HOME-BASED HIV COUNSELLING AND TESTING IN UGANDA: THE TASO APPROACH. IS IT A VIABLE OPTION FOR THE WHOLE COUNTRY?

A thesis submitted in partial fulfilment for the degree of Master of Public Health

By

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Abstract

The Government of Uganda plans to scale up various VCT delivery models, including Home–Based VCT in order to increase the uptake of VCT and access to HIV prevention, treatment and support services.

The AIDS Support Organisation (TASO), a national NGO in Uganda has been giving care and support to PLWHA and their families since 1987, and has served a cumulative total of over 150,000 people. TASO got funding from PEPFAR to provide ARVS to 3000 clients in 2004, and scale up to 10,000 clients in 2007. In order to facilitate ART adherence and family support for the index client, the Home-Based VCT programme was designed whereby family members of clients initiating ART treatment are offered free VCT at home, and linked to HIV prevention, treatment and support services.

This study is descriptive and analytical; and aims to review the TASO Home-based VCT programme and assess whether it can be scaled up by the Government to the families of all PLWHA in Uganda using OECD's DAC criteria for evaluating development assistance (relevance, effectiveness, efficiency, impact and sustainability).

The main findings are that among these family members, the programme broke barriers to VCT access; identified previously undiagnosed HIV infection, especially among children ≤5 years and adults ≥18 years; identified discordance; increased access to HIV/AIDS prevention, care and treatment; improved the survival of children <10 years; and improved adherence and family support for the index client.

With the availability of financial resources, it is possible for the Government to scale up this programme to the families of all PLWHA in Uganda. However, for the time being, the Government should scale up Routine HIV counselling and Testing in clinical settings, and promote other cost-effective strategies for HIV prevention.

Key words: Uganda, Home-Based VCT, scale up, ART.

Acronyms

AIC	AIDS Information Centre.
AIDS	Acquired Immune Deficiency Syndrome.
ART	Anti Retroviral Therapy.
ARVS	Anti Retroviral drugs.
CBO	Community Based Organisation.
CD4	Cluster of Differentiation-4
CDC	Centre for Disease Control
DIFD	UK Department For International Development.
HBVCT	Home Based Voluntary Counseling and Testing.
HCT	HIV Counselling and Testing.
HIV	Human Immunodeficiency Syndrome.
HSSP	Health Sector Strategic Plan.
MIS	Management Information System.
MoFPED	Ministry of Finance, Planning and Economic Development
MOH	Ministry of Health of Uganda.
MTCT	Mother to Child Transmission of HIV.
NGO	Non Governmental Organisation.
OECD	Organisation for Economic Co-operation and Development.
PEPFAR	Presidential Emergency Plan For AIDS Relief.
PLWHA	People Living With HIV/AIDS.
PMTCT	Prevention of Maternal To Child Transmission of HIV.
RCT	Routine Counseling and Testing.
STIs	Sexually Transmitted Infections.
SWAP	Sector Wide Approach.
TASO	The AIDS Support Organisation.
UAC	Uganda AIDS Commission.
UBOS	Uganda Bureau of Statistics.
UDHS	Uganda Demographic and Health Survey.
UHSBS	Uganda HIV Sero-behavioural Survey.
UNAIDS	United Nations Joint Programme on HIV/AIDS.
UNDP	United Nations Development Programme.
UNGASS	United Nations General Assembly Special Session.
VCT	Voluntary HIV Counseling and Testing.
VU	The Free University, Amsterdam.
WHO	World Health Organisation.

Chapter 1. Introduction

Worldwide, 33.2 million people were estimated to be living with HIV/AIDS in 2007. Over 6800 new HIV infections and over 5700 AIDS deaths occurred on a daily basis; mainly because of inadequate access to HIV prevention and treatment services (UNAIDS and WHO 2007). Of all new HIV infections, 42% occur in young people aged 15-24 years; and almost one-third of all people living with HIV/AIDS (PLWHA) worldwide are 15-24 years (Global fund 2008). Only 10% of HIV-infected individuals worldwide are aware of their HIV status (UNAIDS 1999). Sub-Saharan Africa continues to be the most affected region; having 68% and nearly 90% of all infected adults and children respectively, and 76% of all AIDS deaths in 2007. 61% of all infected adults in sub-Saharan Africa are women (UNAIDS and WHO 2007).

Uganda was one of the first Sub-Saharan African Countries to experience the devastating effects of HIV/AIDS and to act in an attempt to control it. With a strong government and political leadership, multi-sectoral collaboration, and effective public education campaigns, success was registered and adult HIV prevalence declined from about 30% in the 90s to the current estimated prevalence of 6.4% (MOH & Macro 2006).

However, HIV prevalence has stagnated between 6-7% in the last 6 years and there are actually indications that it might be on the rise. This is because of an apparent increase in risky sexual behavior among people ≥24years, and people in the fourth and fifth wealth quintiles, despite the availability of both prevention and treatment services, and the high level of knowledge of HIV prevention among Ugandans. Prevention of Mother to Child Transmission of HIV (PMTCT) is also lagging behind considering that in the 2 years prior to the 2004/5 Uganda HIV Sero-Behavioral Survey (UHSBS), only 2% of women who gave birth were counselled, offered an HIV test, received the test, and found out their test results. Of those who tested HIV positive, only 65% received Anti Retroviral drugs (ARVs) for PMTCT (MOH & Macro 2006). Currently, it is estimated that there are about 940,000 PLWHA in Uganda (UNAIDS 2008a)

An important entry point to HIV/AIDS prevention, care, and support is Voluntary Counselling and Testing (VCT). In Uganda, only 25% of women and 21% of men aged 15-49 years have ever tested for HIV and received their test results (UBOS & Macro 2007) despite the fact that Home-based VCT (HBVCT) involving the general population has been piloted successfully in 2 districts of Uganda and Routine Counselling and Testing (RCT) has been rolled out in clinical settings. Consequently, according to the Uganda AIDS Commission (UAC), the majority of HIV infected Ugandans are not aware

that they are HIV infected. Some of the reasons why people do not test for HIV include; considering themselves to be at low risk of HIV infection, no knowledge of HIV testing, not knowing where to get one, test costs too much, not wanting to know if one has the virus, inaccessibility to treatment if HIV positive, and testing center being too far (MOH & Macro 2006).

The AIDS Support Organization (TASO), a national Non Governmental Organisation (NGO), has been giving care and support to PLWHA in Uganda since 1987. One of the programmes that TASO has is HBVCT. In this programme, all family members of TASO's index clients who are initiating ARV treatment are offered VCT at their home and given their results the same day. It was conceived in 2004 as a strategy to ensure high adherence among TASO's clients on Anti Retroviral Therapy (ART) since ARV drug sharing had been observed between parents and their children, between spouses, and between other family members, even when there is only a suspicion that the other person could be HIV infected (without a positive HIV test result). Sometimes this would even occur without the consent of the index client (TASO 2005). Since its conception, HBVCT has conferred many benefits onto TASO clients, their family members, and the larger community; and experienced many challenges as well during its implementation.

The aim of this thesis is to review TASO's HBVCT programme, and assess whether this model can be scaled up by the Government of Uganda to the families of all PLWHA. The thesis is organised into 6 chapters; the 1st one being the introduction, the 2nd the background information on Uganda, the 3rd the problem statement, objectives, and methodology, the 4th information about TASO and TASO's HBVCT programme, the 5th the discussion, the 6th conclusion and recommendations, and finally annexes that gives complementary information to help the reader to better understand the document.

