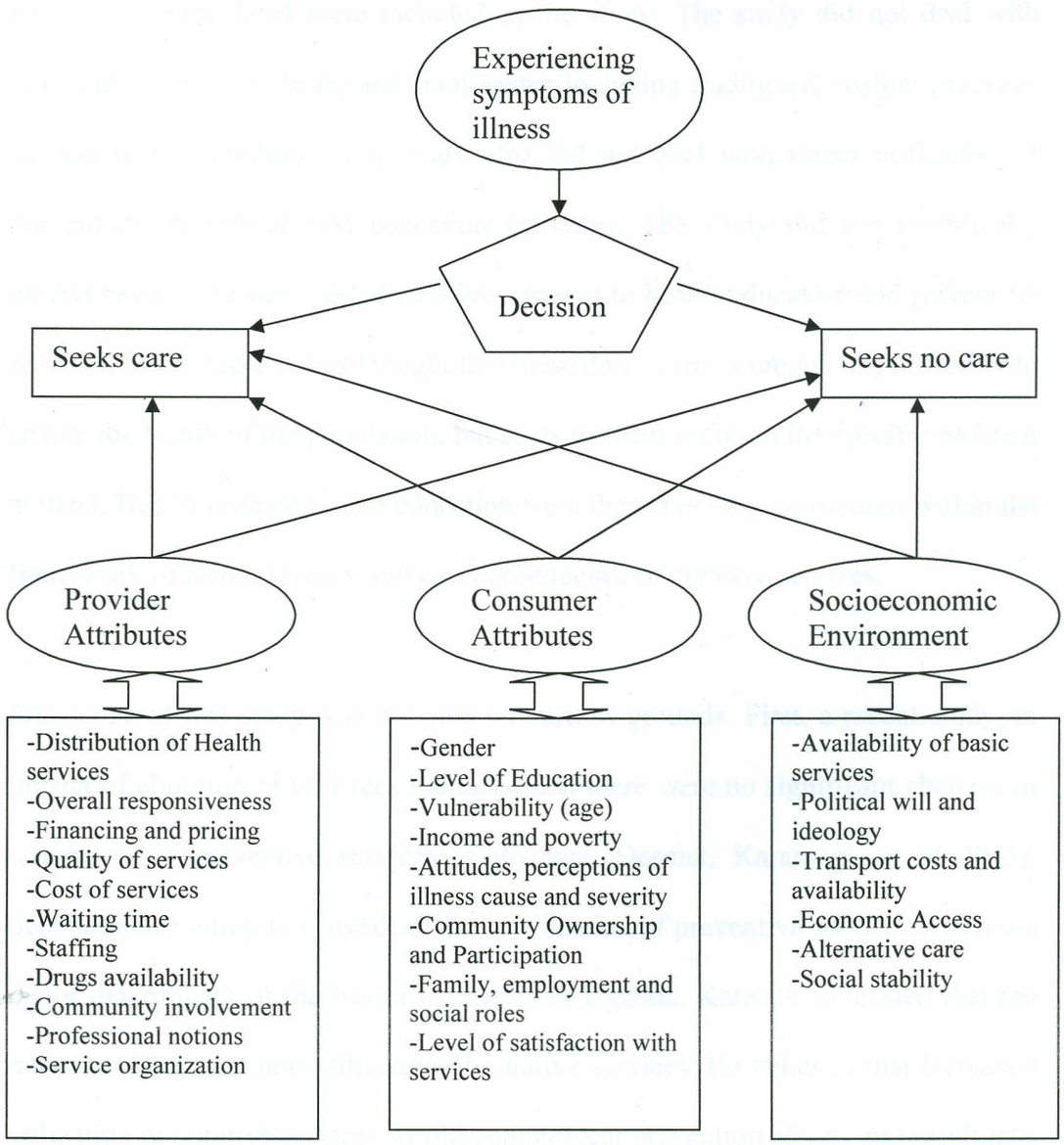


Figure 1: Factors associated with utilization of health care services; A conceptual framework

1.4 Scope of the study

In order to best understand the determinants of the current utilization level of health care services, this study focused on analysing use of ambulatory curative clinical services for communicable and non-communicable diseases. The study was limited to formal official or conventional health facilities, which include public and private; private-for-profit and private-not-for-profit facilities. Public facilities from HCII to hospital level were included in the study. The study did not deal with issues of health care in the informal sector including traditional healing practices outside formal facilities. The study also did not deal with direct utilization of prevention, promotion and education activities. The study did not specifically extend beyond the confines of curative services to health education and promotion services, not because it was thought that these don't carry a unique responsibility to ensure the health of the population, but so as to focus more on the specific problem at hand. Health promotion and education were therefore only considered within the framework of health literacy and as a consequence of curative services.

The scope of this study was justified on various grounds. First, a recent study on impact of abolition of user fees indicated that there were no significant changes in utilization of preventive services (Nabyonga, Desmet, Karamagi, et al 2005). Secondly, according to Katende (1994), utilization of preventive services was not a major determinant of the health indicators in Uganda. Katende suggested that the major problem was non-utilization of curative services. He believed that increased utilization of curative services would complement prevention efforts and result into high positive contribution to health indicators. Thirdly, ambulatory curative

services are the first line contact between individuals and HCWs. Fourthly, curative services were also selected in order to retain in the analysis, a relatively homogeneous type of service unlike prevention and promotion services that target a wide variety of issues ranging from ANC and maternity, child growth monitoring, education, child and adult immunization, routine screening, policy making and advocacy. Fifthly, virtually all people want curative care when ill but are generally less interested in preventive care (Katende 1994). Finally, according to Gish (1990), effective curative services are a successful entry point for prevention.

1.5 Justification of the study

Access to basic social services including health care is a fundamental human right, enshrined in the UN Covenant on Economic, Social and Cultural Rights. It is also one of the core rights that bind member states of the United Nations, as stipulated in Article 25 of the Universal Declaration of Human Rights of 1948 (UNDHR 1948). Governments have an obligation of ensuring that health care services are provided to their people as part of the effort to attain the Millennium Development Goals (UNDP 2003). The GOU and indeed the health sector are committed to improving the quality of life of the people. Measures are being implemented to attain this goal, but obstacles still remain.

Relatively little information is available on population–health care service utilization levels in many developing countries. Similarly, a search of literature revealed few articles addressing the issue of utilization of health care services in Uganda. The very limited literature available, dates back to the 1980s before the

introduction of major health sector reforms in many developing countries. Most of the studies were conducted at health facilities. Health facility-based studies provide information about a selected part of the population. In addition many of these studies focus on a single issue such as an event or perceived determinant of utilization. Health facility based surveys focus on provider-based determinants. User fees have been the center of focus for utilization studies in the last decade (Kipp, Kamugisha, Jacobs, et al 2001). Other studies focused on particular sections of the population like women, members of micro-insurance schemes, services like reproductive health or concerned about high costs of health care (Nanda 2002 and Blanchard-Horan 2003). It was therefore important to understand what influences utilization of curative services among the general population, when financial constraints in terms of user fees do not seem to be a barrier. Secondly, very little is known about the types of health facilities through which people access care today. Studies carried out in Uganda in the late 1980s indicated that more than 50% of the population sought care outside the modern health care system.

In a study on the abolition of cost sharing in Uganda, Nabyonga, Desmet, Karamagi, et al (2005), recommended that there was a need to clarify issues of utilization of services. Despite the important contributions of existing literature on utilization of health services, many critical questions remain to be unanswered. Health managers and overseers are beset with various input concerns that output issues may be overlooked. In a background paper on NGO-financing and provision of health services in Africa, Hanson and Berman (1994), recommended detailed studies on public-private composition of service utilization over time.

In the early 1990s, of the people who sought care from modern health care system, 40% obtained services from government facilities, 35% from private clinics and 25% from NGOs (White Paper on Health 1993 quoted in UAC 1998). It is therefore important to update this information with contemporary data.

This study therefore provides insights on what needs to be done to improve the utilization levels. These insights will be used by the GOU and its development partners who are committed to improving health status, health care service delivery and the quality of life for the people who live in Uganda. Utilization of health care services should be periodically reviewed for guidance in existing operations, planning of new facilities and services, and identification of research needs. There is a need for evidence-based information that will support health planners and their partners to match provision of health services and increased effective use of these services. Such services should be able to support a well-distributed and quality annual utilization level per person, if the health system is to contribute to national health care and development goals.

Understanding of the utilization patterns is required as a shift from input planning methods to output planning, where the actual population and the factors that influence them to use services are isolated. Therefore it was important to carry out this study so as to promote and facilitate planning based on utilization of services by intended users.

This study focused on the general population and analyzed provider, consumer and socioeconomic attributes that influence utilization from the population's perspective. The study explored utilization of services provided by the whole formal sector including public, PNFP and PFP, whereas many of the previous studies have focused their attention on services provided by public and PNFP facilities. It is not known what proportion of sick people secures health care services from the different types of providers and for what needs. The little information that is available dates back to the late 1980s early 1990s, and needed to be updated with new evidence. In addition, the study generated information about the use of service by specific population groups, which is needed to complement routine facility-based data. Whereas previous studies on utilization and related issues have focused on individuals of a voting age; at least 18 years, this study covered population of all age groups.

The findings from this study are intended to support both district health planners, health managers at the central level, development planners and managers to design better strategies that will improve utilization rates of health care services.

1.6 Study objectives

Overall goal

To determine utilization of formal health care services and identify factors which promote or hinder their use in Luweero District.

Specific objectives:

i. To establish the level of utilization of formal health services in Luweero District

ii. To determine the types of health facilities through which people get health care

iii. To identify consumer attributes which influence utilization of formal health care services

iv. To assess the effect of provider practices on use of health care services

v. To establish the contribution of socioeconomic factors on health care seeking decisions

CHAPTER 2: LITERATURE REVIEW

Economists have argued that social welfare depends on the health of the people and that health greatly contributes to the welfare and wealth of a community and nation. Therefore, if wealth has to be maximized and get people out of the viscous cycle of poverty, their health well-being needs to be given priority by leaders (Mead 1991). Some of the developing countries, including Tanzania, that are reported to have done very well in the past in form of delivery of health services to their population, record an annual per capita contact of four to five times per year (Gish 1990). Ethiopia set her target at 2.5 contacts as early as 1994 (Kloos 1990). Information available indicates that among the people, who report illness or symptoms of lack of wellness, those who seek care from formal providers can range from as low as 15% (Schulpen and Swinkles 1980) to as high as 62% (Wouters 1992). No population-based study on utilization has been carried out in Uganda. Therefore, this study is expected to be a feedback process to health policy makers. However, according to (MOFPED 2003), there is marked deterioration in the quality provided. Quality is compromised as a result of inadequate medical personnel and limited staff housing. Limited staff housing makes HCWs report late for duty, be absent at night or leave work early. Utilization rates are associated with availability of drugs and supplies (Yates 2004).

This section provides an assessment of what has been found regarding utilization of health care services. It lays down the global, regional, and Ugandan perspective based on provider, consumer and socio-economic environment. It also identifies

the knowledge gaps that exist pertaining to specific determinates of use of health care services.

2.1 Provider level

Overall responsiveness and its distribution

Responsiveness refers to the degree of courtesy and humility of health care workers, and the time users have to spend while seeking care. The World Health Report, 2000 noted that responsiveness influences utilization. This is where health facilities provide respect for human beings as persons, not humiliating or demeaning patients, provide confidentiality and the right to determine who accesses one's personal health information. Responsiveness also involves autonomy to participate in choice about one's health including choosing what treatment to receive and not to receive. Responsiveness can be influenced by the attitude of health care workers towards their work and their clients (Gish 1990). There is evidence to suggest that where health care services are "decently" provided, the population will make adequate quantitative overall use of them (Gish 1990). This view is shared by Donaldson (1999) who asserts that if health care workers do not adequately explain key aspects of care or cannot communicate well with patients, the patients don't hold the services with high regard.

In Uganda, some studies have been carried out on the responsiveness of reproductive health services to the needs of young people. In particular, some pilot health facilities extended hours of service. This contributed to a more than 6-fold number of adolescents who sought reproductive health services from the pilot

health facilities compared to those that did not extend their hours of work (Nelson 2002). In a study on health utilization among women participating in health care micro-insurance in Uganda, Blanchard-Horan (2003), established that long queues made health care very costly for the women who had to chose between going to their informal business, provided they were not too ill to work; and going to seek health care. The majority chose the former thus delaying health care until they were too sick to work. She suggested that waiting time was a big indirect cost of health care. In a study on the impact of user fees on health care incentives in Kabarole District of Western Uganda, there was an increase in use of services where the attitude of health care workers improved (Kipp, Kamugisha, Jacobs et al 2001).

Distribution of responsiveness affects utilization. This is the way responsiveness is accorded to people of different gender and age, and living in different localities. In health facilities where a certain group of the population receives a discounted level and kind of service compared to others, this drives them away. The way health facilities are managed on say a profit, not-for-profit, or public basis, influences the way they provide service to patients and determine the responsiveness. No information is available on the distribution of responsiveness. The few previous studies have focused on general populations with no distinction between levels and ownership of facilities.

Quality of services

Quality can be assessed from the point of view of the users or the providers of health care services. Therefore, the onus is on the health care providers to reconcile

the population's perception of quality and their own definition of quality. This is important as perceived quality by the users is what influences their decision to use health care services. From the providers' or professional point of view, quality of care refers to delivery of health care for individuals and the population that increases the likelihood of desired health outcomes and is consistent with current professional knowledge and standards (Lohr 1990). Process elements are what actually is done in giving and receiving care. Impact elements indicate the effects of care on the health status of patients in terms of morbidity and mortality (Boller, Wyss, Mtasiwa, et al 2003). Operationally, quality can simply be put as availability of trained staff, general cleanliness of the facilities, availability of equipment and supplies to perform desired tasks, provider-patient interaction, regular availability of drugs and recovery from illness. Individuals are more likely to go to facilities that possess the basic quality elements compared to those that lack some or all of them.

Studies done in Latin America by Bitran and McInnes (1993), suggested that waiting time before being seen by HCWs influences utilization and the choice of provider. They also found that other factors like age, gender, education level, travel time and income left constant, people were willing to pay a higher price in exchange for a shorter waiting time. This explained why, despite the fact that private providers' fees were the highest among all providers, they had the highest level of utilization. There is no information on average waiting times in Ugandan health facilities and the impact this may have on utilization of the services they provide.

Availability of personnel with appropriate training and competence determines the level of trust the population puts in services provided by any given facility. This trust enhances utilization of services. Donaldson (1999), established that when practitioners lack masterly in their clinical practice fields, this tends to affect the way users entrust them with their lives. This is coupled with attitudes personnel have towards their work and the way they relate with patients (Pichette and Mtasiwa 2005). According to Sengooba and McPake (2004), there were inadequate service providers in Uganda, with relative concentration at higher levels of care. They added that there is attrition from the public sector to more paying private sector positions, while others operate PFP clinical practices alongside their public roles. The MOH (2004) also noted that there remain significant staffing gaps in terms of quantity and quality. Yates (2004), observed that these gaps were inhibiting further changes in the outputs of the health sector. The impact of these gaps on utilization of health services in Uganda needs to be established.

Availability of free drugs influences the level of utilization of health facilities. This adds to trust people have in health care facilities to relieve their symptoms and pain (Pichette and Mtasiwa 2005). Samba (2004), reported that the consumption of essential drugs through the public distribution system had declined in all African countries since the 1980s, with the introduction of economic and health sector reforms. Samba added that by 1996, the low level of government expenditure allowed public primary health care centers to cover only 25% of the patient drug costs.

According to the MOH (2002), funding for drugs was estimated to be US$1.2 per capita against the requirement of US$3.5. The funding gaps contribute to regular stock-outs of drugs in public facilities. For the financial year 2003/4, an estimated 60% of all health facilities below hospital level had essential drug stock-outs for an average of 6 months, with HC IIs and IIIs more prone to stock-outs than HC IVs (MOH 2000). According to Nabyonga, Desmet, Karamagi et al (2005), patients tend to visit health facilities in large numbers when they have information that drugs are available. In a study on the impact of user fees on service utilization in Kabarole District of Western Uganda, where drug supply was improved, there was an increase in use of services (Kipp, Kamugisha, Jacobs et al 2001). In Uganda, drug stock outs are attributed to leakages in addition to budgetary limitations. According to Konde-Lule, Okello, Mbonye, et al (1998) by 1998, leakage of drugs was established to be at 78% in public health facilities.

The impact of such stock-outs is not clear. In addition, it was important to update the relationship between utilization of health care services and drugs managements since major changes happened in the health care delivery system, including abolition of user fees, and crackdown on corruption.

Community involvement

When health care delivery systems attempt to bridge the gap between providers and the communities that they are supposed to serve, the populations are supported to use health care services more (Pichette and Mtasiwa 2005). This is because they will know what to expect from the providers in terms of service. They will also be

able to mobilize and encourage others to use the services. In Rwanda, a program for promoting community-provider partnerships enhanced the relationship between these two stakeholders of the health care delivery system. The program substantially improved utilization of health care services (Cooney, Sempabwa and Nelson, 2003). In a study on the impact of user fees on health care workers incentives in Kabarole District, where the community participation improved, there was an increase in use of services (Kipp, Kamugisha, Jacobs et al 2001).Whereas community involvement in health care delivery is high in Uganda, including appointment of Health Center Management Committees (HCMC) and secretaries for health and social services at the district level and lower levels, the impact of these measures on utilization of health services is not known.

Professional behavior and notions

After the first contact, the provider influences the perception of the user. HCWs do drive users to seek for additional care and making return visits (Pichette and Mtasiwa 2005). This could be attributed to the nature of reception accorded to patients or experience with prices charged by health facilities. This would also have a multiplier effect on individuals associated with the patient. The effect of this interaction on utilization of health services in Uganda needed to be established.

Financing and cost of services

Financing is one of the key determinants of utilization of health services. WHO (2000), affirmed that fair financing ensures financial protection for everyone and enhances utilization. WHO (2002), further explained that under a fair health care

financing arrangement, the risks each individual and household faces due to costs of health are distributed according to their ability to pay rather than on the risk of illness. Health care systems that mandate universal coverage regardless of ability to pay tend to have more equal health care access in all aspects and higher utilization than those that do not mandate universal coverage (Pencheon, Guest, Melzer, et al 2001). According to the World Health Report 2000, $12 per capita per year was able to avert one third of the disease burden in many developing countries. However, allocating national budgets to health has declined in many African countries since the 1980s as a result of a combination of natural and mandate factors including debt burden, economic depressions and harsh economic measures (Samba 2004). Samba added that such market liberalization measures have made health care costs to individuals very high thus acting as a hindrance to many poor people from seeking care. The high costs, Samba explained, resulted into tripling of deaths due to malaria. This view is shared by Donaldson (1999), who concluded that financing of health care services affect the way the vulnerable, especially the poor, use health services.

At the individual level, inability to raise financial resources to either pay for treatment or transport fares when one is ill is a major hindrance to seeking care. In Rwanda, according to Nelson and Nolan (2002), individuals who had a sound source of financing health care costs were more than 4 times likely to consult health care workers per annum compared to those that did not.

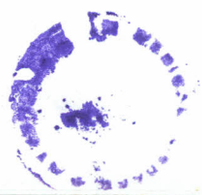
According to Sengooba and McPake (2004), Uganda is heavily dependent on donor resources to finance health care programs. They further observed that salaries were the largest budget item whereas the essential drugs program was largely supported by donors. The country is categorized as a low health expenditure nation which lags behind many other African countries (Hanson and Berman, 1994). In addition, Sengooba and McPake (2004) reported that by 1999, there was a declining central government allocation of the budget to health services putting the biggest burden of financing health care on individuals. Households contribute about 40% to the costs of health care, followed by private-not-for-profit organizations about 35%, and Government (MOH, other Ministries, national health services, and local governments) about 25%. Hardly any finances are channeled through private insurance organizations. The contribution of parastatals and private-for-profit institutions is very insignificant (MOH 2004). According to the 2003/4 Health Sector Performance Report, the per capita public spending that year was $7.83, which is higher than $7.2 for financial year 2002/3. According to Sengooba and McPake (2004), 60-80% of the health sector budget is spent on hospitals. In as much as there is an improvement in health care financing in Uganda over the years (MOH 2004), this spending remains far less than the requirement of $28 per capita that was identified by the Health Accounts (MOH 2004). Total per capita spending on health was estimated at about $18 in 2004. This shortfall, according to Nabyonga, Desmet, Karamagi, et al (2005), has resulted into irregular supplies of drugs and other consumables in health facilities, delayed staff salaries, low staff motivation and poor attitudes to work.

In a study on the impact of access to health services on infant and child mortality in Uganda, Katende (1994), established that existence of private clinics had no effect on childhood mortality. This view is shared by Hanson and Barman (1994), who suggested that utilization of private services was relatively less important in Africa than else where despite large amounts of private expenditure. Katende (1994) attributed this to the fact that private services were too expensive for the majority of the population. This is because user fees contribute almost 100% of the revenues of PFP health facilities and 50-60% of PNFP health facilities (Amone, Asio, Cattaneo, et al, 2005). This view is supported by Nabyonga, Desmet, Karamagi, et al (2005), who have demonstrated that removal of user fees greatly increased the number of sick people seeking care from formal facilities. Government funding therefore, ensures that health services are equitably distributed and hence increases utilization. Amone, Asio, Cattaneo, et al (2005), noted that user fees represent an unfair mechanism of financing health services because they exclude the poor and the sick. However, the fact that the trend of utilization is improving amidst these circumstances, needed to be studied.

There is direct and indirect cost of care. The more direct costs include the fees charged, which may be formal or informal. Formal and informal fees determine utilization of health care services. Indirect costs include transport costs, waiting time, travel time, and opportunity costs for the direct fees paid. Direct costs charged, which may be formal or informal fees determine utilization of health services in the developing world (Gish, 1990). Even in public facilities where services are expected to be free at the point of delivery, it is not uncommon for

patients to be requested to make informal, under-the- table payments for these services (Boller, Wyss, Mtasiwa, et al 2003). In addition, patients are some times asked to provide supplies like syringes or gloves. Some patients are asked to pay for services which according to Policy, are exempted from fees. This irregularity in expectations negatively influences people's perception about health care and often deter those who either can't pay or don't receive services, to use services (Amone, Asio, Cattaneo, et al 2005). The irregularity also promotes the use of private facilities where payments are formal, though higher than public facilities (Bitran and McInnes 1993) as PNFP recover about 60% of their recurrent costs from fees whereas PFP recover 90-100% (Sengooba and McPake 2004). According to Sengooba and McPake (2004), informal fees were a common phenomenon during implementation of formal cost sharing. They refer to Konde-Lule, Okello, Mbonye et al (1998), who reported that by 1998, over half (56%) of patients in public health facilities were paying informal fees to health care workers.

Much has been written about the impact of removal of formal fees on utilization of health services in public facilities in Uganda and other countries in the region. According to Nabyonga, Desmet, Karamagi, et al (2005), there has been an exponential increment in utilization of OPD services in Uganda since the abolition of user fees in March 2001. Similarly, Hussein and Mujinja (1997), report that when fees were introduced in Tanzanian utilization fell by over 50%. However, Konde-Lule, Okello, Mbonye et al (1998) established that before the abolition of cost sharing, some sections of the community had bought into the idea after seeing some of the benefits in terms of quality and availability of drugs, and did not consider it as a deterrent to seeking care. However, they noted that lack of financial



management skills was a problem faced by many health facilities. There was a need to establish whether informal fees are still in place and what impact they have on individual decision to use health care services when they fall ill. Also there was a need to understand the relationship between informal fees and choice of provider from whom to seek care.

Geographical or physical access

Many writers have identified distance to health facilities as a key determinant to utilization of services in developing countries (Gish 1990). Geographical distribution of health services determines utilization. In a study carried out in Southern and Western Ethiopia, it was found that 66% of pediatric in-patients of a Regional Hospital were actually residents of the town where the facility was located, with most of the remaining patients coming from the neighboring districts in distances not exceeding 3kms (Kloos 1990). Kloos therefore concluded that health service distribution greatly influenced utilization. Vernon (1993), as cited by Katende (1994), confirms that geographical access to services increases utilization rates. However, according to Ellis and Mwabu (2004), choice of provider is not strongly determined by distance, as many users are willing to trade distance for quality, waiting time and price. This view is shared by Deloitte Touche Tohmatsu (2002), who established that patients traveled from as far as western Tanzania, eastern Congo and Rwanda to seek care from Benba Clinic located in Mbarara District in western Uganda.

Utilization of health services in the country varies according to location and distance from health facilities (UAC 1998). According to the MOH (1999), an average of only about 49% of the population of Uganda lived within 5km distance from a health facility. This is far below the HSSP target of 75%. Coupled with poor transport networks in rural areas, this negatively affects the utilization rates of health care in the country. In a study on the impact of access to health services on infant and child mortality in rural Uganda, Katende (1994), established that children residing furthest from health facilities had a higher probability of dying within the first month of their life. However, Sengooba and McPake (2004), concluded that geographical access to health facilities does not necessarily translate into utilization of health care services. Therefore, there was a need to establish how access has changed over the years and how this change is influencing utilization of health care services.

Service organization and integration

Betran and McInnes (1993), explained that the preference for private facilities among older populations could be attributed to a wide range of services they provide. In Zambia, mission health facilities provide health care to 50% of the rural population and 35 % of the total population, while in Burundi, more than 30% of health care services are provided by mission health facilities. Higher value is placed on integrated kind of service arrangement than where individuals have to move from one facility to another to get comprehensive care including consultation, examination and pharmaceuticals. Overall, managerial separation of activities and competitive planning among what are basically complementally

activities discourages utilization (Gish 1990). Gish further urged that health care delivery systems primarily based on a series of vertical program interventions or separate services, however well organized and managed, are generally felt to be less acceptable to the populations. He made an exception for special situations, which should be ad hoc and temporary arrangements but not the order of health care service delivery. Such special situations may include highly stigmatized conditions or conditions that need specialized care like caring for AIDS patients or the elderly. In Uganda, NGOs own 40% of all health facilities. Data compiled by Hanson and Berman (1994) indicated that in 1988, 56% of the Uganda population sought care from public providers, 31% from PNFP, 10% from PFP and 3% elsewhere. However, it is not known how the Ugandan population today makes decisions to use health services and the choice between providers based on the range of services they provide.

2.2 Consumer level

Income and poverty

In its strictest form, poverty refers to lack of money or material possessions. In a broader sense, it can be understood as having no means, which may include lack of social or educational resources (WHO 2001). Individual and family income determines the degree of utilization of health services. The IUHPE (2000), concurred that poverty exacerbates inequality in utilization of health care. This is signified by the differences in utilization between developing and developed countries, where a big proportion of the population is insured for health care, and utilization is higher (Gish 1990). This is particularly so where consumers of health

services have to pay out-of-pocket fees at the point of delivery in addition to incurring additional costs for transport and drugs.

Inequality in other social and economic conditions that are associated with poverty also determines the level of utilization of health care (IUHPE 2000). IUHPE has collected evidence that indicated that poverty, homelessness, joblessness, low-income, poor sanitation and various social breakdowns including the family unit are significant contributory factors to poor utilization of health services (IUHPE 2000).

Betran and McInnes (1993), observed that the affluent had more choices on the type of provider of health care services than the poor. However, they concluded that whereas the public sector provided most of its services to the poor, the private sector provides services to all income groups equally. This view is supported by Hanson and Berman (1994), who concluded that ownership of services used differs by income group. They reported that use of public health facilities decreased with income while use of private services increased with income.

Whereas much has been written about the impact of user fees on utilization of public health services especially among the low income groups in Uganda and the East African region, there exists a gap in knowledge on how income and poverty influence choice of providers.

Gender

According to Nanda (2002) unmarried and widowed women, especially those with children, find it difficult to pay for health care costs. This is aggravated when a women has a condition that needs long-term or regular care and treatment. She observed that women with children found it difficult to re-allocate time and resources within the household to health care. However, Meininger (1986) concluded that women tend to seek health care more than men. Hussein and Mujinja (1997) also found that women utilized both public and private facilities more than men. The Tanzania Household Budget Survey 2000/1 showed that men and women disproportionately use health services (NBST 2002, and Nabyonga, Desmet, Karamagi, et al 2005). In Uganda, women have the primary responsibility for their own and children's health care, while it is frequently men who have access to cash. According to the MOFPED (2003), women's lack of control over disposable income limits their consumption of health services due to inability to either pay for private fees in public facilities, transport costs or procuring drugs when there are stock-outs in pubic facilities, or private consultations in private facilities. Therefore, there was a need to understand why women tend to use services more often than men for illness other than maternity related needs, yet there may be income disparities in favor of men in many communities.

Education

There are conflicting opinions on the contribution of education to utilization of health services. On the one hand, some literature shows that educated people are more aware of the existence of treatment, are more in charge of their lives and are

likely to seek care when they are ill (Betran and McInnes 1993). This school of thought was supported by Pichette and Mtasiwa (2005). They asserted that lack of knowledge on when to seek care, for example failure to recognize symptoms of illnesses deterred an individual from seeking care. The level of education of an individual enhances their health literacy. Health literacy refers to knowledge and skills which determine the ability of individuals to gain access to, understand and use information about health care. This has a direct multiplier effect on utilization (Pencheon, Guest, Melzer, et al 2001). Another school of thought proposed by Heller (1982), as cited by Betran and McInnes (1993), is that more educated people are likely to have milder illnesses because they would tend to have higher standards of living. Due to milder illnesses, they are less likely to seek care. However, there is consensus that the level of education influences the choice of provider, where the more educated people have a higher preference for private providers compared to less educated people (Betran and McInnes 1993). Betran and McInnes (1993), concluded that the choice is not influenced by higher levels of income among the more educated people, but the perception that private providers have a greater positive effect on their health. In a study on the impact of access to health services on infant and childhood mortality in rural Uganda, Katende (1994), established that utilization of services by infants depended on maternal education. There was therefore a need to reconcile the different schools of thought in the current Ugandan context, taking into account all age groups, levels of education and gender

Age and vulnerability

Age and disability determine the degree of utilization of health care. According to IUHPE (2000), the young and the very old are likely to utilize less health services. In addition, people with chronic diseases and other forms of disability are more susceptible to using less and less services(IUHPE 2000). Similarly, households with members who are disabled or are chronically ill tend to use less health services (IUHPE 2000). On the other hand, Bitran and McInnes (1993), established that infants and the young were generally more frequent users of care. This could be attributed to their greater susceptibility to illness.

However, whereas it would be normally expected that infants and children are more susceptible to common illnesses due to lower immunity and would use health facilities more, much of the contemporary literature concentrates on adults (Nabyonga, Desmet, Karamagi, et al 2005 and Hussein and Mujinja 1997). Therefore it is difficult to make comparisons over all age groups. Information from secondary sources tends to be inconclusive (Nabyonga, Desmet, Karamagi,et al 2005), hence a need to determine the relationship between age and vulnerability and the propensity of using health care.

Definition of cause, severity of illness and perception of need

Superstition about the cause of disease or belief that no medical treatment is available, like convulsions in children, determines whether or not individuals seek care (Pichette and Mtasiwa 2005). Betran and McInnes (1993), concur that cultural definition of illness influenced utilization of services and the choice of providers.

Similar studies in India revealed that people went to seek health care from formal facilities for common conditions like diarrhoea yet they sought care from traditional and spiritual healers for more serious conditions, depending on what they defined to be the cause of the illness (Wouters 1992). Holland (1983), observed that attitudes determine acceptability of service and influence utilization rates. Stigimatized illnesses like STIs, mental problems or HIV/AIDS, are less likely to be reported to HCWs compared to socially acceptable illnesses. Similarly, illnesses that have long latency periods are discounted. Particular attention is given to what are considered acute illnesses with severe outcomes. In a study on gender dimensions of user fees, Nanda (2002), observed that perception of severity and morbidity of illness affects health care seeking decisions especially when payment in involved. Similarly, Blanchard-Horan 2003 found that women participating in micro-insurance schemes tended to seek care when they considered the illness very severe, which is then more expensive to treat in addition to indirect costs like loss of work.

According to Bitran and McInnes (2003), it is the individual perceptions of health care need that drives an individual to seek for care from a health professional. Perceptions are influenced by symptoms, the person's health literacy and or general education. Education might influence individuals' interpretation of symptoms and knowledge of how they can be treated. In a study on physician utilization and psychosocial factors, Mechanic (1979), concluded that an individual's perception of the severity of the illness was a key issue in influencing their decision to seek care.

There are individuals who think they have a problem that deserves seeking health care and according to professionals, that problem deserves professional attention. There are also people who, according to health care professionals, have a problem that deserves care but the individuals do not perceive themselves to be in need of care. The later will not seek care. According to Bitran and McInnes (1993), it is the later group that poses a problem to the health systems. They underutilize services that are "planned" for them and consequently reduce their quality of life. In addition, this under-utilization of health care services results into "idle" resources in health facilities due to excess supply.

According to a study on health utilization among members of micro-insurance scheme, the majority of whom were women, Blanchard-Horan (2003), established that cultural issues contribute to under-utilization of health care services. There is no information on the impact of perception of need and severity of illness on utilization of services among the general population in Uganda.

Family, social and employment roles

Meininger (1986), established that the presence of children in a home has significant impact on men seeking health care when ill but not women. She concluded that employment had no impact on seeking care when ill for both men and women. However, the study was carried out in USA where the majority of the people were insured and the family sizes are generally smaller, with higher employment levels compared to Uganda. There was need therefore to establish a

relationship between individuals' family, employment and other roles and their health seeking behaviors.

Perceptions of quality of services

Many studies have indicated that perceived facility quality strongly influences utilization and choice of providers (Ellis and Mwabu 2004). This view is shared by Nanda (2002) who established that perceived quality of care was a key determinant of the way individuals, especially women, made decisions regarding health care seeking.However, according to Bitran and McInnes (1993), there is often a discrepancy between the population's perception of quality and quality as defined by the medical profession. What determines utilization of services is the population perception of quality and not what the medical professionals define as quality. When users perceive the quality of a particular service or facility to be high, they will be motivated to seek care for illnesses they have from that facility. Similarly, when the population perceives the quality of care provided by a given facility to be low, they will seek alternative sources of care. Whereas, there are claims that the quality of care has gone down in Uganda (MOFPED 2003), the trend in utilization is reported to be improving though remains below international and regional levels. This relationship needed to be examined critically.