The author has been working with TASO as the Medical Coordinator of TASO Gulu Centre since October 2005; giving clinical care and directly supervising 35 people involved in service delivery including Medical officers, clinical officers, nurses and nursing assistants, pharmacy technicians, laboratory technicians and assistants, and field officers; and coordinating all the activities of the medical department of TASO Gulu centre. She has had many personal and professional encounters in caring for PLWHA. She believes that in Uganda's generalized epidemic, which could actually be worsening, new and innovative models for HIV prevention should be developed; and HBVCT involving family members of HIV infected people could be one of those innovations.

Chapter 2. Background Information on Uganda

This chapter gives the geographical, demographic, political, administrative, socio-economical, health systems organisation and financing, and the HIV/AIDS situational analysis of the country.

2.1. Geographical Profile.

Uganda is a land-locked Country crossed by the equator. It is 800km inland from the Indian Ocean and bordered on the east by Kenya, south by Tanzania and Rwanda, west by The Democratic Republic of Congo and the north by Sudan. It covers a total area of 236,040 sq km; with land covering 199,710 sq km, and water 36,330 sq km. The climate of Uganda is primarily tropical, with two dry seasons in a year, from December to January, and June to July. Uganda is a well watered country with adequate rainfall to sustain it.

2.2. Demographic Profile.

The population of Uganda was estimated at 28,400,000 in 2007. Only 13% of this population is urban (MoFPED 2007). There are 3 main ethnic groups; the Bantu found in the central, western and eastern areas, and the Luo and Nilo-Hamites in the northern areas of the country. The population is predominantly young with 49.4% between 0-14 years, 48.1% between 15-64 years and only 2.5% 65 years and above (UNDP 2008). There has been a slight decline in infant mortality from 83 per 1,000 live births in 2001 to 76 per 1,000 live births in 2006, and of maternal mortality from 505 per 100,000 live births in 2001 to 435 per 100,000 live births in 2006. The total fertility rate is 6.7 children per woman; 7.1 in rural areas and 4.4 in urban areas (UBOS & Macro 2007). HIV/AIDS contributes most to all age's mortality at 25% (WHO 2006) and the HIV prevalence among the 15-49 age group is 6.4% (MOH & Macro 2006).

2.3. Political and Administrative structure.

Uganda gained her independence from Britain on October 9th 1962. The current government came to power in 1986 after a five-year bush war and managed to secure relative peace, stability and economic growth in most parts of the country, and attracted tremendous donor support. However, there has been long-standing North-South regional inequalities; insecurity in Northern and Southwestern Uganda, and rampant corruption (DFID Uganda 2004).

Administratively, Uganda is divided into 81 districts; each of which is further subdivided into sub-districts, counties, sub-counties, parishes and villages (Ocwich 2005). Decentralization was launched in October 1992, aimed at making districts have more power, resources, responsibility, and decision making authority in order to encourage long term rural development (Munyonyo 1999).

2.4. Socio-economic Profile.

Uganda is a low-income country with a GDP per capita (Purchasing Power Parity) of only 1,454 US dollars in 2005 (UNDP 2008). In 2006, the adult literacy rate was low at 69%, and 31% of the population lived below the poverty line (MoFPED 2007). The unemployment rate is low at 1.9%. However, 30.3% of those in paid employment earn less than 20,000 Uganda shillings (≈11.8 US dollars) per month, and 30.2% earn more than 100,000 Uganda shillings (≈58.8 US dollars) a month. The Agricultural sector is the dominant sector of employment, employing 74% of the working population, most of whom are subsistence farmers and fishers (UBOS 2007). The high level of poverty and underdevelopment depicted above is a major driver of the HIV/AIDS epidemic.

2.5. Health Systems Organisation.

The Ugandan Ministry of Health is responsible for the Health System in the country. Its mandate is to provide policies, guidance and standards; mobilize resources, develop capacity and give technical support, facilitate district health services; manage nationally based health services; monitor and evaluate the overall sector performance; and to ensure the attainment of good standards of health by all in Uganda. The health infrastructure consists of National and regional referral hospitals, district hospitals and Health centres II, III and IV (See annex 1 for details).

The districts implement the National Health Policies, plan and manage the district health services, provide disease prevention, health promotion, curative and rehabilitative services with emphasis on the Minimum Health Care Package and related national priorities, provide Vector Control, Health Education, ensure provision of safe water and environment sanitation, and collect, manage, interpret, disseminate and utilize health data (MOH 2001).

2.6. Health Systems Financing.

Uganda adopted the Sector Wide Approach (SWAP) to financing it's health sector in 2000 with the main aim of improving the overall performance of the

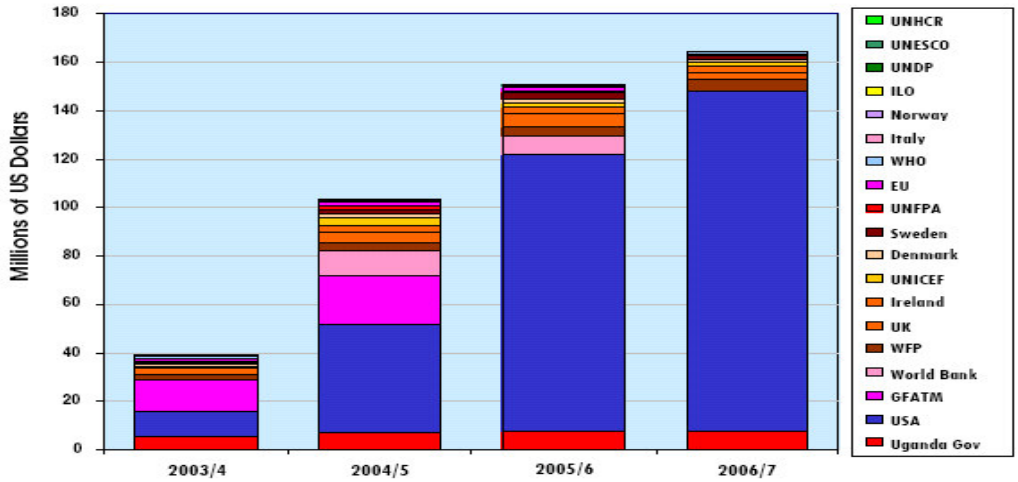
health system and consequently the health status of Uganda's Population, by coordinating development assistance to the sector and reducing the administrative burden for the government. In Uganda, the focus of the Health SWAP is on the Health Sector Strategic Plan (HSSP) and the National health policy, and not just a basket approach to funding. It is also focussed on consensus building among stakeholders; and thus has a flexible approach to the channelling of donor funds; which can be in the form of budget support, support to projects at national or district levels, and technical assistance (Kirungi et al 2006).

In 2005, the Total Expenditure on Health as a percentage of the Gross Domestic Product was 7.2% (WHO 2007), higher than in many countries in the world, probably because of HIV/AIDS spending. The health sector received only 9.6% (MOH 2007) of the Total Government Expenditure, even less than the Abuja commitment of 15% government expenditure committed to Health services. The per capita expenditure on health by the government was equivalent to 9 US dollars, far less than the MOH recommendation of 28 US dollars required to deliver the minimum health care package excluding ARVs. This means that currently, the Government needs a minimum of 784 million US dollars annually to deliver free of charge the minimum health care package excluding ARVs. Considering the cost of ARVs, the optimal per capita expenditure rises to about 40 US dollars, which translates to 1,120 million US dollars annually for basic health care (UAC 2005). However, at the current level of funding, only 41-65% of the HSSP II is being funded (MOH 2007).