Community ownership and participation in health care delivery

Participation of communities in health delivery promotes ownership and enhances utilization of health services. This could take form of educating others on health seeking behaviours and helping the sick to get to facilities or simply letting people

know the working times of facilities (Pichette and Mtasiwa 2005). In a study carried out in Kabarole District on impact of user fees of health staff incentives, Kipp, Kamugisha, Jacobs, et al (2001) established that where community-HCW relationship improved, utilization of services increased. However, there is no information on the extent at which users feel they are participating in health delivery in Uganda.

2.3 Social factors

Transport costs and availability

According to Ellis and Mwabu (2004), availability of means of transport is strongly associated with utilization of health services. They added that, in places where transport was not readily available, costs could be very significant and hence deter sick people from seeking care. This view was supported by Kloos (1990), in a study carried out in Ethiopia, where he found that among hospital patients coming from distances longer than 10kms, only 7% used motorized transport. This correlated with the finding that over 60% of patients were from distances of less than 3kms from hospitals, where the mode of transport was walking or using donkeys. In Sierra Leone, there was significant increase in purchase of drugs from peddlers during rainy seasons when roads were impassible by public vehicles, making formal health facilities inaccessible (Hanson and Berman 1994). The IUHPE (2000), has also established that lack of affordable and accessible public transport was a distinct disadvantage to utilization of existing health services.

Blanchard-Horan (2003) had similar findings in a study on health utilization among Ugandan's participating in health care micro-insurance. She concluded that unavailability of transport services influenced under-utilization of health care services. In Uganda, problems of transportation and access to care are associated with underutilization of health care (Blanchard-Horan, 2003). In a study on the impact of access to health services on infant and child mortality in rural Uganda, Katende (1994), confirmed that the type of access road had a significant effect on childhood mortality. There was a need to determine the relationship between transport availability, cost, and use of health services when ill, in the current Ugandan setting.

Economic access

In addition to geographical access, economic access has been found to significantly influence utilization. Donaldson (1999), observed that individuals without insurance faced additional barriers to seeking care when ill. He further noted that less than 1% of the population in many African countries is covered by private insurance. For women, their ability to access cash at any time of the year is very restricted. In a study on gender dimension of user fees, Nanda (2002), established that for individuals depending on agricultural income, access to cash restricted their ability to meet direct and or indirect costs of their health care. Blanchard-Horan (2003), concurs when she notes that those low income communities were more prone to underutilization of health care services. She suggested that under-utilization of health care services is a problem that is perpetuated by economic conditions. There is corroborative evidence to suggest that where a big proportion

of the population is insured for health care, utilization is higher (Gish 1990, and Bitran and McInnes 1993).

In Uganda, indirect costs are sometimes higher than the direct fees charged by health facilities. Indirect costs include supplies and utilities like paraffin (Nanda 2002). This affects the way individuals make decisions to seek care and the very poor, often resort to traditional healers or partial treatment. This view is shared by Konde-Lule, Okello, Mbonye et al (1998) who established that poverty was a key barrier to utilization of health care services and determinant of choice of health care service provider. They noted that the poor tended to seek care from public health facilities while the better off members of the community sought care from private facilities because they were required to pay the full cost of treatment. There is no information on the impact of economic access utilization of health facilities in Uganda among the general population after abolition of user fees.

Availability of other basic services

Some studies have pointed out that other social services like sanitation, water and nutrition explain the utilization levels of health services (Wouters 1992). Betran and McInnes (1993), found that in Latin American cities, individuals' access to water and sanitation systems explained some of their differences in perceiving illness and therefore seeking care. Similarly, their nutritional status had a positive relationship with the way they perceived illness and therefore care. Kloos (1990), in a study carried out in Ethiopia, identified famine as a contributory factor to utilization of health services.

From the available literature, which is generated from largely facility-based routine data, there is no evidence of relationship between individuals' utilization of health services and their access to other social and basic services.

Political will and ideology, and policy guidance and decisions

According to Gish (1990), the political situation in any given country or community directly influences utilization of health services. In particular, political will, grants the health system the resources; financial, human and equipment that are needed to support interventions that target the populations. Low budget allocations to health services results into a large reserve of underutilized health care resources in terms of human resources and physical infrastructure, along side unmet need for health care in terms of supplies and drugs (Gish 1990).

Politics creates a working environment for donor programs and also determines the level of flow of external assistance in form of aid (Yates 2004). Issues like sector ceilings and macro-economic debates, competition from other sectors and preferences for aid mechanisms are determined by high level political and policy decisions. According to Sengooba and McPake (2004), by year 2000, donors contributed 34% of the recurrent health budget and 82% of the development budget.

The HSSP 2000/1-2004/5, that set policy and directs action, set the target for contacts per person per year at 0.70 (MOH 1999).

Abolition of user fees, which was a political move initiated by the Head of State (Sengooba and McPake 2004), strongly increased utilization of health services among the poor segments of the Ugandan community. It was not seen as an effective way of increasing utilization by financial experts including the World Bank, and opposed by some health planners and managers. In 2001, the World Bank, following the canon principle of health care being price inelastic, predicted a mere less than 5% increase in utilization of health services. In 2004 the increase was almost 80%! (Yates 2004). Therefore there was a need to understand the implication of political and policy decisions on the ability of providers to deliver services to the people in need.

Availability of alternative care

Some studies have established that people who are ill and do not gain access to any formal health care could range between 26-62 %. They attribute this to availability of alternative sources of care. Alternative sources of care include traditional medicine and providers, and self-medication (Wouters 1992). It is not known how communities in Uganda make decisions to use formal or informal care systems in relation to alternative sources of care.

Social stability

In a study conducted in Ethiopia, Kloos (1990), established that social instability contributed to underutilization of health services. This could take form of wars, floods, famine and drought or any other events that cause upheavals among communities. No information is available on how such happenings are influencing utilization of health services in Uganda.

CHAPTER 3: METHODOLOGY OF THE STUDY

3.1 Study design

The study was a descriptive cross-sectional one.

3.2 Data collection methods

In order to gain a deeper understanding of what determines utilization, multiple data collection methods and sources of information to answer the research questions were employed. Both primary and secondary data were collected. The study used both qualitative and quantitative data collection methods. Qualitative tools were employed to explore some of the issues that could not be extracted using a structured questionnaire and gain an in-depth analysis of issues that influence use of health care services by the population. Multi-stage sampling was employed.

Data was collected directly from the people using an interview-structured questionnaire (see Annex II) administered to a sample of 460 people. The interviews were conducted in Luganda which is the mother language for 95% of the population of the district. A Luganda version of the interview-structured questionnaire is attached as Annex III

In-depth interviews (IDI) were conducted with leaders in the community including LC officials, health sector leaders and health care workers who were selected using the snowballing approach or referrals. A guide was used for the IDI (See Annexes IV-VI).

FGDs were carried-out to obtain an in-depth understanding of consumer, provider and social-economic attributes that influence use or non-use of health care services in a way that was not constrained by predetermined categories of responses covered by the structured questionnaire. They were used to understand the experiences of a cross-section of people and generate burning issues as far as utilization of health services was concerned. In particular FGDs were used among the consumer community to get their opinions and perceptions and explore their attitudes towards issues related to health seeking behaviour (see Annex VII). Unique cases and situations rather than generalizations were isolated through FGDs. FGDs empowered individuals to express themselves by providing group support and assurance. The sharing of personal experiences, feelings and opinions by members of the groups provided for a clearer understating of issues in the larger group they came from. FGDs were also used to generate an understanding of language and words which are used or have been adopted in relation to seeking care. The FGDs were carried out in Luganda. A Luganda version of the FGD guide is attached in Annex VIII.

In order to limit power imbalance between FGD participants and moderators, non-health care workers did the facilitation. These included teachers, secretaries from non-health oriented organizations and University students. Participants were recruited by the interviewers of the population survey. Participants were largely drawn from individuals who never met the criteria of having experienced an illness

in the past 4 weeks and households that were ineligible according to the sampling procedure. This reduced moderator-selection bias of group composition.

Participants of FGDs were selected because they had similar socio-demographic characteristics like those of the population survey. Due to time constraints, FGDs were carried out during the same time population interviews were carried out.

A mapping of existing health facilities in the study localities and their levels was established before data collection commenced. This helped in understanding the kind of facilities from which the population in a particular locality sought care.

3.3 Study site

The study was conducted in Luweero district. The district is located in the central part of Uganda, bordered by Masindi and Nakasongola districts to the north, Wakiso to the south, Mukono and Kayunga to the east and Mubende and Kiboga to the west. The District is divided into 3 (three) counties (*Amasaza*); Katikamu, Nakaseke, and Bamunanika. However, at the time the study was conducted, Nakaseke county got autonomy to become a separate district.

The counties are further sub-divided into 3-8 sub-counties (*Gombolola*) each. For polling purposes, Katikamu county is further subdivided into 2 constituencies; Katikamu South and Katikamu North. The sub-counties are further divided into about 3-9 parishes (*Emiruka*) each. The parishes and villages constituted the sites

for the study. The health care delivery system corresponds with the electoral constituencies. The district has 4 health sub-districts (HSD).

In year 2003/4, the district had an estimated population of 499,992 people. The infant mortality rate and under 5 mortality rate was estimated at 98/1,000 and 150/1,000 respectively. The maternal mortality rare was estimated at 550/100,000.

The top 10 conditions seen among OPD attendees in the district are malaria, upper respiratory infections, oral problems, pneumonia, anemia, diabetes mellitus, PUD, diarrhea, AIDS and hypertension. The proportion of the population in the district within 5 kilometers distance from a health facility was 49%. The district had 4 health sub-districts, 3 hospitals, 13 medical officers, 51 clinical officers, 70 midwives, 95 nurses and 4 pharmacy personnel (MOH 2004).

In the year 2003/4, Luweero ranked 42 of 56 on the District League Table. This is a table that gives an assessment of individual district's performance against the planned district HSSP monitoring indicators. The OPD utilization in the district stood at 0.71 per person per year.

Luweero District provided an interesting setting because it had a diverse network of health facilities of all levels including public and PNFP hospitals, PFP facilities and indeed informal providers. Specifically, the district was selected because of the following reasons:

i. The Local Government Act of 1997 decentralized service delivery to local governments. A larger proportion of new and traditional services icluding

health care services have been directed to district service delivery activities so as to ensure greater access to the minimum health package.

ii. It is a rural district. According to the National Health Policy, 1999, geographical access to health facilities has been limited to 49% of the population with rural areas more negatively affected. Even within rural areas, facilities are often located in towns along main roads. The district has only one tarmac highway.

iii. According to the Annual Health Sector Performance Report 2003/4, the district was one of the few rural districts with an over supply of all cadres of HCWs. It was also the only rural district in the country with the highest number of clinical staff including medical officers.

3.4 Study population

The study had four study populations:

a. All residents of Luweero district who reported an illness in the 4 weeks preceding the interview date

b. Local leaders

c. Health sector officials and

d. Health service providers

3.5 Sample size estimation

i. Population survey

In a study on household choice among medical treatment alternatives in rural Kenya, Mwabu (1984), established that 38% of all persons reporting illness did not

seek care; that is, 62% sought care. Therefore the sample size was calculated using the Kish (1965) formula as shown below:

$$n = \frac{z^2 pq}{d^2}$$

where:

d is the desired precision or margin of error, set at 5%

p is the proportion of people reporting illness and seeking care (62%)

q is the proportion of people reporting illness and not seeking care (38%)

z is 95% confidence level standard deviation (1.96), which is approximated to 2, thus

$$n = \frac{2^2 \text{ X } 0.62\text{X } 0.38}{0.05^2}$$

$$\frac{0.9424}{0.0025} = 376.96$$

Therefore, n is approximately 377 respondents

The UDHS 1995 had response rates that varied between 96% among women and 90% among men. For the UDHS 2000/1, the response rates varied between 96% and 92%. Assuming the worst scenario, the study anticipated having a response rate of 90% and a non-response rate of 10%. Therefore, to compensate for non-response, the sample size was inflated by 10% (38). A sample size of 415 candidates was designated for interview. The non-responses were anticipated to include people who refused to complete the interview, people who could not

answer all questions for various reasons including sickness, or incomplete questionnaires. Effectively 460 respondents were interviewed.

ii. Key Informants (KI) Interviews

Personal interviews were conducted with 12 key informants using IDI guides. These comprised of managers of health facilities, HCWs, health sector officials, district political leaders, and district civil servants. The IDIs were designed to obtain information from the different cadres of the informants. The key informants included 2 LC health secretaries, the District Secretary for Health and Social Services, a Medical Officer from one of the private-for-profit facilities and, a Medical Officer from a private-not-for-profit facility, 2 nurses from HC II facilities, 2 Clinical Officers from Health Center III facilities, 2 members of local health facility governing committees and district health officials at a professional level. Many of these KIs were contacted through referrals. Care was taken to ensure balance in the parishes.

iii. Focus Group Discussions (FGDs)

A total of 16 FGDs were carried out; 4 for young men, 4 for young women, 4 for older men and 4 for older women. The young people were aged approximately 15-24. Two FGDs were conducted in each of the eight locations where interviews were conducted. They comprised of groups of 6-10 people. The locations to conduct FGDs were selected by simple random sampling.

3.6 Sampling procedure

Vital registration is still underdeveloped in Uganda. Therefore the election register, last updated May 2005, was the most reliable source of information on villages and locations. Multi-stage and stratified sampling were employed. The first stage was to select one parish from each of the 4-polling/electoral constituencies ("counties"). All parishes in each of the constituencies constituted the sampling frame. The election register was used as the source of this information. Simple random sampling was used. Names of all the parishes in each constituency were written on pieces of paper, the papers folded and placed in a box, and one picked.

The second stage was, using simple random sampling, 2 locations (trading centers/municipalities or polling stations) were selected from each of the 4 parishes selected in stage one, making a total of 8 locations. The election register provided the sampling frame. The locations were stratified into trading centers/ municipalities and villages where applicable.

The last stage was to identify individuals to interview in each of the 8 locations. A random starting point was selected and the interviewers moved eastwards to every other house to conduct interviews until the desired number was attained. Effectively, 54-61 respondents were interviewed in each of the locations.

For KIs, the DDHS was the first contact person. He was requested to make the initial referrals based on the study design. Subsequently, other KIs were requested to make referrals until the desired number was obtained.

Participants of FGDs were be recruited by the interviewers of the population survey. They identified those individuals who did not meet the inclusion criteria of the population survey.

3.7 Sampling unit

The sampling unit for the population survey was individuals.

3.8 Study variables

3.8.1 Dependent variables

i. Seeking care

ii. Not seeking care

3.8.2 Independent variables

Table 1: ***Consumer independent variables***

Demographic characteristics	**Vulnerability factors**	**Perceived quality of service**	**Perception of cause of illness and severity**
• Age • Gender • Education level • Marital Status	• Presence of chronic conditions • Physical disability • Gender of head of household • Age of household head • Source of money for meeting health care costs	• Recovery from illness • Availability of staff • General cleanliness • Availability of equipment • Availability of drugs and supplies	• Relating illness with past illnesses • Perceived health status • Role limitations

Table 2: Provider and socio-economic independent variables

Provider attributes	**Socio-economic environment**
• Formal direct costs • Formal indirect costs • Informal fees • Distance to health Facility • Level of facility • Ownership of facility • Community involvement • Competence of HCWs	• Size of household • Age of members of household • Type of occupation • Level of income • Level of education of household head • Availability of means of transport • Transport costs • Economic access

3.9 Data collection process

a ***Primary data***

Specific procedures are outlined below:

Population survey

i. Permission to carry out interviews was requested from LC1 officials of respective locations.

ii. Trained interviewers conducted the population interviews.

iii. For every village/location, interviews were carried out for 2 and half days.

iv. Verbal informed consent was sought from all the individuals prior to the interview, after explaining to them the purpose of the study. A copy of the consent form used is attached in Annex XIII.

v. Completed questionnaires were reviewed. In case of substantial lack of clarity, the interviewer made a callback to the respondents to seek clarity.

In-Depth Interviews (IDI)

An IDI guide was used for the particular cadre of KIs. The IDI guides were expanded or reduced depending on the flow of discussions. Some of the IDIs were carried out by the Principal Investigator (PI). Due to time constraints, others were carried out by the research team coordinator. Notes were taken during discussions. No tape recording was done. Where the timetable allowed, at least 2 interviews were carried out every day.

Focus Group Discussions (FGDs)

Teams of two administered a FGD guide. Other than clarifying questions, in order to maintain homogeneity of responses, additional questions were limited to probes. One person acted as the lead facilitator while the other took notes on flip charts or notepapers; where it was not possible to use flip charts. FGDs were conducted for 60-90 minutes each.

b. Secondary data

Reports from the DDHS office, the MOH and selected HFs were studied. These provided information among others, on user patterns, catchment area, population, common illnesses, financing levels and community involvement. Other relevant documents such as international journals and other publications, national policy and HF documents were reviewed to augment data that was collected from primary sources.

3.10 Data processing

Data entry

Data entry commenced upon completion of the data collection process. Quantitative data was entered into Epinfo Version 6. Qualitative data was typed using Microsoft-word and analyzed by excel using the master sheet technique.

Data cleaning and validation

a. Quantitative data

i. Every night, the interviewers reviewed completed questionnaires to make sure that there were no gaps. From time to time, the principal investigator, also took part in the review process.

ii. A trained coding assistant checked completed questionnaires in the process of coding.

iii. Once entered in the computer program, data comparison was made between the actual and expected frequencies. Variations were identified, investigated and where appropriate, corrections made.

b. Qualitative data

Notes from FGDs and IDIs were reviewed every night to ensure that they were clear. They were transcribed into well-organized notes. The notes were written according to discussion topics. They were later categorized according to the order of the discussion. Re-categorization was made during analysis based on study questions, variables and themes as appropriate. A combination of transcript-based, note-based and memory-based analysis was used. In addition, debriefing notes and moderator notes were reviewed. In the master sheet, the issues that emerged from the discussions were presented into grids/ matrices based on themes and research objectives. Typical quotes were identified to emphasize the findings. The categories were related to the study objectives.

3.11 Ethical considerations

The study proposal was presented to the Director of Post Graduate Studies of MUCHS for clearance. The study proposal was also presented to the DDHS from whom permission to conduct the study in the district was sought. Permission to carry-out interviews and FGDs was sought from LC I officials of respective locations.

In order to maintain respect to participants, verbal consent was sought from respondents before interviews were carried out. No names of population survey respondents were taken to keep their anonyminity. Names of the KIs and FGD participants are not presented in the report to secure their confidentiality.

3.12 Quality control

A two-day training was conducted for interviewers, coding assistants and FGDs facilitators. The training went through the objectives of the study and the various tools. This was followed by group pre-testing of the tools, pilot testing and feedback on the group and pilot testing exercises. As part of the training, all members of the research team participated in the translation of respective tools into Luganda. The population data collection tool was pilot tested in Kampala and Mpigi Districts.

The training aimed at minimizing wrongly filled questionnaires and maximize cooperation from the FGD participants. Emphasis was put on explaining the purpose of the study so as to reduce out-right refusals. FGDs facilitators were

trained on how to manage group dynamics and taking complete notes from discussions.

Every location was allocated 2 and half days, so there was a possibility of calling-back on respondents when the interviewers realized major gaps in completed tools.

A person, other than the one who completed the tool, did the data validation and coding on the completed questionnaires every night. In case of substantial lack of clarity, the interviewer was required to make clarifications and or make a callback on their respondents to seek clarity. If a questionnaire was incomplete and it was not possible to fill in the gaps during entry, that respondent was categorized as a non-respondent.

Qualitative notes were reviewed every night to ensure that they were consistent with the discussion. This reduced loss of memory on issues raised by different participants. Once they were typed, another member of the research ream reviewed the notes to ensure clarity.

A day was also set aside for wrap-up and final checking of all completed questionnaires and notes taken by the entire study team. A debriefing was done among all members of the research team and particularly the FGD facilitators so as to identify salient issues that emerged from FGD sessions.

3.13 Definition of terms

In this study the following terms were used as described below:

i. *Demand for health care*

Quantity of health care service that people are willing to seek and obtain

ii. *Need for health care*

Illness that in the opinion of both HCWs and patients, requires attention of a health care professional (Holland 1983).

iii. *Illness*

Any symptoms that make a person depart from a state of physical and mental well-being.

iv. *Health status*

Individual perceived health status, role limitations, basic functional limitations and restricted activity days (Pope 1988).

v. *Perceived health status*

Self-rated health status measure in comparison with other individuals ranked on a 4-level scale; very good, good, fair or poor.

vi. *Role limitations*

Impact of individuals' health on their pay job and or other activities they normally perform e.g. working, looking after children, cleaning the house, going to school, playing, etc in comparison with normal activities of individuals as ranked on a 4-level scale; not limited, limited outside activities, limited amount of all usual activities and cannot perform any usual activity.

vii. *Formal health care services*

Health services delivered in "western" style facilities. These include public, and private facilities but excluding drug shops. Private facilities included private-for-profit and private-not-for profit which are run by faith-based and or charitable non-governmental organizations. Formal health services included services delivered through mobile clinics, provided they were delivered by qualified health care workers.

viii. *Health facility*

Any establishment where routine health care consultation is carried out by qualified health care workers including medical officers, clinical officers, nurses or midwives. It excludes drugs shops that do not offer consultation services.

ix. *Private health care*

Private health care refer to all health care providers working outside the direct control of the state. Private health care provision will further be used to refer to both private-for-profit (PFP) and private-not-for-profit (Hanson and Berman 1994).

x. *Health care delivery system*

According to the HSSP 2000/1-2004/5, formal health care services in Uganda are delivered in facilities that are classified as below:

a. Health Center II (HCII)

This is the first level of health care delivery. Services are supposed to be delivered by at least 2 comprehensive nurses aided by 2 nursing assistants. A HC II is supposed to serve a population of about 5,000 residents. Every parish is supposed to have at least I HC II.

b. Health Center III (HC III)

Services are supposed to be delivered by at least 1 clinical officer and 3 comprehensive enrolled or registered nurses. The clinical staff is supposed to be aided by at least 1 nursing assistant, a laboratory technician and a health assistant. A HC III is supposed to serve a population of about 20,000 residents. Every sub-county is supposed to have at least 1 HC III.

c. Health Center IV (HC IV)

Services are supposed to be delivered by at least 2 clinical officers, 1 medical officer, and 4 enrolled or registered nurses and midwives. The clinical staffs are supposed to be supported by at least 1 nursing assistant, 1 laboratory technicians and 1 dispenser. As part of the facility establishment, there should be an anesthetist, community health assistant, public health dental assistant, a health educator and a health information assistant. The facility is supposed to be equipped

with a basic operating theater. A HC IV is expected to serve a population of approximately 100,000 residents. Normally, every county is expected to have at least 1 public or PNFP HC IV health facility. A HC IV is supposed to host the headquarters of a Health Sub-district (HSD).

d. Hospital

Services are supposed to be delivered by clinical officers, medical officers, and enrolled or registered nurses and midwives. The clinical staffs are supposed to be supported by radiographers, laboratory technicians and technologists, dispensers and other medical related professionals. Every district is expected to have at least one designated public or PNFP hospital serving a population of approximately 500,000 residents.

xi. *Health Sub-District (HSD)*

This is a self contained sub-system within a district health care delivery system. Normally a HDS coincides with an electoral constituency or administrative country. Every HSD is expected to have at least one public health facility at HCIV level.

xii. Trading centre

Any settlement that has a tarmac road or first class murram road, or a permanent bus or taxi stand or park and at least 30 shops in a radius of one square kilometer.

xiii. *Rural district*

Any district in Uganda other than the following major business, administration or industrial centers: Kampala, Entebbe and Jinja.

xiv. *Poverty*

Lack of money or material possessions, based on less than one dollar (Ugshs1,800, June 2005) a day spending. A 5-level scale of monthly income was used as show below:

Level	Amount (Ugshs)
1	Less than 54,000
2	54,001-108,000
3	108,001-162,000
4	162,001-216,000
5	216,001-270,000

xv. *Proxy respondent*

This is an individual who was interviewed on behalf of an under 15 respondent. This was done in order to ensure reliability of the information given as very young children, even when they could speak, cannot, generally be relied upon to accurately report on events.

xvi. Education system in Uganda

The education system in Uganda is classified into primary school (P1-P7), ordinary senior secondary school level (S1-S4), advanced senior secondary school level (S5-S6), tertiary institutions of higher learning, and university education.

xvii. Marital status

In union, included all those individuals who reported to be living with a partner of the opposite sex and had a conjugal relationship. Previously in union, included individuals who reported having separated or had lost their partners, and at the time of the interview, were living on their own.

xviii. Age

All respondents below the age of 1 were categorized as 1 year old.

3.14 Study limitations

i. The cross-sectional nature of the study implied that issues existing at the particular point in time of the data collection may be over-represented hence affecting the reliability of the results. In addition, seasonal variations and severity of illness may affect health care seeking decision taken by individual. In order to neutralize this recall-bias, interviewers were trained to capture issues that may have happened at an earlier point in time. In addition, triangulation was employed such that data collected from different study populations could be used to augment each other. In addition, different sources of data; primary and secondary, were sought to provide corroborative evidence on findings.

ii. For some proxy respondents, it was difficult to distinguish between their own characteristics and characteristics attributable to the respondent. In particular, the question of dependency and education status required the characteristics of the proxy respondent to be registered. This is because

adults were thought to have a bigger influence on the dependent variable of seeking care than those of the under 15 respondents themselves. However, for the same respondent, if the proxy is varied, the conclusion would vary. Similarly, some of the variables like marital status and gender might be attributes of the proxy and not the respondent. This might affect the reliability of the results.

iii. Respondents were very hesitant to disclose their earnings despite being assured that the information will be kept confidential and not disclosed beyond the confines of the study. Therefore, quantitative information on this variable may be less reliable.

iv. The ethical challenge of interviewing ill people who reported they had not got any remedy and having nothing to offer them.

v. There is a thin difference between different HF levels, which makes categorization of their use less reliable. There was irregularity in definition of levels between district health officials, the managers of their HFs and the clients. However, this does not affect the definition of their ownership.

3.15 Study management

i. The SPHSS appointed a supervisor to the Principal Investigator (PI) and the research work.

ii. Clearance was sought from the Director Post Graduate studies, MUCHS.

iii. The DDHS was requested to send letters to notify LCI officials, introducing the student once the locations had been identified.

iv. The PI did the coordination of all the work with the different officials.

v. The PI, with the help of a research coordinator, identified 23 helpers; 16 interviewers/ coding assistants and 7 FGD facilitators. The team members were paired-up in such a way that every pair had a member from the district and one from the city. The team worked for 6 days including 2 and half days of interviews, 2 days of training, translation and pre-testing, 1 day for wrap-up and debriefing. The research team coordinator worked for the whole month of June, a total of 30 days. The PI also sought help of 6 data entry clerks.

vi. The research team coordinator identified the venue for training.

vii. The FGD facilitators or the interviewers identified the venues for FGDs. Such venues included schools, mosques, or homes of residents as appropriate. Health facilities were deliberately not selected as venues so as to reduce unnecessary bias.

3.16 Dissemination of findings

The study report will be posted on the MUCHS website. Hard copies will be placed at the MUCHS Library. Hard copies will also be distributed to key individuals, including the KIs, Luweero District authorities, the MOH library, WHO library in Kampala, Makerere University library, Nkumba University library, and the Institute of Public Health-MUK library. Abstracts will be sent to key journals for possible publications including the Bulletin of the WHO, Health Policy and Planning, Public Administration and Development, East African Medical Journal and others. Extracts will be presented in web-based forums like PartnersUganda and workshops and seminars both locally and regionally as appropriate.

CHAPTER 4: RESULTS

This chapter presents the salient findings from this study. The socio-demographic characteristics of the respondents, level of utilization of health care services, consumer attributes that influence utilization of health care services and types of health facilities through which people get care are described. In addition, provider practices that influence use of health care services and the impact of socioeconomic factors on health care seeking decisions are also outlined.

4.1 Socio-demographic characteristics of the respondents

Socio-demographic characteristics studied include age, sex, religious affiliation, education and marital status, and mother language of the respondents. Also studied was the main occupation of the respondents.

Table 3 below shows the key socio-demographic characteristics. A total of 460 respondents were interviewed, with an age range of 1-103 years. The mean age of the respondents was 27 years. About half of the respondents (51.3%) were 22 years and below. There were more female respondents (58.5%, n=269) compared to males. The ratio of males to females was 1:1.4.

Table 3: Socio-demographic characteristics of the respondents in Luweero District;2005 (n=460)

Socio-demographic characteristics	Male		Female		Total	
	n	%	n	%	n	%
1-6	56	44.4	70	55.6	126	27.4
7-22	46	41.8	64	58.2	110	23.9
23-44	47	42.7	63	57.3	110	23.9
45 and above	42	36.8	72	63.2	114	24.8
Total	**191**	**41.5**	**269**	**58.5**	**460**	**100**
Ratio	**1**		**1.4**			
No Education	35	31.5	76	68.5	111	24.1
Primary Incomplete	60	38.5	96	61.5	156	33.9
P7-S2	67	48.6	71	51.4	138	30.0
S3 and above	29	52.7	26	47.3	55	12.0
Total	**191**	**41.5**	**269**	**58.5**	**460**	**100**
Full time Employment	13	61.9	8	38.1	21	4.9
Farmer	100	42.6	135	57.4	235	54.5
Other	68	38.9	107	61.1	175	40.6
Total	**181**	**42.0**	**250**	**58.0**	**431**	**100**

Whereas about one-third of the respondents (33.9%, n=156) did not complete primary school, the proportion of respondents who attained S3 education and above was only 12% (n=55).

Respondents' occupation overall showed that, 54.5% (n=235) were subsistence farmers; whereby women formed the highest proportion. Respondents who reported to be in fulltime employment were 4.9% (n=21) of which female

comprised 38.1%. Full time employment included those working for government, NGOs or the formal private sector. The "others" category included those who reported to be self employed, not employed at all or doing menial jobs.

4.2 Level of utilization of health care services

Respondents were asked whether they had illnesses or symptoms of any disease during the last 4 weeks preceding the date of the interview and whether they had got any remedy for their symptoms, and if so, from where. Only those respondents who indicated to have illnesses or symptoms of a disease were included in the study. Whereas 82.0% (n=373) of all respondents indicated having sought some remedy for their ailments, only 47% of those got it from a health facility (Figure 2).

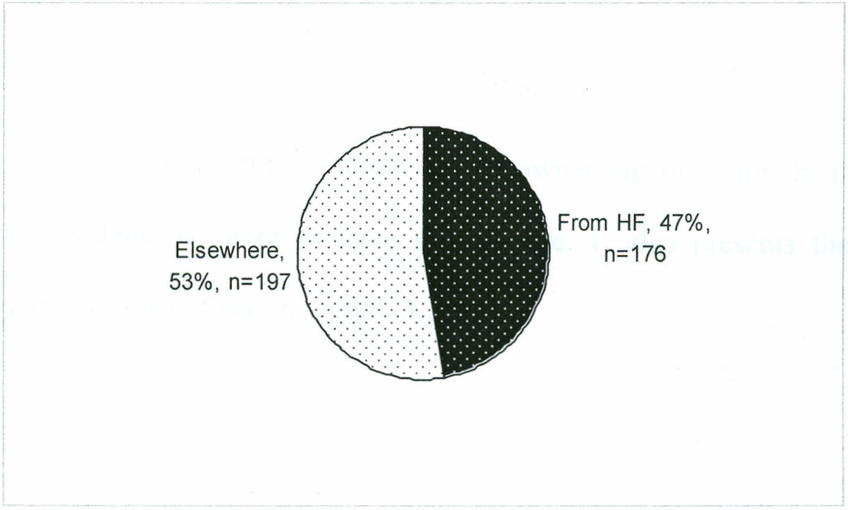


Figure 2: Proportion of people in Luweero District who reported having sought care from a health facility; 2005

All FGD participants unanimously reported that many people did not seek care from health facilities when they were ill. It was reported that many people bought drugs from shops, sought help from community drug distributors while others did

nothing. It was also revealed that a good number of people use herbs or sought help from traditional healers. An old male participant in Katikamu North indicated that "some people prefer local herbs, especially to treat fever". He added that "they use *kasero* which is believed to cure malaria". Another young male participant from Nakaseke indicated that "other people turn to God and get saved".

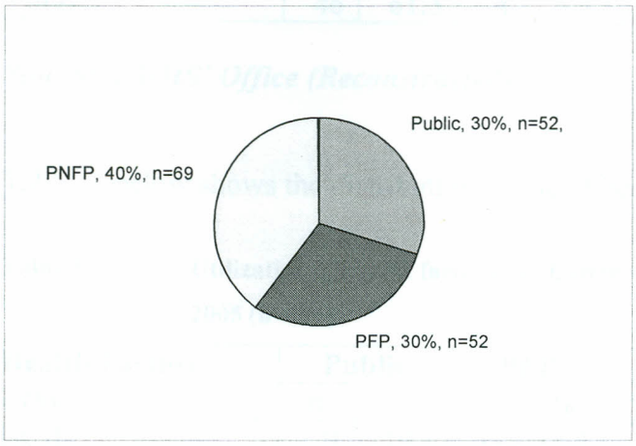
4.3 Types and ownership of health facilities from which people got health care

The study established the levels of facilities respondents reported to have sought care from, and their ownership. The type and ownership of facilities was verified with data from the DDHS' office (Table 4), key informants and the focus group discussions.

This section presents findings on the ownership of health facilities from which respondents reported to have sought care. It also presents the levels of those facilities (as defined in section 3.13).

4.3.1 Utilization of health facilities by ownership

Figure 3 below indicates that many respondents (40.0%, n=69) reported having sought care from private-not-for-profit facilities (PNFP) compared to PFP (30%, n=52) and public health facilities (30%, n=52).



Missing information=3

Figure 3: Ownership-distribution of health facilities used by the population in Luweero District; 2005 (n=173)

4.3.2 Utilization of health facilities by level

Table 4 below presents the distribution of health facilities in the district by ownership. More than half of the HFs in the district were HC IIs (53.3%, n=40). More HFs were publicly owned (61.3%, n=46) compared to PFP (5.3%, n=4) and PNFP (33.3%, n=25). One of the hospitals is a military hospital. It offered only limited access to the general public. More than half of HC II facilities were publicly owned (52.5%, n=21). Similarly, the majority of HC IIIs were publicly owned (69.o%,n=20). All HC IVs (100%, n=3) and two-thirds (66.7%, n=2) of the hospitals were publicly owned. There were no PNFP HC IVs. Similarly, there were no PFP hospitals nor HC IVs.