Currently, 85-90% of the National HIV/AIDS response is funded by external donor support; the major funders being PEPFAR, Global Fund, and UN agencies, although Global fund support was negligible in the 2005/6 financial year probably because of the its mismanagement in Uganda (See figure I). Government funding accounts for only 7-8% of the response; bringing in the question of sustainability in case of withdrawal of donor support (UAC 2007a).

A new Civil Society fund was created under the Uganda AIDS Commission and officially launched in May 2008. Under Government leadership, development partners contribute to this fund which is then awarded as grants to Civil Society Organisations and NGOs in the fight against HIV/AIDS. The contributing partners so far are Irish Aid, Danida, DFID, and USAID; and 40 national and local civil society organizations have benefited from the grants (Ambassador of Denmark 2008).

Figure I: Actual funding for HIV/AIDS programs in Uganda by year.



Source: Lake, et al. (2006) Sector based assessment of AIDS spending in Uganda. European commission, as cited in UAC. 2007a.

2.7. HIV/AIDS epidemic and response.

In Uganda, cases of HIV/AIDS were first described in a small trading town on the shores of Lake Victoria, at the border with Tanzania, in 1982. It was locally known as the 'slim disease' since the major symptoms were diarrhea and weight loss. The disease was then attributed to witchcraft. All the people who were first affected were traders who were smuggling goods across Lake Victoria to and from Tanzania. Later, it was realized that it was most likely transmitted through sexual intercourse, as most of the people affected were the sexually active age group (Serwadda et al 1985), and was associated with sexual promiscuity. A survey of the households indicated that despite the closeness within family, only sexual partners were affected (Okware 1987).

In 1984, it was estimated that 1.5 million out of the 15 million Ugandans were living with HIV/AIDS. (Aliro 1994). At that time, the country was in political disarray and there was no concrete political acknowledgement of the situation. By 1986, 900 cases were reported, rising to 6000 cases by 1988 (Uganda AIDS programme, as cited in Slutkin et al, 2006).

HIV/AIDS was brought to the forefront in Uganda in 1986 when the current government took over power. Uganda's president was struck by the reality of AIDS in 1986 when he learnt that up to 25% of Ugandan troops could be HIV infected (Zuniga 1999). By 1986 -1987, 86.5% of sex workers and

35% of lorry drivers studied were HIV positive and 14% of blood donors and 15% of Ante Natal Care attendees in major urban areas were HIV positive (Slutkin, et al 2006). As a result of this high prevalence the government of Uganda formed the National committee for the prevention of HIV/AIDS and the first national AIDS control programme in Africa through assistance from WHO under the MOH of Uganda (UNAIDS 2008b).

The strategies of the national AIDS control plan of 1987 were educational campaigns to inform the public on the modes of transmission and how to avoid infection, to reduce transmission through blood transfusion by setting up laboratories to test all blood before transfusion, advocacy for careful sterilization of instruments and contaminated hospital areas to assure patient and health worker safety, measuring the extent of the outbreak and possible co-factors by case surveillance, and doing sero-prevalence and operational research studies (UNAIDS 2008b).

Local initiatives against HIV/AIDS also sprung up in the 1980's. One of the major initiatives that has stood the test of time and expanded to become the largest indigenous national NGO in Uganda, and indeed in Africa, in the fight against HIV/AIDS in Uganda is TASO (TASO 2003a).

The Uganda AIDS Commission (UAC) is the overall coordinating body of the national HIV/AIDS response. It was formed in 1992, directly under the office of the president by an act of parliament to coordinate the national AIDS response under the global principle of 'the three ones'; ie. "One National HIV/AIDS Coordinating Authority with a broad-based multi-sectoral mandate; One HIV/AIDS Action Framework that provides the basis for implementation by all partners; and One agreed Country-Level Monitoring and Evaluation System". It's mandate is to oversee, plan and coordinate AIDS prevention and control activities throughout Uganda, with particular regard to policy formulation, planning and coordinating all AIDS policies and programs within the National Strategic plan, identifying obstacles to the implementation and achievement of AIDS control activities and targets, mobilizing and monitoring resources for AIDS control programs and activities, disseminating information pertaining to the epidemic, and supervising activities related to the control of the epidemic. This coordination is done through the Uganda HIV/AIDS partnership mechanism. UAC is not involved in direct programme implementation (UAC 2006).

2.8. Trend of the epidemic.

The HIV prevalence in Uganda has been going down since the 90s from as high as 30% to the current estimated prevalence of 6.4% (MOH & Macro 2006) and Uganda is considered to be one of the first countries in the world

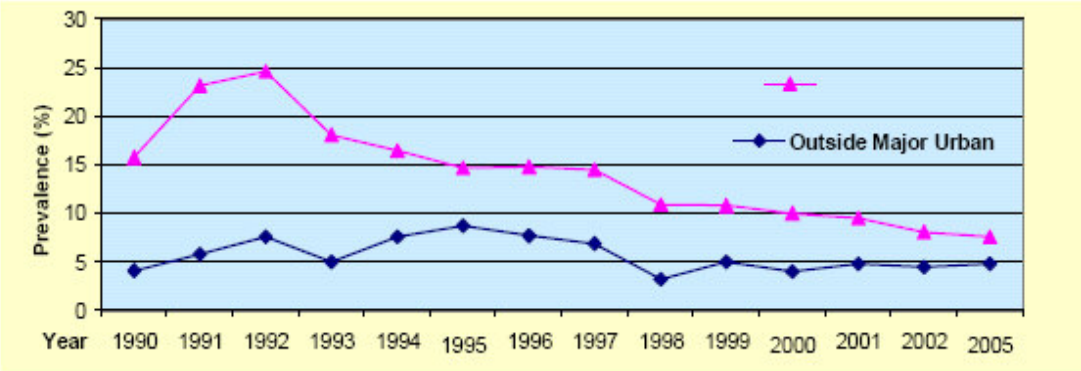
to have clearly reversed its HIV epidemic (Asimwe-Okiror et al 1997). Despite this initial downtrend, the prevalence of HIV is more or less the same for the last six years at 6-7% (UNAIDS 2008b). (See fig II).

The initial decline in HIV prevalence in Uganda could be attributed to the high mortality in HIV infected persons (Wawer 1997) and to behaviour change; especially abstinence and condom use. (Killian 2002; Asiimwe-Okiror 1997).

However, the stable HIV trend now is associated with an apparent increase in behaviours that favor HIV transmission. While abstinence behavior is increasing overtime [the young are increasingly delaying their sexual debut] (MOH & Macro 2006), sex with a non-regular partners is increasing (reported by 12%, 14%, 15% and 16% of adult women, respectively, and by 29%, 28%, 37% and 36% of adult men, respectively in national population-based surveys conducted in 1995, 2000, 2004–2005 and 2006). In the same surveys, condom use during sex with these partners was reported by 20%, 39%, 47% and 35% of women in 1995, 2000, 2004–2005 and 2006, respectively, and by 35%, 59%, 53% and 57% of men, respectively, indicating a lack of progress in promoting safer sex. Consequently, 77% of new infections occurring in adult men and 58% of new infections occurring in adult females happened in persons older than 30 years. This is despite the high level of awareness and knowledge on HIV transmission and prevention. (Kirungi et al 2006).

It is also thought that that the long duration of the epidemic has led to complacency or "AIDS fatigue". The wide availability of ARVs has also removed the notion that HIV infection is a "death sentence". With effective ARV treatment, people begin to feel human again and desire to engage in sexual intercourse (Bunnell et al 2006), or even desire more children (Maier et al 2008). All these have led to an increase in more risky sexual behaviour; and the same prevalence overtime actually means increasing numbers of people infected because the population is also increasing.