Table 4: Level and ownership of health facilities in Luweero district; June 2005

Health Facility Level	Public		PFP		PNFP		Total	
	n	%	n	%	n	%	n	%
HCII	21	52.5	3	7.5	16	40.0	40	53.3
HCIII	20	69.0	1	3.4	8	27.6	29	38.7
HCIV	3	100	0	0.0	0	0.0	3	4.0
Hospital	2	66.7	0	0.0	1	33.3	3	4.0
Total	**46**	**61.3**	**4**	**5.3**	**25**	**33.3**	**75**	**100**

Source: DDHS' Office (Reconstructed)

Table 5 below shows the distribution of use of health facilities by the ownership.

Table 5: Utilization of health facilities in Luweero District by level and ownership; 2005 (n=173)

Health Facility Level	Public		PFP		PNFP		Total	
	n	%	n	%	n	%	n	%
HCII	9	19.1	34	72.3	4	8.5	47	27.2
HCIII	10	35.7	14	50.0	4	14.3	28	16.2
HCIV	21	58.3	4	11.1	11	30.6	36	20.8
Hospital	12	19.4	0.0	0.0	50	80.8	62	35.8
Total	**52**	**30.1**	**52**	**30.1**	**69**	**39.9**	**173**	**100**

Missing information=3

Figure 4 below shows the use of health facilities by level and ownership. The proportion of people using public facilities increased with progression of health facility level up to health center level IV. The use of public facilities drastically dropped from 58.3% (n=21) at HC IV to 19.4% (n=12) at hospital level (see Table 5 above). On the other hand, the proportion of people who reported using PNFP increased steadily throughout all levels. The proportion of users of PFP facilities reduced with level of facility up to HC IV. However, note that there were no registered PFP health facilities above HCIII in the district. Similarly, there were no registered PNFP HC IV facilities (see Table 4 above).

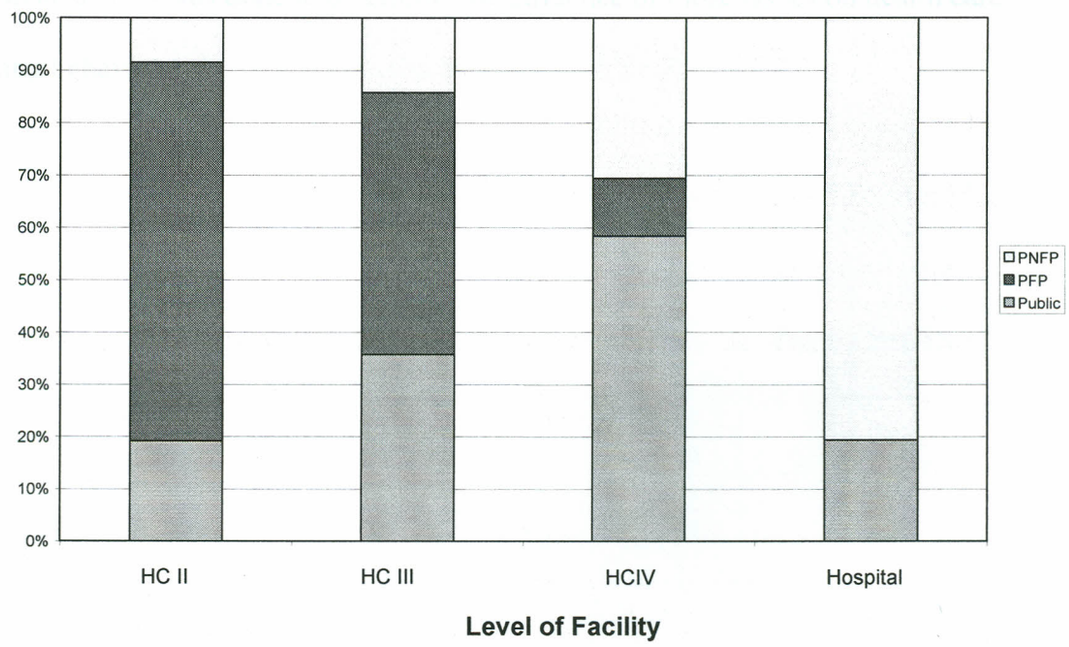


Figure 4: Utilization of health care services in Luweero District by level and ownership of health facilities; 2005 (n=173)

4.4 Consumer attributes influencing utilization of health care services

Respondents were asked whether they sought care from a health facility. Those who sought care from a health facility were asked how they got money to meet health care and related costs. The illnesses that they complained about were also established. Existence of chronic conditions, perception of the cause of illness and whether in their opinion the illness was related to a previous illness were established. The respondents' perception of their health status in comparison with others when they were ill, and the severity of the illness were also established. Respondents were asked about their level of earning and observed for any physical disability. For the under 15 respondents, the kinship with their guardians was established. This was done to determine the influence of those issues on health care seeking behavior.

4.4.1 Influence of education on health care seeking behavior

Respondents were asked about their education background in order to establish relationship between education and seeking health care. For respondents under the age of 15 years, the education background of their immediate guardian was registered.

Table 6 below shows that many people (33.0%, n=123) did not complete primary education. Only 14.0% (n=29) had attained S3 education and above (see definition of terms for education system in section 3.13). Use of health facilities was highest (58.8%, n=47) among respondents with no education and least (39.0%, n=46) among respondents who attained S1-S2 education (39.0%, n=46). Further analysis revealed that the difference was statistically significant (p-value<0.05).

Table 6: Use of health care facilities by level of education in Luweero District; 2005 (n=373)

Education Level	Seeking health care services				Total	Total
	From Health Facility		Elsewhere			
	n	%	n	%	n	%
No Education	47	58.8	33	41.3	80	21.4
Primary Incomplete	54	43.9	69	56.1	123	33.0
P7-S2	46	39.0	72	61.0	118	31.6
S3 and above	29	55.8	23	44.2	52	14.0
Total	**176**	**47.2**	**197**	**52.8**	**373**	**100**

X^2=9.55, p-value=0.02, df=3

4.4.2 Influence of chronic conditions on health care seeking behavior

Respondents were asked if they had any conditions that they considered to be chronic. Chronic conditions identified included diabetes, arthritis, HIV/AIDS, cancer, psychological disorders, health problems, epilepsy, sickle cell anemia,

blood pressure problems and others. This was to find out whether presence or absence of a chronic condition had an impact on individuals' health care seeking behavior.

Table 7 below shows that the majority of the respondents (72.7%, n=263) reported no chronic conditions. The proportion of those who reported having sought care from a health facility was higher among those with chronic conditions (68.7%, n=68) compared to those who reported no chronic conditions (38.4%, n=101). The difference was statistically significant (p-value<0.05).

Table 7: Relationship between health status and use of health care facilities in Luweero District; 2005 (n=362)

Chronic conditions	Seeking health care services				Total n	Total %
	From health facility		Elsewhere			
	n	%	n	%		
Present	68	68.7	31	31.3	99	27.3
Absent	101	38.4	162	61.6	263	72.7
Total	**169**	**46.7**	**193**	**53.3**	**362**	**100**

Missing information=11

X^2=26.50, p-value =0.000000, df=1

4.4.3 Influence of perception of health status on health care seeking behavior

Respondents were asked how they perceived their general health status in comparison with others at the time when they were sick for the last time. This was to determine whether one's perception of health status had influence on health care seeking behavior.

Table 8 below shows that 61.6% (n=229) ranked their health condition at the time they were sick as poor and very poor. The proportion of respondents who reported having sought care from a health facility was higher among those that ranked themselves poorly and very poorly (51.5%, n=118) compared to those that ranked themselves good and fair (39.9%, n=57). Further analysis revealed that the difference was statistically significant (p-value<0.05).

Table 8: Relationship between perception of health status and use of health care facilities in Luweero District; 2005 (n=372)

Health Status Relative to others	Seeking health care services				Total n	Total %
	From health facility		Elsewhere			
	n	%	n	%		
Good and Fair	57	39.9	86	60.1	143	38.4
Poor and Very Poor	118	51.5	111	48.5	229	61.6
Total	**175**	**47.0**	**197**	**53.0**	**372**	**100**

Missing information=1

X^2=4.81, p-value=0.03, df=1

4.4.4 Impact of severity of illness on health care seeking decisions

In order to determine severity of symptoms and illnesses, impact of illnesses on routine activity and basic chores was established. Also established was whether the illness kept the respondent in bed at all, and if so, for how long. This was done to establish whether severity of the disease influenced decision to seek care.

Table 9 below shows that for those who sought care from a health facility, the proportion was higher among those whose ability to perform routine activities was affected by the illness (50.9%, n=144) compared to those who indicated the illness did not affect their ability to perform routine activities (34.5%, n=30).

FGDs also confirmed that many people who had illnesses that they considered minor were less likely to seek care compared to those that had conditions which they considered severe.

Table 9: Relationship between severity of illness and use of health care facilities in Luweero District; 2005 (n=370)

Routine activity	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
Affected	144	50.9	139	49.1	283	76.5
Not affected	30	34.5	57	65.5	87	23.5
Total	**174**	**47.0**	**196**	**53.0**	**370**	**100**

Missing information=3

X^2=7.18, p-value=0.01, df=1

Similarly, relationship was sought between impact of illness on the respondents' ability to perform basic chores such as walking and health seeking behavior. The majority of the respondents (54.6%, n=201) indicated that the illness impaired their ability to perform basic chores. The proportion of those who sought care from a health facility was higher (53.7%, n=108) among those whose ability to perform basic things was impaired compared to 38.9% (n=65) among those whose ability was not affected. Among respondents who were bedridden as a result of the illness, more than half (52.6%, n=100) sought care from a health facility compared to those who were ambulant (41.8%, n=76).

4.4.5 Relationship between occupation and health care seeking behavior

Respondents were asked about the work they did to earn a living. This was done in order to establish whether occupation had an impact on the kind of decisions they made regarding seeking health care.

Table 10 below shows that the proportion of those who reported having sought care from a health facility was higher among those in full time formal employment (57.1%, n=12) compared to farmers (48.7%, n=95) and other occupations (47.0%, n=65). However, the difference was found to be statistically not significant (p-value>0.05).

Table 10: Impact of occupation on use of health care facilities in Luweero District; 2005 (n=353)

Occupation	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
Formal	12	57.1	9	42.9	21	6.0
Farmer	95	48.7	100	51.3	195	55.2
Other	65	47.0	72	52.6	137	38.8
Total	**172**	**48.7**	**182**	**51.3**	**353**	**100**

Missing information=20

X^2=0.69, p-value=0.71, df=2

Information from FGDs indicated that lack of money was a major hindrance for people to seek care when ill. This corroborates with the finding that those in formal employment and earned a stable income were more likely to seek care when ill.

4.4.6 Relationship between income and health care seeking decision making

Respondents were asked how much they earned in the last one month. This was done to establish relationship between level of income and health care seeking behaviour. The median income was Ugshs10,000/= with the majority of respondents reporting having earned nothing. The highest reported income was Ugshs600,000/=. Appropriate groupings were made based on percentiles.

Table 11 below shows that more respondents earned between Ugshs2,001-10,000/= (31.1%, n=78) and fewer respondents earned above Ugshs10,000/= (21.1%, n=53). The proportion of respondents who sought care from health facilities was higher among those who earned between Ugshs2,001/= and Ugshs10,000/= but decreased with the increase in reported income. Paradoxically, those who reported an income of Ugshs2,000/= and below had the lowest utilization rate (p-value<0.05).

Table 11: Income distribution of respondents who sought treatment in Luweero District; 2005 (n=251)

Amount earned (Ugshs)*	Seeking Health Care services				Total	Total	Cumm
	From health facility		Elsewhere				
	n	%	n	%	n	%	%
2,000 and below	21	31.8	45	68.2	66	26.3	26.3
2,001-10,000	46	59.0	32	41.0	78	31.1	54.7
10,001-30,000	28	52.8	25	47.2	53	21.1	78.5
Over 30,000	27	50.0	27	50.0	54	21.5	100
Total	**122**	**48.6**	**129**	**51.4**	**251**	**100**	

Missing information=122

* US$1=Ugshs1,800 (June 2005)

X^2=11.22, p-value=0.01, df=3

4.4.7 Relationship between nature of guardianship for the under 15 and their health care seeking behavior

Proxy respondents who were interviewed on behalf of children under 15 years of age were asked about the kinship of the guardian and the respondents. This was done to determine whether children staying with their biological parents were more likely to be sent to a health facility when ill compared to children staying with other kins. The total under 15 children were 190.

Table 12 below shows that 78.8% (n=123) of the children were living with guardians who were their biological parents. For those respondents that sought care from a health facility, the proportion was higher among children with other guardians (45.5%, n=15) compared to those living with at least one parent (39.0%, n=48). However, further analysis established that the difference was not statistically significant (p-value>0.05).

Table 12: Relationship between kinship for under 15 and use of health care facilities in Luweero District; 2005 (n=156)

Guardianship	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
At least 1 parent	48	39.0	75	61.0	123	78.8
Other guardians	15	45.5	18	54.5	33	21.2
Total	**63**	**40.4**	**93**	**59.6**	**156**	**100**

Missing information=34

X^2=0.45, p-value=0.50, df=1

4.4.8 Relationship between marital status and health care seeking decisions

Respondents, excluding those under 16 years of age (n=195) were asked about their marital status. This was in order to determine whether marital status influenced the way individuals made decisions concerning seeking health care when ill. There were 178 respondents above the age of 16 years who indicated having sought care for their ailments. Whereas the Ugandan Constitution defines a child as an individual 18 years and below, and it is an offence under the defilement law to have conjugal relationship with a person below 18 years, occasionally children below 18 are forced into marital relationships.

Table 13 below shows that the many respondents above 16 years of age were in union (53.9%, n=98). Seeking care from a health facility was reported highest among those previously in union (65.1%, n=40) and least (43.6%, n=42) among those in union. Further analysis established that the difference was statistically significant (p-value<0.05).

Table 13: Relationship between marital status and use of health care facilities in Luweero District; 2005 (n=178)

Marital status	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
In Union	42	43.6	54	56.4	98	53.9
Never in Union	11	54.0	9	46.0	21	11.5
Previously in Union	40	65.1	21	34.9	62	34.6
Total	**93**	**52.2**	**85**	**47.8**	**178**	**100**

X^2=7.18, p-value=0.03, df=2

4.4.9 Influence of sex on health care seeking behavior

Comparison was made between health care seeking decisions taken, and sex. This was done in order to determine the impact of gender roles on health care seeing behavior.

Table 14 below shows the sex distribution among respondents who sought care for their ailments. The majority of the respondents were female (59.5%, n=222). However, the proportion of respondents who sought care from a health facility was higher among males (49.7%, n=75) compared to females (45.5%, n=101). However, further analysis revealed that the difference was not statistically significant (p-value>0.05).

Table 14: **Sex distribution of respondents who sought treatment in Luweero District; 2005 (n=373)**

Sex	Seeking health care services				Total	Total
	From Health Facility		Elsewhere			
	n	%	n	%	n	%
Male	75	49.7	76	50.3	151	40.5
Female	101	45.5	121	54.5	222	59.5
Total	**176**	**47.2**	**197**	**52.8**	**373**	**100**

X^2=0.63, p-value=0.43, df=1

4.4.10 Relationship between age and health care seeking behavior

Comparison was made between health care seeking decisions taken and age. This was done in order to determine the influence of age on health care seeing behavior. Table 15 below shows that the proportion of respondents who sought care from a health facility was highest (62.2%, n= 51) among respondents 45 years and above, and least among those 7-22 years of age (39.1%, n=34). Further analysis established that the difference was statistically significant (p-value<0.05).

Table 15: **Impact of age on health care decision making in Luweero District; 2005 (n=373)**

Age	Seeking health care services				Total	Total	Cumm
	From health facility		Elsewhere				
	n	%	n	%	N	%	%
0-6	44	41.1	63	58.9	107	28.7	28.7
7-22	34	39.1	53	60.9	87	23.3	52.0
23-44	47	48.5	50	51.5	97	26.0	78.0
45+	51	62.2	31	37.8	82	22.0	100.0
Total	**176**	**46.9**	**197**	**52.8**	**373**	**100**	

X^2=11.35, p-value=0.01, df=3

4.4.11 Qualitative findings on consumer attributes influencing utilization of health care services

FGDs confirmed some of the findings from the quantitative survey. The participants indicated that perception of severity of an illness influenced health care seeking behavior.

In addition, new issues emerged that were established as attributes of consumers that influenced health care seeking behavior. These included ignorance about services offered by health facilities, apathy and perception of causes of illnesses.

i. Ignorance about services offered

It was reported that there was ignorance about services available in some health facilities. "Some people don't seek care because they don't know about the services provided by health facilities", claimed an old female participant from Bamunanika. However, some FGDs revealed that some people never sought care as a result of laziness.

ii. Perceptions of the cause of the illness

It was revealed that individuals who suffered from conditions considered genetic never sought care from health facilities. They believed that such illnesses were not amenable to medical treatment. Other illnesses that individuals considered "traditional" or as a result of witchcraft, were more likely not to be reported to health care establishments.

4.5 Provider practices that influence use of health care services as perceived by the respondents

Respondents were asked how far the health facility they went to was, how long they waited at the health facility and how long it took them to walk to the health facility if they had to walk. Respondents were also asked if they made any payments at the health facility, and if so how much, and whether or not they were issued with receipts. An attempt was made to establish the nature of the payment. Also established was the cadre of HCWs who attended to the respondent and their assessment of satisfaction with the service received. Issues that respondents liked and disliked most at the health facilities were also explored. Also identified was the past experience of the respondents at health facilities.

This section presents key findings on reasons that influenced choice of health facility as given by the respondents. It also gives factors that influenced use of health as was facilities established through FGDs.

4.5.1 Reasons influencing choice of health facility by individuals

Of the 455 respondents (missing information=5), 176 indicated to have obtained treatment from a health facility. Those who indicated to have obtained treatment from a health facility were asked why they chose those particular facilities. This was done to in order to rank issues that motivated individuals to use particular facilities. Table 16 below shows the reasons that motivated users of health facilities.

Table 16: Reasons for use of particular health care facilities in Luweero District; 2005 (n=176)*

Reasons	n	%
Credibility of the facility	100	56.8
Short Distance	91	51.7
Availability of drugs	88	50.0
Availability of laboratory and investigating services	59	33.5
Availability of health care workers	54	30.7
Kindness of health care workers	49	27.8
Affordability	44	25.0
Others	26	14.8

** % based on number of respondents, multiple responses were accepted*

Credibility of the health facility was mentioned by many respondents (56.8%, n=100) as the reason why individuals sought care from a particular health facility. Credibility was translated as trust that they would be helped by the facility to cure their ailments. Credibility was followed by the health facility being near (51.7%, n=91) to their homes and availability of drugs (50.0%, n=88). Kindness of health care workers (27.8%, n=49) and affordability (25.0%, n=44) ranked least as motivating factors for seeking health care.

4.5.2 Qualitative findings on provider practices influencing utilization of health care services

FGD participants provided corroborative evidence on some of the reasons identified through the quantitative survey. Participants indicated that availability of health care workers and drugs, cost of care and free health care, behavior of health care workers and the credibility of the facilities as evidenced by good care were key issues that motivated people to use particular facilities.

Additional issues included perceptions of quality of health care services provided, being allowed to pay by installment, cost of services and waiting time. Other factors that influenced health care seeking behavior were professional conduct of health care workers and their behavior. Corruption and nepotism were also singled out. Lack of publicity of services offered was established as a prohibiting factor.

i. Availability and management of drugs and other supplies

Availability of drugs was a key factor identified as a reason why people chose some health facilities and not others, or why they chose to seek care from health facilities or alternative sources of care. One participant remarked, "they don't go to government health facilities mostly because there are no medicines in those health facilities, so they opt for private health facilities".

Drug pilferage was raised as a concern. It was claimed that drug pilferage was responsible for the chronic drug stock-outs in public health facilities to pilferage. "We always see our ambulance bringing boxes of drugs in the afternoon and taking

them away the following morning", claimed a male participant from Bamunanika. He added, "when you go there the following day, they (health care workers) tell you there are no drugs". An old male participant said "health care workers prescribe for you drugs and refer you to buy them from their own clinics". He added, "sometimes they direct you like a child by describing the clinic you have to go to".

Lack of supplies in health facilities discouraged people from seeking care. Such supplies included basics like medical forms, where patients were required to buy stationery on which to get prescriptions, needles and syringes to administer injections. A young male participant from Katikamu North lamented that "you take a very sick child at night and you are first asked to go and buy kerosene for the lamp, or an exercise book; if you are not lucky, your child can easily die at the door of health facility".

ii. Credit services

Receiving services on credit was another issues identified by FGD participants as a motivating factor for seeking care. It was revealed that health facilities, particularly PFP facilities operated by owners well known to people in the community, offered services on credit and the patient was allowed to pay when they got the money. It was also reported that some of these health facilities, allowed patients to exchange services for material items or labor when they got well. The later was also common among higher-level PNFP facilities. Related to credit services, was being allowed to pay by installment.

iii. Cost

High costs associated with care was identified as a big hindrance to seeking health care from health facilities because of the high cost associated with care. Due to cost, individuals and families were reluctant to seek care when they thought the individual was too ill to recover. A young female participant from Nakaseke complained, "when your patient dies before receiving treatment at the health facility, you have to pay in order to get the body released". "In some health facilities, treatment costs are not negotiable", claimed a young male participant from Nakaseke. FGD participants further revealed that people used public health facilities because they expected to get free service or because they believed they were cheaper compared to others.

iv. Waiting time

Short waiting time was a key motivating factor for seeking care. "In some health facilities, health care workers take long to attend to patients and sometimes don't attend to them at all", claimed an old male participant from Bamunanika. Another old male participant from Katikamu North said, "in private hospitals (health facilities) they don't discriminate and segregate. It is 'first-come-first-served', which is contrary to government hospitals (health facilities)".

v. Credibility of health services, professional conduct of health care workers and perceptions of quality of service

Some FGD participants complained about health care workers who did not tell the truth about the disease individuals were suffering from. It was revealed that in

some health facilities, health care workers did not give patients drugs of their choice. This made patients to have no trust in health facilities and discouraged them from seeking care. An old female participant from Katikamu North affirmed that "when a health care worker does not give me the drug of my preference, based on the past experience of the drug that cured me, I don't go back".

FGD participants complained that some health care workers administered injections carelessly, which led to forming abscesses. This discouraged people from seeking care from health facilities and opt for alternative means of care.

Some individuals believed that some health facilities administered expired drugs to patients, which were harmful to their health. Therefore, they felt safer to use alternative forms of care.

"Bad behavior" of HCWs discouraged a large number of people from seeking care from health facilities. It was reported that some health care workers conducted themselves in a way that showed no respect to patients and did not respect the patients' confidentiality. It was revealed that some health care workers asked about how patients feel in very loud voices so as to get every body in the vicinity to know what an individual was suffering from. Examples like "Sam, how are your boils?" were given. "Doctors (health care workers) in some health facilities don't keep patients' secrets", complained a young female participant from Bamunanika. A young male participant from Bamunanika reported that some health care workers use discriminatory language like "you are a young man, where did you get AIDS?"

Such type of language discouraged people who feared to be victimized from seeking care from health facilities. Ill-treatment by security personnel of health facilities was also a barrier to seeking care.

The nature of care provided in health facilities was identified as one of the determinants of health care seeking behaviour of individuals. "We are satisfied in private hospitals (health facilities)", declared an old male participant from Katikamu North. Similarly, an old female participant from Katikamu North indicated "in a private hospital (health facilities), they welcome you very well compared to government hospitals (health facilities)".

Lack of food in health facilities hindered many people from seeking health care. It was reported that when individuals anticipated to be hospitalized but had no money to buy food daily or a relative attendant to give them food, they chose not to seek care from health facilities.

FGD participants claimed that inability of health facilities to cure people's ailment discouraged them from seeking care. This discredited the competency of particular health facilities.

It was established that there was variation in services provided in some health facilities depending on the condition of the patient. This discouraged some individuals from seeking care. "Some health care workers do not want to handle

patients with certain conditions like too much bleeding or septic smelly wounds", complained a young female participant from Nakaseke.

FGDs established that there were a large number of people not seeking health care from health facilities because of unavailability of health care workers. It was reported than some people desist from seeking care because they don't want to be attended to by trainees. On the other hand, it was reported that some individuals, knowing that there were no drugs in the health facilities, simply go there to get prescriptions. An old female participant from Bamunanika reported "the prescription helps people to know what they are suffering from and treat the right diseases".

The physical state of some HFs was one of the reasons why people chose to go to some health facilities and not others or to seek care from health facilities or not. Particularly cleanliness and availability of good beds were singled-out as motivating factors. Lack of sanitation facilities was identified as an inhibiting factor.

It was revealed that some health facilities did not let the community know about services they offered. Therefore, some people do not go to seek care health facilities, as they did not know where to go to seek care for particular conditions.

vi. Corruption

Illegal behavior was a key factor hindering utilization of health care services that was mentioned by FGD participants. They indicated that corruption in form of under-the-table payments was more rampant in public health facilities. A young male participant from Bamunanika complained, "the health care workers ask for money for everything they offer to patients". However, other participants reported having got receipts from some health facilities.

Language that was used to exhort unlawful payments was disclosed. "They ask you whether you are from *Kasawo* or *Ngalonkalu*?", explained an old male participant from Katikamu North. This literary translates "did you carry a bag full of money or you just came empty-handed?" Other terms used by communities when transacting in informal activities in health facilities included *okuwooza* and *obusuuru* which literally translate into "a surcharge". Old male participants from Katikamu North revealed that in some health facilities, health care workers use terms like "did you carry the blackboard and chalk?", when demanding informal fees from patients. This is interpreted as asking for the tuition fees the health care worker paid in school. A young male participant from Katikamu North added, "The health care workers do not face you to demand the informal fees. They have a racket of individuals who collect the fees from patients on their behalf".

Other methods of implementing illegal activities that were revealed included referral to PFP facilities which are ran by the health care workers employed in public health facilities. "When you get there, you find the same person you found

in the hospital (health facility)", reported a young male participant from Katikamu North.

vii. Nepotism

Favoritism in service delivery was identified as a factor that discouraged people from seeking care from some health facilities. They reported that this was particularly common in higher level public facilities. It was reported that in some facilities, health care workers attend to and, or give good care including drugs, to only those people they know. "If you are lucky, you get treatment from those health facilities", lamented an old male participant from Bamunanika. An old female participant from Bamunanika affirmed, "The health care workers neglect some patients and attend to the ones they know".

4.6 Socioeconomic factors and their impact on health care seeking decisions

Respondents who reported having sought care from outside health facilities were asked why they took that decision. Those who sought care were asked who recommended the facility. Respondents who indicated they were not the heads of households were asked for the sex of the heads of their households and asked to give the age and level of education level of the head of their households. Also established was the responsibility respondents had for looking after less able members of their households.

This section presents findings on social economic reasons for not seeking health care as presented by the respondents. It also presents the impact of dependency and care burden on health care seeking behavior.

4.6.1 Reasons for not seeking care

Of the 455 respondents (missing information=5), 197 indicated they obtained care outside a health facility. The 197 respondents were further asked why they never sought care from a health facility. This was done so as to establish a rating of factors that hindered individuals from seeking health care. Additional findings from qualitative data are also presented.

Table 17 below shows the reasons given by respondents for not seeking care. The majority of the respondents (81.7%, n=161) who never sought care from a health facility when ill indicated that it was because they had no money. Half of the respondents (50.8%, n=100) gave long distance to health facilities as the second most important barrier to seeking care.

Others included belief that the health facility would not treat the kind of illness, lack of transport, belief that they were bewitched, low self esteem, lack of attendants at home or at hospital in case one got admitted, having no time to seek care, being dumb and therefore unable to communicate with health care workers and having home-based responsibilities like caring for children, which took precedence over seeking care from health facilities.

Table 17: Reasons for not seeking health care among residents of Luweero District; 2005 (n=197)*

Reasons	n	%
Lack of money	161	81.7
Long distance to health facilities	100	50.8
Ailment not severe	78	39.6
Knowing the problem	65	33.0
Had medicine at home	49	24.9
Others	47	23.9
Lack of trust in the health facilities to help	13	6.6

** % based on number of respondents, multiple responses were accepted*

4.6.2 Impact of dependency status in households, gender and education of household heads on health care seeking decision making

4.6.2.1 Influence of status of respondent in household on health care seeking decision-making

Respondents were asked about their dependency status in their households. This was to find out whether being in a dependant role in the household had an influence on the way individuals made decisions about their health care. This included proxy respondents for children under 15 years of age. For proxy respondents, the status of the persons interviewed was registered.

Table 18 below shows that the majority of the respondents (68.3%, n=254) were dependants. For the respondents who sought care from a health facility, the proportion was higher among those that reported being heads of households (61.9%, n=73) compared to those that were dependants (40.6%,n=103).

Table 18: Relationship between dependency status, gender and education level of household heads and use of health care facilities in Luweero District; 2005

Independent Variable	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
Status in household*						
Head	73	61.9	45	38.1	118	31.7
Dependant	103	40.6	151	59.4	254	68.3
Total	**176**	**47.3**	**196**	**52.7**	**372**	**100**
**Missing information=1* X^2*=14.68, p-value=0.000127, df=1*						
Sex of household head#						
Female	18	54.5	15	45.5	33	15.1
Male	73	39.5	112	60.5	185	84.9
Total	**91**	**41.7**	**127**	**58.3**	**218**	**100**
#Missing information=36 X^2*=2.62, p-value=0.11, df=1*						
Education level of head of household**						
No Education or Primary Incomplete	22	42.3	30	57.7	52	30.6
P7-S2	27	42.9	36	57.1	63	37.1
S3-S4	12	30.8	27	69.2	39	22.9
S5 and Above	6	37.5	10	62.5	16	9.4
Total	**67**	**39.4**	**103**	**60.6**	**170**	**100**
***Missing information=84* X^2*=1.74, p-value=0.63, df=3*						

4.6.2.2 Impact of gender of head of household on health care seeking behavior

The 254 respondents who indicated they were dependants were further asked for the sex of the heads of their households. This was done in order to determine whether gender relations in households influenced health care seeking behavior.

Table 18 above shows that 84.9% (n=185) of the respondents lived in male-headed households. The proportion of those who sought care from a health facility was higher among female-headed households (54.5%, n=18) compared to those that lived in male-headed households (39.5%, n=73). However, further analysis established that the difference was not statistically significant (p-value>0.05).

4.6.2.3 Influence of education level of head of household on health care seeking decisions

In order to determine the impact of education level of decision makers in households on health seeking behavior of respondents (see section 3.13), dependant respondents were asked to give the education level of their heads of households.

Table 18 above shows that more respondents indicated that heads of their households attained P7-S2 education (37.2%, n=63). For those who sought care from a health facility, the proportion was higher among those with P7-S2 education (42.9%, n=27) and paradoxically followed by those with no education or did not complete primary education (42.3%, n=22). The proportion was least among those with S3-S4 education (30.8%, n=12, p-value>0.05).

However, there was a high proportion of missing information. One third of the respondents (n=84) indicated that either they did not know the education level of their household heads or simply provided no information.

4.6.3 Influence of care responsibilities on health care seeking decisions

Comparison was made between health care seeking behavior and burden of caring for vulnerable members in a household. These included children under 5 years of age, the elderly above 55 years of age, physically disabled or the chronically ill.

4.6.3.1 Impact of caring for infants on health care seeking behavior

Respondents were asked for the number of children under 5 years of age in their households. This was done in order to establish relationship between the burden of caring for children and making decision to seek care when one was ill. On average, respondents had one child in their households. The majority had two children, whereas 27.4% (n=125) had no child under 5 years of age.

Table 19 below shows that for those who reported having sought care from a health facility, the proportion was higher among those with no under 5 children (58.3%, n=56) and least among those with one child (38.9%, n=37). However, further analysis revealed that the association was not statistically significant (p-value=0.05).

Table 19: Relationship between caring for infants, the elderly and use of health care Facilities in Luweero District; 2005

Care Responsibility	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
Number of under 5 children in household#						
0	56	58.3	40	41.7	96	25.9
1	37	38.9	58	61.1	95	25.7
2	51	45.9	60	54.1	111	30.0
3 and above	30	44.1	38	55.9	68	18.4
Total	**174**	**47.0**	**196**	**53.0**	**370**	**100**
#Missing information=3 $X^2=7.70$, *p-value=0.05, df=3*						
Number of over 55 seniors in household*						
0	106	40.9	153	59.1	259	70.6
1	45	62.5	27	37.5	72	19.6
2 and above	20	55.6	16	44.4	36	9.8
Total	**171**	**46.6**	**196**	**53.4**	**367**	**100**
**Missing information=6* $X^2=11.83$, *p-value=0.003, df=2*						

4.6.3.2 Impact of caring for seniors on health hare seeking behaviors

Respondents were asked for the number of the elderly over 55 years in their households. This was in order to establish whether caring for the aged had a relationship with the way people made decisions to seek care when they fell ill.

Table 19 above, shows that among those who indicated having sought care from a health facility, the proportion was highest for individuals with one elderly person (62.5%, n=45) and least for those with no elderly (40.9%, n=106). Further analysis established that the association was statistically significant (p-value<0.05).

4.6.3.3 Impact of care burden for chronically ill members of households on health care seeking behavior

Respondents were asked whether any member of their households had a chronic condition. The chronic conditions defined included diabetes, arthritis, HIV/AIDS, psychological disorders, cancer, heart problems, epilepsy, sickle cell anemia, blood pressures problems and others. This was done to establish whether there was a relationship between having to care for a chronically ill members of households and seeking care when an individual was taken ill. Table 20 below shows that the majority of the respondents (73.9%, n=269) reported having no chronically ill person in their households. For those who reported having sought care from a health facility, the proportion was higher (63.2%, n=60) among those indicating they had a chronically ill member in the household compared to 42.0% (n=113) among those who indicated no member of their households had a chronic condition (p-value<0.05).