Figure II: Median HIV prevalence of Antenatal care attendees from 1990-2005



Source: HIV Prevention in Uganda: The Road towards Universal Access, June 2006

The MOH and Ministry of Defense through the Joint Clinical Research Centre pioneered free ART provision in the year 2002 with 6 sites. By September 2007, there were 106,000 active clients on ART of whom 11,000 were HIV positive children (UNAIDS 2008b). 17% of those cumulatively enrolled on ART in Uganda were enrolled by the 11 TASO centres (TASO 2008a) .

2.9. VCT in Uganda

Before 1990, there were very few HIV testing services in Uganda, almost none of which had counselling services as well. Most of the people who wanted to know their HIV serostatus would go and donate blood; which was an expensive misuse of blood banking services. Moreover, the blood bank was not able to offer the needed supportive counselling (UNAIDS 1999).

In response to the ever-growing demand for HIV testing services, several organizations got together and held meetings to discuss the need for anonymous VCT services in Uganda. As a result, the AIDS Information Centre (AIC) was founded in 1990.

The Government of Uganda, assisted by numerous donors, has also been creating VCT centers around the country over the past 15 years, and has promoted HIV testing as a means of HIV prevention and access to care. By June 2007, VCT services had been established in almost all the districts in the Country, although in many areas the coverage within the districts was still limited to a few sites. The coverage of Government facilities providing VCT in the country is shown in table I below. Currently, Health Centre (HC) 2 levels are not providing VCT services.

Table I: VCT Coverage by Health Facility level in 2006/07

Level of Health facility	Total no. in the Country	No. of HCT sites as of June 2006	% coverage in 2006	No. of HCT sites as of June 2007	% coverage in 2007
Hospitals	101	101	100	101	100
HC4	152	142	88	152	100
HC3	799	137	17	259	30
HC2	1887	0	o	0	0

Source: MOH. 2008. Annual Health Sector Performance report 2006/07.

According to the Uganda VCT policy document (MOH 2003), HIV testing in Uganda occurs under the following circumstances.

- VCT; here HIV testing is provided to individuals who seek testing out of their own will without coercion.
- HIV testing offered to pregnant women during ANC for purposes of PMTCT.
- HIV testing for clinical purposes aimed at helping the attending clinician manage the patient.
- HIV testing after occupational exposure particularly aimed at health workers for purposes of post-exposure prophylaxis.
- VCT for special groups of people e.g. the deaf, the blind, and people who may be in a state of mind that makes them unable to make rational decisions about VCT.

In addition, HBVCT has been piloted successfully in 2 districts of Uganda and Routine Counseling and Testing (RCT) has been rolled out in clinical settings following a study that showed its effectiveness.

In the study, RCT was offered to some in-patients and outpatients and their family members in a Hospital setting in two tertiary, public, university teaching hospitals in Uganda. Within 16 months, a total of 50,649 patients and 9,720 family members had been tested; the acceptance rate being over 90%. Overall, 38% of inpatients and 20% of family members were HIV infected. The discordance rate among the couples in which one pair of the couple was a patient was 19%. Prior to this, none of the discordant couples were aware of their discordant status (Wanyanze et al 2008). The high discordance rate found in this study, almost 4 times the national average discordant rate among cohabiting couples (5%) shows that testing couples in which one partner is admitted in hospital is an important way of identifying discordance.

Despite this 'success', VCT uptake still remains low in Uganda and yet VCT is a very important entry point to HIV prevention, care, treatment and support. If persons are not aware that they are HIV infected, they cannot access care and support especially prevention of opportunistic infections for example through daily intake of co-trimoxazole, and ART. HIV infected persons who are aware of their serostatus have also been shown to engage less in risky sexual behavior compared to those who are not aware of their serostatus. (Matovu et al 2005; Sherr et al 2007).

2.10. Plans and progress.

The national HIV/AIDS strategic plan 2007/8- 2011/12, entitled moving towards universal access developed by the Uganda AIDS commission has the following specific goals.

Box I: Goals of the 2007/8-2011/12 National HIV/AIDS strategic plan.

Goal 1: *To reduce the incidence rate of HIV by 40% by the year 2012*
Goal 2: *To improve the quality of life of PLWHA by mitigating the health effects of HIV/AIDS by 2012.*
Goal 3: To mitigate the *social, cultural and economic effects of HIV and AIDS at individual, household and community levels.*
Goal 4: *To build an effective support system that ensures quality, equitable and timely service delivery.*

Objective 8 which falls under Goal 2 of the HIV/AIDS National Strategic Plan (NSP) is as stated below with its strategic action areas.

Box II. Objective 8 of the NSP and its action areas.

Objective 8: *To scale up HIV counselling and testing (HCT) to facilitate universal access*
Strategic actions:
- *Strengthen capacity for HCT training by increasing the number of trainers and accredited training institutions;*
- *Scale up RCT/RTC, HCT, and HBVCT;*
- *Strengthen the management of logistics systems;*
-*Scale up HCT support to sero-discordant couples;*
- *Ensure availability of trained counsellors throughout the health care systems;*
-*Enhance coordination support, supervision and quality assurance of HCT*

Source: UAC. 2007a. Moving Towards Universal Access: National HIV & AIDS Strategic plan 2007/8-20011/12

The HIV/AIDS strategic plan is supported by several policies and guidelines e.g. ART, Orphans and Vulnerable children, HCT, condom policy and strategy, PMTCT guidelines, and HIV/AIDS and the world of work.

From the above, it can be seen that HIV counseling and testing is a very important part of the strategy and there are intentions to further scale up different VCT models, including the HBVCT model, in an attempt to increase the uptake of VCT in order to enroll more people into treatment, care and support, and prevention services.

Chapter 3. Problem statement, Objectives and methodology

In this chapter, the problem statement including the study objectives are discussed; and the methodology, limitations and intention of the thesis are presented.

3.1. Problem Statement.

In 2004, TASO secured funding from the Presidential Emergency Plan for AIDS Relief (PEPFAR) to give ARVs to 3000 clients in the first year and then scale up to 10,000 clients in 2007. One of the problems anticipated by TASO was drug sharing between the index client on ART and family members leading to poor adherence. To reduce this risk, all household members of index clients would need to know their serostatus so that those who turn out HIV positive and qualify for ART are started on treatment, those who are not yet eligible for ART are referred for appropriate care and support services, and those who are HIV negative are counseled on risk reduction. In order to enhance access to VCT services for household members of TASO clients initiating ART treatment, the household based approach to VCT was adopted.

The goal of the HBVCT program was to improve access to HIV/AIDS prevention, care, support and treatment services amongst household members of clients on ART; and the specific objectives were (TASO 2005),

- ✓ To enable household members know their individual HIV sero-status.
- ✓ To enhance the understanding of household members of their personal risk for HIV infection.
- ✓ To help household members plan to reduce risk of infection or transmission of HIV.
- ✓ To facilitate adherence support for the index client and other household members eligible for ART by reducing pressure of sharing drugs.
- ✓ To encourage disclosure and openness about sero-status.
- ✓ To facilitate integration of ART into TASO community work.
- ✓ To contribute towards achieving national access targets to VCT services.

The strategy of HBVCT has several strategic advantages. In Uganda's generalized HIV epidemic, the 2004/5 UHSBS found that among 4000 cohabiting couples who were both tested for HIV, 5% were discordant, 3% were both HIV infected and 91% were both HIV negative. From this, it can be seen that there are more cohabiting couples who are discordant than there are couples who are both HIV infected (MOH & Macro 2006).