Table 20: Relationship between caring for the chronically ill, physically disabled and use of health care facilities in Luweero District; 2005

Care Responsibility	Seeking health care services				Total	Total
	From health facility		Elsewhere			
	n	%	n	%	n	%
Chronically ill in the household*						
Present	60	63.2	35	36.8	95	26.1
Absent	113	42.0	156	58.0	269	73.9
Total	**173**	**47.5**	**191**	**52.5**	**364**	**100**
**Missing information=9* X^2*=12.59, p-value=0.0004, df=1*						
Physical disability in the household**						
Present	17	63.0	10	37.0	27	7.3
Absent	159	46.4	184	53.6	343	92.7
Total	**176**	**47.6**	**194**	**52.4**	**370**	**100**
***Missing information=3* X^2*=2.77, p-value=0.10, df=1*						

4.6.3.4 Impact of caring for physically disabled members of households on health care seeking behaviors

Respondents were asked whether any member of their households had physical disability. This was in order to establish whether caring for a physically disabled person influenced the way individuals made health care seeking decisions.

Table 20 above shows that the majority of the respondents had no member of their households with a physical disability (92.7%, n=343). Further analysis revealed that the association was not statistically significant (p-value>0.05).

4.6.4 Qualitative findings on social economic factors influencing utilization of health care services

FGD participants confirmed some of the findings from the quantitative population survey. It was established that having money, trust in health facilities to cure their illnesses, availability of transport services, and having relative attendants when hospitalized, influenced people to seek care when ill.

Additional social, economic and environmental issues identified, included availability of quick means of transport, perceptions of services provided, individual and community perceptions of diseases, and availability of support from

relatives and friends, trust in faith-based health facilities, availability of external support, availability of other coping mechanisms, and financial security.

i. Transport availability

Availability of quick and affordable means of transport was a key reason that FGD participants gave as a determining factor for decision making regarding seeking care when ill, and choice of provider. It was reported that some people went to Mulago, the national referral hospital in Kampala, which is over 60kms away from Luweero district headquarters, because of availability of reliable transport. It was also reported that individuals found it very difficulty to seek specialized care beyond health facilities which were within walking distance from their homes.

ii. Perceptions about health care services provided

Information from FGDs indicated that individuals had beliefs that inhibited them from seeking care when ill. These included fears of operations when they thought the illness they had could be subject to surgery. In particular, many participants reported that hernia was common and some people who feared to be subjected to surgery decided to stay at home. Other individuals feared receiving injections to treat fevers. Injections were particularly unpopular based on claims that they often form abscesses. There was also concern over the likely spread of HIV infection through needles. FGDs also revealed that some people had beliefs that drugs administered for injection in public health facilities were diluted and hence not effective.

It was also reported that there was uneasiness especially among the elderly, being subjected to examinations that needed them to undress. This was aggravated by what was termed as "young" health care workers, particularly of the opposite sex.

It was reported that some individuals believed that HCWs deliberately removed body parts from patients and possibly sold them. This was particularly the account given over accident victims who get abdominal surgery. "Every child who falls off a tree and taken to hospital is operated to remove the spleen", claimed a young male participant from Nakaseke. Such perceptions deterred people from seeking care from health facilities.

People had a belief that some health facilities deliberately administered drugs to kill some patients. This was more so in relation to the types of ailments that people chose not to seek care for from health facilities. AIDS was one of the diseases that people indicated that they never go to seek care from health facilities. "If you are found to be infected with HIV, you are given drugs that accelerate your death in order not to infect others", claimed a young male participant in Nakaseke.

iii. Individual and community perceptions about diseases

FGDs established that communities defined which diseases were better managed by health facilities and which were better managed else where. It was revealed that health facilities were not the best place to seek care from, for indeterminate abdominal pains *(ebigalagala)*, AIDS and convulsions in children. Other conditions were epilepsy, fevers, mental disorders, hernia, malaria (fever), measles

and limb fractures. Other conditions identified as not being amenable to care from health facilities included tuberculosis, syphilis commonly referred to as *kabotongo*, skin ulcers *(ettalo)* and prolapsed rectum.

> *"Although AIDS is a major health problem, these young men don't want to go to health facilities for they think that once one is found positive, they can be easily violated and hated by the society/ community"* reported a young male participant in Katikamu South.

> An old female participant from Katikamu South, while why explaining why people living with HIV/AIDS don't seek care said *"...losing hope since they know that regardless of any treatment, there is no hope for a cure".*

iv. Availability of external support

There were some NGOs that helped a few vulnerable members of society to get care. Plan International was particularity singled out as helping to meet medical bills for some chronically ill individuals or individuals that required expensive treatment like surgery.

Borrowing and fundraising from close relatives and friends was identified by FGDs as a key source of money to meet health care and related costs. If an individual had no money at the time they fell ill and had no one to borrow from, they were more likely not to seek care compared to another individual who had this support at their disposal. Terms used when borrowing were revealed. "You go to Baroda", declared

an old male participant from Katikamu North. Bank of Baroda is an Indian Bank operating in East Africa. The term Baroda was literally interpreted as borrowing at a very high interest rate or on bond, with a likelihood of confiscation of the security in case the borrower failed to adhere to the terms of the agreement in the future.

It was reported that having no relative to attend to a sick admitted person discouraged individuals from seeking care from health facilities when they anticipated that their illnesses might need hospitalization.

v. Trust in faith-based health facilities

FGD participants revealed that when individuals had illnesses that could not be managed at health facilities that were within walking distances from their homes, the next option was to mobilize resources to seek care from faith-based health facilities in Kampala or within the district. The decisions were based on trust many individuals had in faith-based health facilities to help people get better.

vi. Availability of other "coping" mechanisms

Selling of property and household items was mentioned by FGDs participants as one of the major sources of funds to meet health care and related costs. Possession of items to sell, which included farm produce, land, and sometimes household items influenced the way people made decisions to seek or not to seek care when they fall ill. However, it was reported that people had devised non-canon safety nets including escaping from health facilities where they were admitted once they

felt well enough to leave! "Some people ran away from hospital beds before they recover", a male participant from Bamunanika explained.

vii. Availability of financial resources

Poverty was identified as a major obstacle to individuals when seeking care from a health facility. An old male participant from Bamunanika claimed "some patients forsake treatment and let illness take its course and wait for their fate". He added "you have to be with money….."

CHAPTER 5: DISCUSSION

This section provides an interpretation of the study findings. It also makes inference to what is known to influence health care seeking behavior. The level of utilization of health care services and the types and ownership of health used by the population are critically analyzed. Also analyzed are consumer attributes, provider environment and socio-economic settings that impact on health care seeking decisions.

5.1 Utilization of health care services

This study found that 47% of the respondents who sought care, got it from a health facility. Whereas the duration of the study on which the 1993 White Paper on Health was is not known, the findings agree with the White Paper on Health, which indicated that less than 50% of the Ugandan population sought care from the formal health care delivery system (UAC 1998). This means that for more than 10 years, the health care delivery system has not been able to attract a higher proportion of people who fall ill. This suggests that the health wellbeing of many individuals is compromised as a result of failure to seek health care. The findings correspond with the suggestion by Gish (1990), from his work on links between implementation of primary health care and utilization of health services. Gish concluded that less than one contact per person per year translated into having up to half of the population being outside the health care delivery system. The findings also confirm the observations by Schulpen and Swinkels (1980), that use of care services among sick people in developing countries can be as low as 15% to a

maximum of 62%. However, the impact of changing disease patterns on utilization levels over the years is not known.

5.2 Types of health facilities used by the population

Whereas statistics indicated that PNFP facilities constituted a third of all health facilities in the district, they accounted for 40% of all the services provided. PFP health facilities constituted 5.3% of all health facilities. However, they provided services to 30% of the population. Public health facilities constituted 61.3% of all the health facilities whereas they accounted for 30% of the services provided. Overall, the majority of the population (70%), sought care from private health facilities which constituted 38.6% of all health facilities in the district. The findings confirm that the stake of the government as a provider of health care services has declined to 30% from 56% and 40% in late 1980s and early 1990s respectively. Similarly, the stake of the PFP has reduced to 30% from 35% in the early 1990s, though this is substantially higher than the 10% proportion of the late 1980s. On the other hand, the stake of PNFP facilities has increased to 30% from 25% in the early 1990s. However, the stake of other providers outside the formal health care delivery system has tremendously increased from 3% level in the late 1980s to 53% (Hanson and Barman 1994 and UAC 1998).

According to official statistics, PFP health facilities constituted 5.3% of health facilities in the district, observations in the study area revealed that there were lower level PFP health facilities which were not on the district register. This irregularity between the official statistics and what is operational could contribute

to having more people reporting having obtained care from PFP HC II health facilities (72.3%) than public health facilities (19.1%).

There is also a discrepancy in the categorization of levels of health facilities by district health officials, the managers of these facilities and the users of the services. Some of the KIs from the private sector reported a higher categorization for their health facilities than what the official register indicated. For example, no PFP facility is registered as a HC IV whereas 11% of the respondents who reported having sought care from a HC IV claimed to have got it from a PFP facility. Similarly, whereas there is no registered PNFP health facility at HC IV level, 30.6% of the respondents who indicated having sought care from a HC IV, claimed to have gone to a PNFP facility.

Information to users especially on cost of service is important since it empowers individuals to make choices. Whereas private providers are out to attract users, this has not been the case with public providers. Promotion of public services is often guided by political statements whose reality on the ground may vary. FGDs participants indicated that political leaders often tell them to seek care from health facilities only to find no drugs or health care workers. This created a negative attitude towards the health services provided by public health facilities.

The public sector largely follows nationally negotiated programs. The way these programs are translated into local needs may affect the way local communities perceive the services they provide. There were reservations about the effectiveness

of HCMCs by many KIs. This implies that the community voice they are supposed to represent is only partially heard. One member of a HCMC reported having nothing to do with budgets yet other leaders reported that the HCMC members had a mandate to approve budgets in addition to setting management policies for their respective health facilities. On the other hand, the PFP sector which is out to make profit, invests in market research and knows exactly what the clientele want and does its best to provide for that. Faith-based institutions whose leaders put the needs of their communities ahead of personal gains usually manage PNFP.

The high ability of the private sector to attract more patients corresponds with Donaldson (1999), finding that patients tend to seek care where they felt they were considered more as partners in their own health care.

The variations in use of facilities of different ownership suggest that some of the services do not meet people's expectations. FGD participants indicated that often people go to seek care but do not improve. In addition, the services did not take preferences and values of the clientele into consideration. For example, it was reported by FGD participants that some health care workers shout at patients who were found to be living with HIV, asking them where they got it from.

5.3 Consumer attributes that impact health care seeking behavior

The study established that more than 55.8% of the respondents who attained the highest level of education (S3 and above) sought care from a health facility. The proportion declined up to P7-S2 (39.0%). These findings confirm the conclusions

of Bitran and McInnes (1993) that educated people were more likely to seek care when ill. This could be attributed to having higher health literacy or income that facilitates them to seek care more than those with lower levels of education. This is supported by another finding of this study that ignorance of diseases and where to go to get care inhibits health care seeking decisions. However, the findings differ from the suggestions of Heller (1982) that more educated people tend to seek less care because they tend to have less severe illnesses.

More than 58.8% of the respondents who had not gone to school sought care from a health facility. This differs from findings of Bitran and McInnes (1993) in Latin America, that less educated people were less likely to use health care services. However, it could be attributed to poor living conditions among the less educated sections of the community, which makes them more prone to infectious diseases, and more severe illnesses, thus they have to find ways of seeking health care.

Whereas the study found that there is association between education and health care seeking behavior, it was not possible to make a conclusion as to the impact of education of health care seeking decision as both respondents with no education and those with education showed a high tendency of seeking care. On the other hand, the study found no association between the education level of the decision maker in the household and the decision to seek care by members of that household.

Seeking care from health facilities was higher among respondents who indicated to have a chronic condition. The findings could be attributed to having a high sense of vulnerability and sensitivity to being more prone to severe illnesses. The higher tendency to seek care among individuals with chronic conditions could also be explained by health literacy that might be generated over the years of interacting with the health care delivery system. The higher proportion could also be as a result of individuals with chronic condition being more prone to severe illnesses than those who had no chronic conditions. The findings of this study however differ from the conclusions of IUHPE (2000), that individuals with chronic diseases in Europe were less likely to seek care. The findings also contradict the assertion made by Nanda (2002) from a study among women in Uganda that people, especially women, who had conditions that needed longer term care, were less likely to seek health care when ill. The variations could be attributed to differences in study settings. In European setting, family support may be less than in Uganda. In addition, Nanda's study was among women while this study looked at the general public.

Individuals who perceived themselves to be severely ill had a higher likelihood of seeking care from health facilities than those who perceived their illnesses to be minor. This could be attributed to support from relatives when individuals are ill. FGDs revealed that one of the sources of funds to finance health care and related costs was family members and friends. This communal effort is more likely when individuals are considered too ill than when the illness is considered minor. The higher proportion of use of health facilities by those with a severe condition is also

supported by another finding from this study that people often sold property and household items to raise funds to meet health care costs. Parting with one's property is more likely when individuals perceive themselves to be severely ill. The findings of this study agree with observations made by Nanda (2002) in a study done in Uganda that high levels of morbidity enhanced health care seeking decisions among Ugandan women. Similarly, the findings correspond with the conclusions of Mechanic (1979), and Blanchard-Horan (2003), that an individual's perception of severity of their illness influenced the health care seeking decisions they made. However, the finding challenges the observation from this study that individuals never sought care because they had no money.

Individuals in formal employment were more likely to seek care from a health facility when ill than those in informal employment and the unemployed. However, the difference was not statistically significant (p-value>0.05).

Individuals who earned more than Ugshs2,000/= during the four weeks preceding the interview, were more likely to seek care than those that earned less. This could be attributed to their having disposable income to spend on health care and related costs. In addition to direct influence of income, people with a higher income base could posses more health literacy which supports health care seeking decisions. The findings support observations made by Nanda (2002) and Blanchard-Horan (2003) that cash restricted health care seeking decisions.

Children under 15 years of age whose guardians were not their biological parents were more likely to seek care when ill. However, this difference was not statistically significant (p-value=0.05).

Individuals previously in union were more likely to seek care when they were ill compared to those who are currently in union. These findings contradict conclusions made by Nanda (2002) that unmarried and widowed women in Uganda were less likely to meet health care and related costs, hence less likely to seek care. The findings particularly question the economic vulnerability of unmarried individuals in Uganda, especially women. However, in this study, unlike Nanda's which was gender specific, the analysis did not make a separate categorization for men and women.

This study established that male respondents were more likely to seek care. However, the difference was not statistically significant (p-value>0.05).

Individuals 45 years of age and above, followed by 23-44, were more likely to seek care than lower age groups. This could be due to the fact that mature people posses more financial and general wealth stability than younger adults in Uganda. Another finding from this study that individuals often sell their property and household items, to raise money in order to meet health care and related costs, supports this. However, the age distribution of utilization of health care services does not support the conclusions made by IUHPE (2000) that the young and the very old in Europe were more likely to use less services. The variations could be attributed to

differences in the settings study settings. Whereas in largely formal sector based economies, middle age people generally posses more financial stability and hence on the basis of financial capacity, are more likely to seek care, in Uganda, it is older people who posses property and cash. The variations in study findings among age groups could be attributed to senior individuals having a less burden of caring for infants, so they have more flexibility. This is supported by Nanda (2002) who observed that women with children had to re-allocate time to seeking care from caring for their infant children.

The variations in findings among age groups could also be also attributed to the high burden of HIV/AIDS epidemic in the country. People tend to be infected more in their teen years than older age groups. This is more so as AIDS was identified by FGD participants as a highly stigmatized condition for which young people who thought they were newly infected, were hesitant to seek care from formal health facilities.

Individuals and communities chose to seek care depending on what they considered to be the cause of the illness. This concurs with an observation made by Pichette and Mtasiwa (2005), that superstition influenced health care seeking decisions. The findings also agree with Bitran and McInnes (1993) who suggested that cultural definitions of the illness had a strong bearing on the nature of decisions made to seek or not to seek care.

FGDs established diseases that individuals were more likely to seek care for from health facilities and those that they considered were best managed elsewhere. Some perceptions over which diseases not to seek care for pose a major public health concern. For example TB, which is highly infectious and fatal when untreated. Similarly, syphilis which is easily transmitted among sexual partners and unborn babies of mothers who are infected. Syphilis also has secondary consequences including mental problems. Also of public health importance is fever among people of all age groups but particularly children under five years of age, given that it is associated with malaria, yet malaria is leading cause of morbidity and mortality in the country.

Also of growing public health concern are mental disorders which are generally neglected, not only by communities but by the health care delivery systems. On the other hand, whereas Uganda is celebrated as one of the few success stories to turn-round the HIV/AIDS epidemic is sub-Saharan Africa, HIV/AIDS remains highly stigmatized by the community including health care workers. Suspecting or knowing that one is infected with HIV/AIDS is alone, a barrier to seeking care.

5.4 Provider practices affecting use of health care services

There were more users of hospital level health facilities than other levels. This could be attributed to more availability of health care workers in hospitals, which is in agreement with findings of Sengooba and McPake (2004), in their study on financing maternal health services in Uganda. Sengooba and McPake established that there was a higher concentration of health care workers at higher levels of care

than lower levels. The concentration of health care workers at higher level health facilities could be explained by insufficient financing and persistent drug stock-outs which are more common in lower level health facilities than higher levels (MOH 2004).