Discordance is therefore one of the main risk factors for new HIV infections among couples because the majority of these couples do not mutually know their HIV status and cannot take measures to minimize risky sexual behaviour among themselves (UAC 2007b).

In addition, according to the UHSBS, 31.2% of women and 45.6% of men have not undergone VCT because they consider themselves to be at low risk of HIV infection. Lack of personalization of the risk of HIV infection is a major barrier to accessing VCT because even 52% of household members (≥15years) of HIV positive clients registered with TASO Tororo in a previous study had not tested prior to being offered HBVCT by TASO because they did not consider themselves to be at risk of HIV infection. Other reasons cited were distance from testing sites (8%), and fear of knowing one's HIV status (17%). Less than 1% cited lack of access to ARVs and HIV/AIDS care as a barrier to accessing VCT (Were et al 2006).

Considering the various factors limiting access to VCT in Uganda, it is important to review a program that is seemingly successful in increasing access to VCT to the critical vulnerable group of the family members of PLWHA, and to assess whether it is possible for the Government to scale up this program to the family members of all PLWHA in Uganda.

3.2. Objectives.

General objective of the thesis.
To review the TASO HBVCT program in order to provide information to policy makers and planners that can be used to increase access to VCT, and care and support for PLWHA.

Specific objectives of the thesis.

1. To describe the HBVCT program in TASO.
2. To review the TASO HBVCT program.
3. To assess the potentials for scaling up or expanding TASO's approach to HBVCT to the families of all PLWHA in Uganda by the Government.
4. To make appropriate recommendations.

3.3. Methodology.

This thesis is descriptive and analytical, with the use of documents on HBVCT in TASO, TASO Annual reports, secondary program data from TASO, and other relevant TASO documents. The Author's 2 year's experience as a

Medical Coordinator in one of the TASO centres, and lessons learnt during the ICHD course will also be used.

Literature search using Google to access the Ugandan Ministry of health, Ugandan Bureau of Statistics, Uganda AIDS Commission, WHO, UNAIDS, PEPFAR, Global Fund, TASO, AIC, CDC, IDI, JCRC, Mild May Uganda, and Straight Talk Foundation websites to access policy documents, reports and articles.

Journal articles were accessed using Pubmed. This was done through the VU library website and the KIT library using the following keywords; Uganda and HIV/AIDS in combination with VCT, mortality, paediatric ART, prevalence, incidence, prevention, treatment, ART, ARVs, discordance, funding, home based VCT, VCT models in Africa, cost-effectiveness, men.

The quantitative data about TASO used in this thesis was generated from TASO Management Information System (MIS) specifically for the purpose of this thesis; and when the required information was missing from the MIS, then quantitative data from TASO publications and reports is used.

The author's involvement in the collection of the secondary data used in this thesis is through the supervision of and participation in the implementation of the HBVCT program in TASO Gulu centre.

The discussion will be based on the DAC Criteria of the Organization for Economic Cooperation and Development (OECD) for Evaluating programmes and projects as shown in table II below

Table II: The DAC criteria for evaluating Programmes and Projects.

Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies
Effectiveness	The extent to which the objectives of a development intervention's objectives were achieved taking into account their relative importance.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
Sustainability	The continuation of the benefits from a development intervention after major development assistance has been

	completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.

Source: DFID. 2005. Guidance on Evaluation and Review for DFID Staff.

3.4. Study Limitations.

1. The TASO HBVCT program is part of the TASO ART program. The human resources that provide general medical and counseling services are the same human resources that provide ART services and HBVCT services. Therefore, it is difficult to say with certainty whether certain inputs and outputs belong solely or partially to HBVCT since the TASO HBVCT program is part of the integrated and holistic service package that TASO gives to PLWHA.

2. Information on HBVCT specific targets and indicators was not also available.

3. Sufficient financial information specific to HBVCT was not available to the author. Therefore it is difficult to assess the cost- effectiveness of the program.

4. Inability of the author to do operational research on the HBVCT program in TASO.

3.5. Primary Intention.

The thesis is primarily meant for The Government of Uganda to enable the Government assess the possibility of scaling up HBVCT to the families of all HIV positive people in Uganda. Once there is an HIV positive person in a family, there is then a higher chance that there is another. HBVCT will therefore increase the percentage of HIV positive people who know their serostatus, therefore increasing the number of clients enrolled into care, treatment and support; and enhancing prevention of transmission to HIV negative family members and the community at large.

The thesis will also be shared with the management of TASO to applaud the achievements so far realized from the programme and with any other person who has interest in HBVCT as a subject, and in TASO's experience of HBVCT.

Chapter 4. Description of HBVCT in TASO

This chapter gives a background description of TASO, how to access TASO services, a brief description of the TASO ART program and pathway, and a description of the TASO HBVCT program.

4.1. Background of TASO.

The AIDS Support Organization is a national indigenous not for profit NGO founded in 1987 by Dr. Noerine Kaleeba and 15 other colleagues; eight of whom have already passed away due to AIDS. The founding of TASO was based on people that were unified by common experiences faced on HIV/AIDS at a time of high stigma, ignorance and discrimination. The founders met informally to provide mutual psychological and social support. They voluntarily used their time and resources to visit AIDS patients. Today, TASO is the largest indigenous NGO providing HIV/AIDS services in Uganda and indeed in Africa; and has provided care and support to a cumulative total of 150,000 people (TASO 2003a).

TASO's mission is "*to contribute to a process of Preventing HIV infection, restoring hope and improving the quality of life of persons, families, and communities affected by HIV infection and disease*". This TASO does at several levels.

At personal level: This involves one-to-one counselling which empowers an individual to make choices and decisions that promote HIV prevention, improve their quality of life and facilitate the balance between their rights and their responsibilities. TASO also gives sensitive and compassionate care which facilitates early diagnosis and treatment of opportunistic infections, Antiretroviral Therapy (ART) treatment, and, enhances "living positively with HIV/ AIDS" (see box III).

At family level: TASO provides counselling for the family members which encourages HIV testing, prevention, care and support for the infected and affected persons, and mobilizes support for home nursing care and nutrition.

At community level: Community counselling and sensitisation is done which empowers the community to organize an appropriate response to HIV/AIDS. Once the community has come up with an appropriate response, TASO facilitates the community's planned responses, evaluates their responses, mobilizes resources, and lays out strategies to reduce stigma and discrimination.

At national and international level: TASO sensitizes the public about *"positive living"* through music, drama, and radio talk shows and messages; provides training to appropriate personnel for service delivery; mobilizes resources for achievement of it's goals; and joins the international efforts for the total defeat of HIV infection and disease.

Box III: TASO Philosophy: "Living Positively with HIV/AIDS.

At TASO people are encouraged to live positively with HIV/ AIDS. In practice this means;
- *Seeking HIV counselling and Testing*
- *Accepting their diagnosis*
- *Seeking prompt medical care including Antiretroviral Therapy*
- *Practicing safer sex*
- *Continuing to work and earn an income*
- *Planning for the family and dependants*
- *Seeking counselling on an ongoing basis*
- *Having a balanced diet*
- *Having adequate sleep and exercise*
- *Continuing with normal social activities*
- *Avoiding harmful practices such as drinking alcohol and smoking*

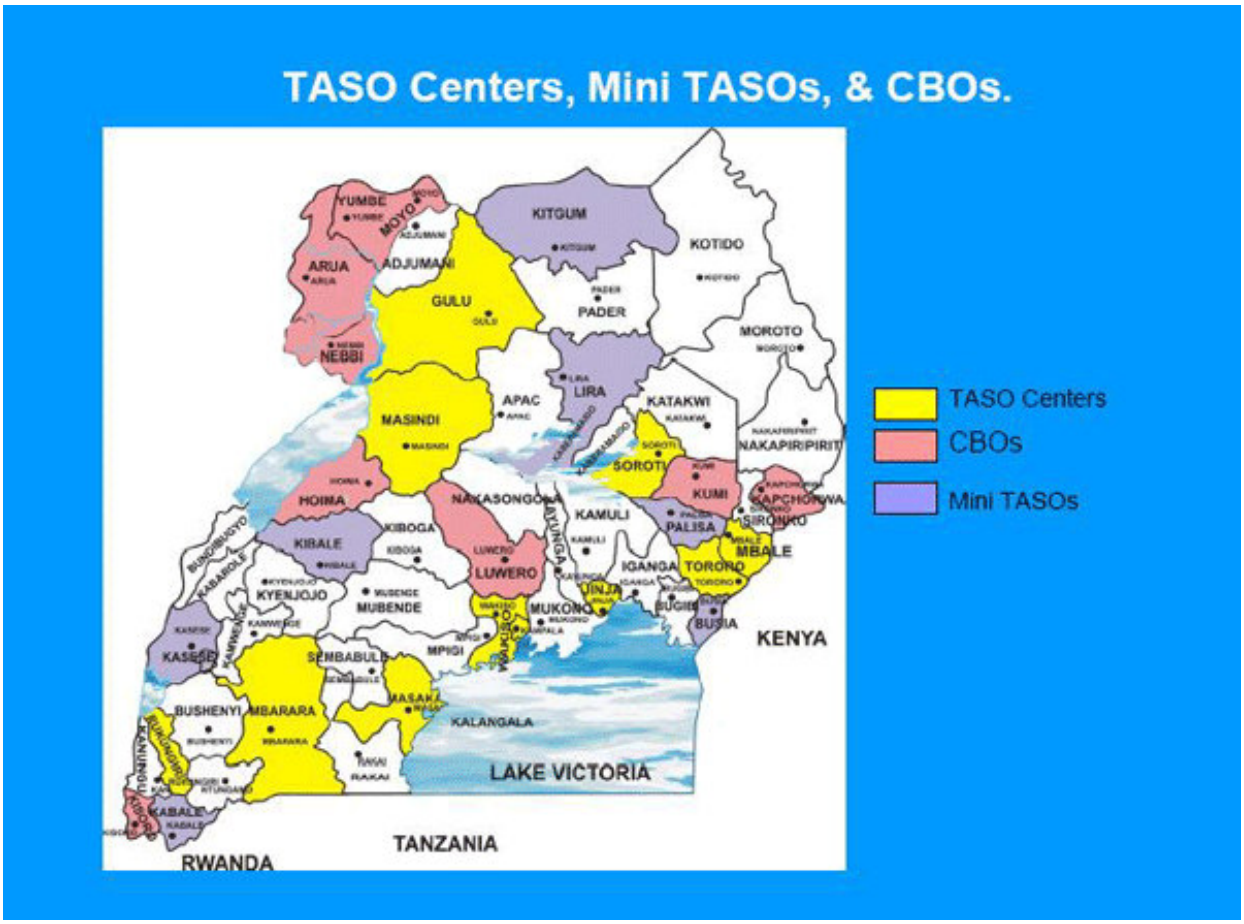
Currently, the organisation has 11 service centres spread throughout Uganda. These provide services for the host district and up to 4 surrounding districts; serving both rural and urban communities in these districts. Although the centres are located in the urban areas of the districts, within the district hospitals, they have extensive networks providing services to the grassroots through frontline staff, partner staff, Community Nurses, AIDS Community Workers, and Community ART Support Agents. TASO provides training, facilitation and supervision to the Community Nurses, AIDS Community Workers and Community ART Support Agents attached to each TASO Centre. (TASO 2008b). It also has "mini-TASOs" and CBOs in other parts of the country that are outside TASO's catchment area of 75Km (See figure III). A mini TASO is a public Health unit that is supported by TASO to provide TASO-like services. A CBO is a Community Based Organisation supported by TASO to provide TASO like services. TASO has provided ARVs to about 20,000 clients including 600 children since it rolled out ART provision in June 2004 (TASO 2003a).

The services that TASO provides include counselling, medical care, social support, training and capacity building, Community mobilization and HIV education, networking and collaboration, and research. The core and basic minimum services that all clients receive are counselling and medical services which are described below. (see annex 2 for an explanation of the others)

Counselling.
Counselling at TASO provides psychosocial support in pre-test, post test, prevention, and supportive aspects of HIV/AIDS counselling. This service is accessed by individuals, couples, children and family members of index

clients. Counselling can be done at a TASO facility, an outreach clinic, a Community Drug Distribution Point (CDDP) or a client's home.

Figure III: The map of Uganda Showing the distribution of TASO centers, Mini TASOs, and CBOs.



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Source: TASO. 2003b. TASO coverage.

Medical care

TASO Medical services are part of the services provided by the national health system. They include; HIV prevention services including Prevention of mother to child transmission of HIV; Family planning; health education to clients and their care givers; screening, treatment and prophylaxis for opportunistic infections; sexually transmitted infections screening and management; and Antiretroviral therapy. These services are provided in clinics (centre & outreach) and at the homes of clients. TASO does not offer in-patient services. Clients who need admission for medical care or any other service that TASO does not offer are referred appropriately. TASO's Home based services has 3 components; home based care (palliative) for the sick, HBVCT, and home based delivery of ARVs. (TASO 2008b)

4.2. Accessing TASO's services.

To register as a TASO client, one is first tested positive for HIV from a VCT service centre and then referred to TASO. The TASO recognised VCT service points include AIC; public government, faith based and private health units; and some NGOs. Clients are referred to TASO on request of the client or on recommendation by the VCT service provider. On arrival at TASO with a positive test result, the client is given pre-test counselling, re-tested to confirm the positive test result, post-test counselling, and registered if found HIV positive. Once registered, the client can access all TASO services, the basic minimum of which include counselling and medical services. Clients visit clinics monthly, bi-monthly, or quarterly depending on the condition of the client, how far his/her home is from the centre/outreach clinic, and the client's preference. At each clinic or outreach visit, each client pays a minimum token fee of Uganda shillings 500 (≈ 0.3 US dollars) and is then free to access the medical or counselling services that s/he needs. However, a few clients who are unable to pay are exempted after consultation with a counsellor and the medical coordinator or counselling coordinator. Most clients visit monthly.

4.3. TASO ART Program and Pathway.

Social and clinical criteria are used to determine eligibility for enrolment on the TASO ART treatment program. The social criteria include; duration of registration with TASO, ie, enrolment onto ART progressively moves from the earliest registered clients to the latest registered clients (First-in First-out). However, clients identified through HBVCT, clients with advanced HIV disease, and pregnant women are considered for ART as soon as possible and do not have to wait until their registration number is reached. Other social issues that are considered are alcohol or substance abuse and family or community support. The clinical criteria include; proven positive HIV serostatus by TASO, a CD4 count of ≤200cells/µl in accordance with Uganda National HIV Treatment Guidelines, and advanced HIV disease with Karposis Sarcoma, oesophageal candidiasis or severe wasting where death is imminent (TASO 2008b).