When there are no drugs in health facilities, health care workers might get redundant. This could in turn contribute to "moon-lighting" (getting side jobs), which results into a vicious cycle of poor service delivery in public health facilities. Moonlighting was revealed by some KIs who complained that the public sector effectively recruited for the PFP sector.

Behavior of health care workers influenced health care seeking behavior of individuals and the community. The findings reflect the observations made by WHO (2000), that humility of health care workers made the services delivered more acceptable to clients. The findings also support conclusions made by Gish (1990), that individuals made more quantitative use of health facilities once they felt part of the decisions made by health care workers on their behalf, and were assured that their privacy will be maintained.

The big share of service delivery by PNFP facilities corresponds to the suggestion by Hanson and Barman (1994), that NGO health facilities responded better to the respect and desire for politeness by their clients.

This study also established that professional behavior of health care workers determined use of health services. This corresponds to observation made by

Pichette and Mtasiwa 2005, that after the initial contact with health facilities, health care workers' behavior determined the way individuals made decisions to seek or not to seek care in the future.

This study found that users were more motivated to seek care from health facilities provided there was an established level of trust between them and the providers. This supports the views of Donaldson (1999), who called for explanation by health care workers the key aspects of care to their patients. The findings also affirm observations by WHO (2000), that assurance for confidentiality over their personal health information, promoted use of health facilities by members of the public. Qualitative results from this study indicated that negative attitudes towards services or lack of understanding and appreciation why some treatments were given or procedures done, inhibit their use. This concurs with Holland (1993) who observed that attitudes determine acceptability of services provided. FGD participants indicated that the private sector had earned reputation in the community for providing high quality services, whereas many people were losing trust in the public sector as a provider of health care.

The declining trend of utilization of public health facilities could be attributed to inadequate financing the health sector, which has resulted into a chronic drug shortage, inadequate numbers of health care workers and generally lower quality of service provided in public health facilities compared to PFP and PNFP. In addition to inadequate financing, KIs revealed that the biggest portion of public expenditure in the health sector went to administrative expenses including salaries. This left

very little money to meet costs of supplies including drugs. The imbalance in budget allocation between salaries and other costs could be attributed to the phenomenon that salaries were indispensable core costs.

Individuals were more likely to seek health care when they knew they would spend as little time as possible. Shorter waiting time in PFP health facilities, among other factors, could have contributed to the equal share of service delivery between the public and PFP facilities despite the fact that the private sector was reported to be more expensive in terms of direct costs than the public sector. The findings provide corroborative evidence to the conclusions made by Bitran and McInnes (1993), that individuals were willing to discount financial costs with time. The findings are however contrary to assertions often made by political leaders that people were willing to spend long hours in queues waiting for free services. The leaders' assertions, among other factors, might contribute to inadequate allocation of human resources to the health sector counting on the few who are there to deliver services to the ever increasing population. In turn, under-allocation of human resources to the health sector could contribute to the vicious cycle where there is high attrition rates due to burn-out among health care workers in the public sector as a result of excessive work-loads.

Informal fees in health facilities still remain. The fees might account for the low uptake of health care services especially in the public sector. The situation seems not to have changed since the abolition of user fees in March 2001. Whereas health care is supposed to be free in public sector health facilities except private wings of

hospital level facilities, the reality is that it is an excludable good, whose enjoyment is only possible for those willing and or are able to pay for it.

Revelations of exhortation of informal payments by health care workers were qualitative and it was not possible to establish its magnitude. However, it was apparent that it affected use of public health facilities given that they provided care to less than one-third of the respondents who indicated having sought care. The findings from this study concur with conclusions made by Konde-Lule, Okello, Mbonye, et al (1998), that under-the-table payments were more rampant in public health facilities in Uganda. The variations in administrative measures taken against corruption between private and public health facilities could explain the differences in the proportions of people reporting use of the three categories of health facilities. People were using public health facilities less and less possibly because it was difficult to predict what the cost of care would be due to informal fees, compared to other facilities.

Whereas all KIs from private facilities acknowledged that when they got reports of dishonesty-related malpractices, they dealt with them by summarily dismissing the staff who were responsible, many of the KIs from the public sector indicated lack of knowledge of dishonesty-related malpractices and hence could not take action. Only one community based KI in the public sector complained about dishonesty. It was revealed that the action that was taken over the individual was a transfer from one duty station to another.

When health facilities informed the community about the services provided, individuals were more likely to seek care when ill. This supports the observation made by Pichette and Mtasiwa (2005), that where populations were involved in the way services were provided, there was a higher tendency to use the services. Therefore, this cast doubt over the effectiveness of HCMCs which are expected to be voices of the community. It also questions the efficiency of health education and promotion programs which were intended to shape health care seeking behavior.

The variation of share of service delivery between the three types of health facility ownership could be attributed to the freedom the private health facilities have to charge fees. The freedom to charge fees ensures availability of supplies in private health facilities, unlike in public facilities, which offer free services except for private wings of hospital level facilities. Despite the government directive not to charge fees, some KIs indicated that some public facilities charge an official nominal fee ranging between Ugshs300/= to Ugshs1,500/= per visit (US$1:Ugshs1,800/=, June 2005). Some FGD participants acknowledged that in the absence of cost sharing, it was very difficult to have high quality services. There were some suggestions to re-introduce fees in the public facilities, so as to improve on availability of supplies.

Information to users, especially on cost of services is important since it empowers individuals to make choices. Whereas private providers are out to attract users, this has not been the case with public providers. Political statements whose reality on the ground may vary often guide promotion of public services. FGDs participants

indicated that political leaders tell them to seek care from health facilities only to find no drugs or no health care workers. This created a negative attitude towards the health services provided by public health facilities.

5.5 Socioeconomic factors determining health care seeking decisions

HC IIs were found to be the second most popular providers of care after hospitals. According to the HSSP 2000/1-2004/5, every parish is supposed to have at least one HC II health facility. This location is a reasonable walking distance for many individuals. Even when HC IIs were far, the distance would be less than many other levels of health facilities, hence the transport fares were cheaper. Secondly, because the biggest provider of care at HC II level were PFP facilities (72.3%), this correlates to the business marketing skills profit makers possess. In addition, PFP facilities are generally more strategically located in densely populated locations or where they could be easily accessible by all forms of transport.

The larger proportion of users of PNFP hospitals is attributable to the location of Kiwoko hospital, which is ran by the Anglican Church of Uganda Luweero Diocese. Unlike many faith-based health facilities, the hospital is not located at the diocese headquarters, which is at the district headquarters, but in a location that was previously underserved. This made its service population very large, in addition to the credibility it has built as a provider of high quality health care.

Availability and cost of transport was a key determinant of health care utilization. This agrees with the findings of Ellis and Mwabu (2004), that availability of means

of transport influenced the way individuals made decisions to seek or not to seek care when ill in rural Kenya. Transport availability could explain why HC IIs were more popular providers of care that HC III and HC IV, because they are located in every parish and hence more physically accessible. The findings also support the conclusions made by Bitran and McInnes (1993), that availability of other social services including transport, influenced health care seeking behavior of individuals.

The majority of the respondents indicated they were dependants (68.3%). This included proxy respondents for under 15 respondents. This could be attributed to the fact that the majority of respondents were 22 years and below, with 0-1 age group being the most populous age. Given that females often take on the child caring role in this community, this could have influenced the dependency status towards having more dependants than non-dependants. However, the proxy respondent status does not affect the sex and education status on the head of household. However, because one-third of the information of educational level of heads of households for dependent respondent was missing, this could have affected the validity of the conclusion that education level of the decision maker in a household does not enhance health care seeking behavior.

Individuals who lived in households with no children were more likely to seek care than those with no under five children However, the difference was not statistically significant (p-value=0.05), hence the high tendency of seeking care among those who lived in households with no under five children was could have been due to chance.

Individuals who had one elderly person in their households were more likely to seek care when ill, followed by those with 2 and more elderly persons. This could be attributed to the common practice in many Ugandan communities where the elderly serve as carers for children in households when more able-bodied members of the households are away. It could also be attributed to having more respondents aged 1 year and below who had no care responsibility for the elderly. Another reason would be that the aged are not a group, in the Ugandan setting, who are actively cared for.

Individuals who reported having a family member suffering from a chronic condition were more likely to seek health care than those that did not have a family member suffering from a chronic condition. This study finding on the impact of existence of a chronically ill member in the family on health care seeking behavior could be explained by stronger extended family systems in the study community. Extended system guarantees that even if one member of the household was ill, there would be others to take care of the infirm while the ill person goes to seek care. This is unlike the findings of IUHPE (2000), which suggested that in Europe, households with members who were chronically ill were more prone to using less health care services. These variations could be attributed to differences in study settings. In the Ugandan setting, unlike European communities, extended family networks offer social security.

Individuals who reported to have a family member having a physical disability were more likely to seek care for themselves when they fell ill. However, the difference was not statistically significant, hence the high tendency could have been due to chance (p-value>0.05).

This study established that one of the most readily available sources of income for individuals to meet health care and related costs was selling personal property. This correlates with the observations made by Donaldson (1999) that individuals without insurance faced additional barriers to seeking care. This could, among other factors, explain why 53% of the study population did not seek care from a health facility when they fell ill. The low level of use of health care services could be attributed to the economic imbalance within the Ugandan population, where rural residents are reported by the MOFPED (2003), to be increasingly getting poorer and unable to afford basics of life. The low level of use of health care services corresponds with another finding from this study that the most important reason (81.7%) which respondents who never sought care indicated as the barrier to seeking care was lack of money. The low level of utilization of health care services could also be attributable to geographical imbalance in distribution of health services where health facilities are concentrated in particular areas (MOH 1999). This is the case for Bamunanika county, where in one location, there was a mission HC II facility and a public HC III facility, whereas the rest of the population remained largely underserved (DDHS Data, June 2005). Given poor transport networks and high levels of poverty, geographical access stood in the way of the population to seek care from health facilities. This is agrees with the finding that

long distances to health facilities was the second biggest barrier to seeking care given by respondents (50.8%).

The low level of utilization of health care services could also be attributed to availability of alternative forms of care including drug shops and herbalists. When individuals have alterative forms of care, which are more financially, physically and socially accessible or acceptable, the population would opt to use such services as opposed to formal health facilities (Woulters 1992).

Political ideology as stipulated by economic liberalization also accounts for the low levels of utilization of health care services. Political ideology also influences health policy. The political set up in the country, which is responsible for making decisions to allocate resources to the health sector and other social sectors like education and public administration might also explain the low utilization rates in that less resources than would meet the people's needs are allocated to the sector.

The increasing trend of the proportions of services provided by private providers could also be attributable to market liberalization in the country and the increasing role of the private sector in all spheres of life. The National Resistance Movement (NRM) government in 1986, as part of Structural Adjustment Programs (SAPs) and Health Sector Reforms (HSR) introduced market liberalization. The increasing poverty levels among the rural population could explain why the population of users of PFP facilities has reduced from 35% to 30% (MOFPED 2003). This is because PFP facilities recover 90-100% of their costs from user fees (Amone, Asio,

Cattaneo, et al 2005). On the other hand, the sharp increase of numbers of users of PNFP hospital level facilities is largely attributable to opening of Kiwoko hospital in 1990 in a previously geographically underserved area.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The study found that only 47% of the people who sought care obtained it from a health facility. This is not satisfactory. The majority of the respondents (53%) in need of health care did not get it from a health facility. This section presents a summary of possible reasons and suggests some interventions. There were a number of factors that were found not to promote health care seeking behavior. These included age, presence of chronic conditions, perception of one's health status in comparison to others, impact of illness on routine activity, marital status, and level of income. Similarly, dependency status in the household was found to influence health care seeking decisions. Sex, occupation and nature of kinship were found to influence health care seeking behavior. Caring for the elderly and chronically ill was found to influence health care seeking decisions. The study established that perceptions about the cause of the disease and knowledge of services available influenced health care seeking behavior. Credibility and distance to health facilities were found to be key enhancing factors to seeking care. Lack of finance means, and long distances to health facilities wee found to be key barriers to seeking care. On the other hand, sex of heads of household and their education status were found not to influence health care seeking behavior. Similarly, caring for under 5 children and the physically disabled were found not to influence health care seeking decisions.

6.1 Despite the abolition of user fees in the public sector, today, public health facilities deliver care to only 30% of the people who seek care from health

facilities. However, 61.3% of the health facilities are publicly owned. The stake of the state as a provider of health care services has declined from 56% in the late 1980s and 40% in early 1990s. On the other hand, the private sector delivers care to 70% of the people, where as it owns 38.6% of the health facilities. However, accounting for individuals who never sought treatment at all, the public sector directly provided service to only less than 11% (n=52) of the population. Credibility and trust people have in health facilities influenced health care seeking behavior. More than half (56.8%) of the respondents who sought care from health facility indicated it was because they had hope in the health facility to help them. Credibility was associated with availability of drugs and other supplies and the professional conduct of health care workers.

The way service in the public sector facilities is delivered needs to be reviewed. Service delivery should be integrated so as to promote a one-stop approach for essential services like consultation, investigation and pharmaceuticals' provision. Interpersonal skills of health care workers need to be improved. District authorities and the MOH should draw lessons from the the PFP and PNFP as one of the measures to improve use of health care services and maximize the potential that exists in the public sector. For services that the private sector has a comparative advantage to deliver, the public sector could contract them out to the private sector. Lessons should be drawn from success stories of contracting out non-core services in the health sector. Services that have been successfully contracted out include cleaning, catering, security, and maintanace. The district authorities and the central government should increase budget allocation to the sector so as to ensure

availability of essential drugs and supplies. Optimal balance should be made between budget lines allocated to the sector so as to meet minimum personnel requirements and availability of drugs and supplies.

6.2 The private sector is taking a leading role in providing health care for all people irrespective of the level of income, Private fees remain the main source of financing the cost of health care. This unfortunately is to the detriment of the rural poor.

Private providers, including the PFP who venture into operation in largely underserved areas should be encouraged through extension of credit facilities, business skills enhancement and tax breaks. Districts authorities should explore public health insurance schemes to finance privately provided services. This would complement government effort to provide free health care services. Lessons should be drawn from anecdotal schemes targeting specific groups of people like women and small communities (Nanda 2002). In addition to public health insurance, community health funds should be encouraged among rural residents who are not employed in the formal sector with appropriate exemption mechanisms for the most vulnerable, so as to promote equity in access to health care services. This would ensure financial stability and provide safety nets for individuals who fall ill and have no money to pay for health care and related costs. However, there would be a need to address negative perceptions about sharing risks using examples from other communal finance pooling schemes. There is also need to address the value placed on health care over and above other basic needs like education.

6.3 Existence of informal fees influenced choice of provider and health care seeking decisions. In addition, existence of fees deterred many individuals from seeking care all together.

Dishonesty in public health facilities need to be addressed so as to increase trust the community has in them to implement government policy for provision of free health care services to the people. Community vigilance against dishonesty and corruption needs to be stepped up through capacity building of HCMCs and local councils. The HCMCs should be empowered to take action against dishonest practices including providing them with knowledge on what to do in case they receive claims of dishonesty among health care workers. The district health officials should strengthen financial management at health centre level so as to ensure the best use of available resources. There should be appropriate division of roles, including engaging individuals assigned the exclusive responsibility for preparation of budgets and financial reports.

6.4 Individual perception of health status enhanced health care seeking behavior. Over half of the individuals who rated themselves poorly or very poorly sought care from a health facility (51.5%).

Health education and promotion efforts that target raising vulnerability to illness need to be strengthened. In particular, the HCMCs, which are in place for all HFs could be tapped for this purpose. Health education efforts should also target the

majority of the population (53%) who never seek professional advice for their ailments. Strategies to incorporate traditional healing practices in modern medicine should be strengthened.

6.5 A supportive legal environment to protect patients from unscrupulous health care practices should be developed. The MOH should work with the Uganda Law Reform Commission and the Ministry of Justice in consultation with organized consumers of health care, Uganda Medical and Dental Practitioners Council, Uganda Nurses and Midwives Council and other interest groups to develop a Patient Bill of Rights. This would promote trust the public has in health care delivery while at the same time safeguarding professional indemnity of health care workers.

6.6 Research Agenda

i. Use of health care services should be explored over time, through a longitudinal study so as to control for recall bias and seasonality of events like access to cash and occurrence of severe illness. The results of such research would help in understanding the worth of public investment in the health sector.

ii. There is a need to understand the role of alternative forms of care including drug shops and pharmacies as they are a major fall-back for many individuals who are not able to use conventional health facilities when they fall ill.

iii. A large proportion of the population seeks care from the private sector. Qualitative data shows that people appreciated the quality of services in the privates sector. There is therefore a need to generate a technical understanding of the variations in quality of health care services provided by the different levels and ownership of various types of providers of formal health care

iv. The results from this study on the impact of caring for others in a household, were inconclusive. Similarly, the impact of education on health care seeking behavior was inconclusive. There is therefore a need to understand the impact of care burden on use of health care services among men and women separately. There is also a need to critically examine the influence of education on health care seeking behaviours of individuals and those who depend on them for decisions regarding health care.

v. Results from this study on informal fees were largely qualitative and it was not possible to determine the degree of their existence. There is a need to understand magnitude of informal fees in health facilities. This would promote government efforts to provide affordable health care to the vulnerable.

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