The TASO ART care pathway (see annex 3) is such that a registered client needs a minimum of 3 clinic visits once a decision is made to screen him/her for ART to be initiated on treatment. During routine centre or outreach clinics, appointments are given to a specified number of clients for 'visit 1'; the first clinic visit in preparation for ART initiation. During this visit, the clients on appointment are counselled on CD4 count and its implications, individually or as a group, and then sent to the laboratory for bleeding for

CD4 testing, and urine pregnancy test for all females. They then go to the clinicians for clinical assessment and treatment of any condition that needs to be treated; and are then given an appointment to return in 2 weeks for 'visit 2'. Before 'visit 2', a case conference is held. Here, clinicians, counselors, and laboratory personnel meet to review the records of the client (including CD4 count, Haemoglobin level, and pregnancy test result [for females] from visit one) and discuss all the clients who underwent visit 1 and sort out the ones who are clinically eligible with a CD4 count of ≤ 200cells/µl from those who are not clinically eligible. The clinically eligible ones are further discussed to assess and identify any clinical and psychosocial issues they may have that may negatively impact on their adherence to ART incase they are initiated on ART so that these can be addressed. These issues are documented, as well as the preferred ART regimen for the client, and recommendations of the case conference team; so that the counseling and medical staff who will handle the client during visit 2 are aware of all the issues around the client.

During 'visit 2', individual counselling is done to deliver the CD4 results and discuss its implications. Those whose CD4 counts are >200cells/µl are given another appointment for visit one in 6 months, and counselled to continue 'positive living'. Those whose CD4 counts are ≤200cells/µl are also given their results and counselled to prepare for ART, disclose their serostatus if they have not yet done so, and any other issues identified that may impact on their adherence are discussed and addressed or a plan made to address them. A clinical assessment is also done, a 2 weeks appointment made for visit 3 for which they are supposed to come with a 'medicine companion', and an appointment for a home visit before visit 3. It is during this home visit that HBVCT is done.

During visit 3, the client together with the medicine companion are counseled and prepared for ART. With the help of the counselor, an adherence plan is made and the client and 'medicine companion' asked to make a commitment to ART. Sexual behaviour and risk reduction plan is made with the client. The client and the medicine companion then see the clinician who prescribes the ARVs and any other necessary treatment, discusses minor and major side effects of the prescribed ARVs and tells them when to return. They then go to the pharmacy where a 2 weeks dose is dispensed, and the client and medicine companion taken through how, when and what dosage to take. They are asked to return in 2 weeks during which an assessment of adherence and any other relevant issue is done; and if there is no problem, a month's prescription is given. Clients are then prepared to receive their monthly ARV refills at home, Community Drug Distribution Points, or at clinics.

4.4. HBVCT in TASO.

All household members of TASO clients eligible for ART who have consented to receive antiretroviral therapy are visited at home by a counselor, Field Officer or both before actual dispensing of ARVs commences after consent for the visit has been obtained. The Field Officer and/or Counselor travels by motorcycle, carrying a HBVCT kit, which contains necessary equipment, supplies, stationery, and sundries.

On arrival at the client's home, the index client introduces the family members, the TASO staff, and the purpose of the visit. The Field Officer and/or Counselor conduct a census verification to establish persons who meet the criteria for household membership. A household education session is offered to introduce the TASO ART program, increase awareness and understanding of anti-retroviral therapy, enlist adherence support for the TASO client, inform about the opportunity for VCT and enrollment on the ART program if eligible, and encourage them to participate. Consent for children is obtained from their parents or guardians.

The Field Officer and/or Counselor then conducts counselling through group sessions (see annex 4), one-on-one counselling with individuals aged 13 years and above (see annex 5), and counseling of parents/guardians of children <13 years. The household members of the TASO client are offered free VCT at home, TASO centre or outreach clinic. Bleeding and testing follows for those who choose to have it at home and at that time. Results are given individually or according to specific requests; followed by a wrap-up session to give chance to family members for one on one counseling. This is then followed by appropriate referrals (TASO 2005).

Implementation plan.
Several activities were done to prepare before the implementation of the HBVCT program. The technical core team at TASO Headquarters was responsible for developing the HBVCT concept paper and plan; and assessment of centres for their readiness to roll out HBVCT in order to identify gaps pertaining to space, human resource numbers and capability, and equipments and supplies.

i. Capacity building:
A TOT was conducted for TASO trainers who then trained the rest of the staff. Additional staffs were also recruited and trained. Majority of the counselors and field officers that implement the HBVCT program come from a non-medical background; mainly social sciences. Most of the counselors are university graduates, and all have undergone a course in Comprehensive HIV/AIDS counseling administered by TASO. The Field Officers undergo

training in basic HIV/AIDS counseling and field operations. With training and support supervision, these people are able to adequately provide the HBVCT services.

ii. Centres HBVCT program roll out:
This took place after center training in HBVCT and field officers training in field operations. The details of key activities conducted at the centres is in the workplan which is attached as annex 6.

iii. Monitoring and Evaluation.
TASO MIS modules for the pharmacy, laboratory, stores and general care were upgraded to incorporate HBVCT data and enhance generation of information and knowledge from the program data. Annual work plans and targets are developed from the TASO Strategic Plan. Each of the 11 centres has monthly, quarterly, semi-annual, and annual targets to achieve and report on. Service providers fill data collection forms that measure the quantity and quality of work. Data personnel enter, clean, store, and analyse the data. Centres submit monthly Programmatic and Financial Reports to TASO Headquarters based on data, lessons and observations recorded. TASO Headquarters generates regular (monthly, quarterly and annual) reports and adhoc reports, Programmatic and Financial Reports for CDC, Ministry of Health, and other national partners. The reports are also used internally for reviewing performance and improving quality of service delivery.

iv. Audit Arrangements.
TASO has an elaborate internal audit mechanism. The office of the Executive Director has an Internal Audit unit comprising the Chief Internal Auditor and three other Auditors. The Auditors are well-qualified and undertake regular performance enhancement training. The team conducts comprehensive audit of all TASO units, including both Financial and Programmatic Reviews twice a year, and other audits as need arises. Externally audits by internationally recognized audit firms are also conducted.

v. Procurement Procedures
TASO conducts competitive open procurement for drugs, medical supplies, stationery, equipment, technical services and other programme needs. All centres adhere to the Procurement Policy. Each of the 11 TASO centres and other TASO units have a Procurement Committee constituted according to the TASO Procurement Procedures policy.

vi. Technical Assistance
The programme has a three-pronged technical support mechanism to the 11 centres. This is done by the Program Management Directorate at TASO Headquarters, (MOH), and the CDC/PEPFAR Country team. The teams from

MOH and CDC provide regular support to the Directorates of Program Management and Strategic Information at TASO Headquarters. The Directorates in turn support the TASO centres through quarterly support visits. The 11 TASO centres also collaborate with MOH in the areas of capacity-building for the centres, availing of the national guidelines by MOH, provision of supplies for TB management, providing consultancy on ART delivery and providing counselling and psychosocial support at MOH facilities by TASO staff. (TASO 2008c)

From the author's analysis, TASO services including the HBVCT programme are well planned and organized. In designing programmes, opinions of clients and front line staff including support staff are usually sought which is a strength in that programmes are not just imposed onto the staff who directly deliver services, and onto clients who know better what actually takes place in the field. The transparency of TASO management, regular capacity building of staff, and regular feedback on performance of the staff on programmes at both individual centre levels and all TASO centres combined keeps staff motivated to deliver quality services.

Chapter 4. Discussion

This chapter provides the discussion of the TASO performance, based on OECD's DAC criteria for evaluating development assistance under the headings of relevance, effectiveness, efficiency, impact, and sustainability. Key challenges and the potentials for scaling up the results are also discussed.

5.1. Relevance.

5.1.1. To the beneficiaries. No study has been done to assess the beneficiaries' opinion of the program. However, from an analysis of counselling sessions that were tape recorded and later transcribed by a researcher in TASO, apart from good health, what most clients express as their priority needs are food and resources to take care of their children including sending them to school (Kwagala 2008, forthcoming). Inspite of this, generally, clients deeply appreciate all TASO services and do not wish to be referred anywhere else for care, treatment and support, although referrals are often done for services that TASO does not offer (Van der Kwaak 2008). Therefore, the author thinks that if clients were asked their opinion of the program, they would appreciate it; but if they were asked what their priority needs are, food and child support would top the list and HBVCT would probably come much later.

However, since lack of disclosure of serostatus to sexual partners, family members, and other significant others, and drug sharing has been noted to affect adherence to ART and the comprehensiveness of HIV/AIDS care and support that can be offered to an individual, his/her family and to the community at large (Larson et al 2007), and the HBVCT programme significantly addresses some of these issues, the author thinks that the TASO HBVCT programme is relevant to the beneficiaries.

5.1.2. To the policies of Uganda. The objectives of the TASO HBVCT program are in line with the National priorities as stated in the HSSP of 2000/01–2004/05 and 2005/06-2009/10, especially those related to increasing access to VCT, providing psychosocial support to PLWHA and their families, and increasing knowledge on, and access to HIV prevention methods (MOH 2000; MOH 2005). The HBVCT programme therefore complements the efforts of the Government to increase access to VCT services.

5.1.3. To the donor. The program is very relevant to PEPFAR's strategic principles; especially encouraging bold leadership in HIV/AIDS programming, fighting stigma, discrimination and denial, seeking the integration of

prevention, care and treatment services, applying lessons learnt eg the ABC strategy, strengthening CBOs, NGOs and FBOs, and actively seeking new approaches and strategies to encourage HIV/AIDS testing (PEPFAR 2004). Testing people for HIV in the comforts of their homes and delivering the results at home had been found to increase uptake of VCT (Wolff et al 2005; Were et al 2006).

5.2. Effectiveness.

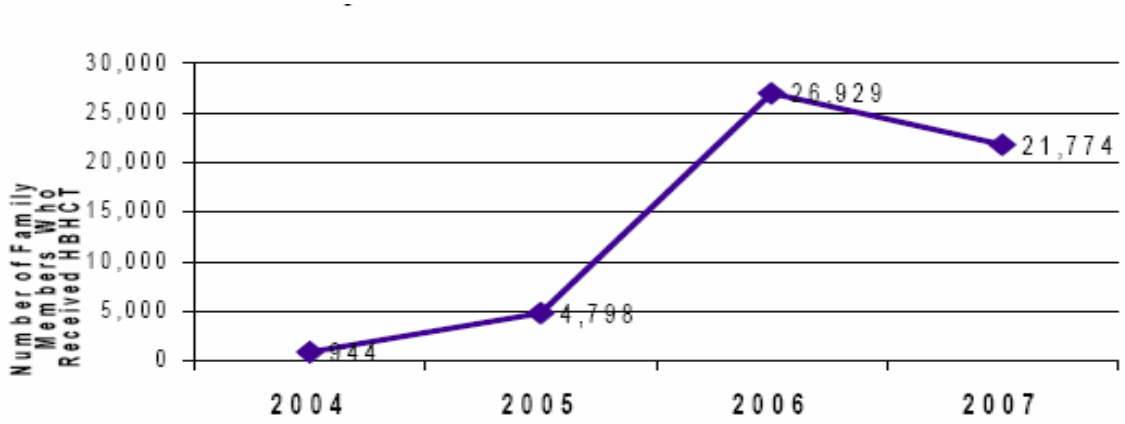
According to the UHSBS 2004/5, 31.2% of women and 45.6% of men have not undergone VCT because they consider themselves to be at low risk of HIV infection (MOH & Macro 2006). Lack of personalization of the risk of HIV infection is a major barrier to accessing VCT. From a previous study, 52% of household members (≥15years) of HIV positive clients registered with TASO Tororo had not tested prior to being offered HBVCT by TASO because they did not consider themselves to be at risk of HIV infection. Other reasons cited were distance from testing sites (8%), and fear of knowing one's HIV status (17%). Less than 1% cited lack of access to ARVs and HIV/AIDS care as a barrier to accessing VCT (Were et al 2006). During the 2004/5 UHSBS, another main reason given by about 20% of men and women for not testing for HIV is not knowing where to go. Moreover, 31% of men and 24.3% of women who have ever tested for HIV and received their results live in urban areas, compared to 9.4% of women and 8.4% of men in rural areas (MOH & Macro 2006). From the study findings, the HBVCT approach seems to address many of these challenges.

5.2.1 High uptake of VCT

By December 2007, 54,445 family members of 11,371 index clients from all the TASO centres combined had been tested for HIV in the programme (figure IV). The number of family members tested dropped in 2007 because most of them had already been reached.

TASO found the uptake of VCT by family members during HBHCT to be 93%. Over 90% of the clients' family members had never been tested for HIV (TASO 2008a). The fact that all these family members were reached, counselled and tested for HIV by TASO staff means that the other specific objectives of HBVCT were achieved. One important objective of the programme is to encourage openness about and disclosure of serostatus by the index clients to the family members. This mean that at least 11,371 index clients on ART disclosed their serostatus to their family members. Disclosure of serostatus enables the family members to care for the client in a special way including supporting the client to adhere to ART treatment

Figure IV: Individuals given HIV Counselling & Testing services (2004 to 2007).



Source: TASO 2008c. TASO 2007 annual report.

Enhancing the understanding of household members' personal risk of infection was also made possible by the programme. This is very important because studies show that many Ugandans, including family members of PLWHA, do not consider themselves to be at risk of HIV infection (MOH & Macro 2006; Were et al 2006). Therefore, the 54,445 family members counselled and tested for HIV at home by the programme have been made aware of their risk of getting infected or infecting others and of the measures that they can take to reduce that risk. This was made possible because of the family, individual, and follow up counselling and support, and information sharing that is done during HBVCT (see annex 4 and 5).

5.2.2. Breaking barriers to access.

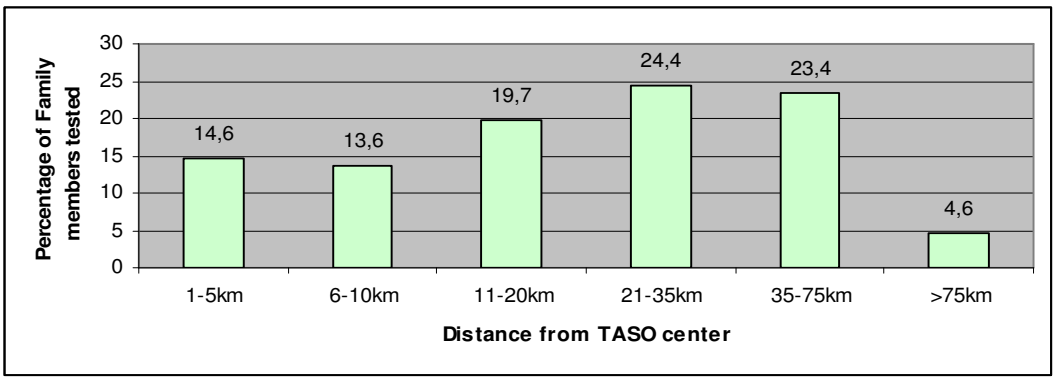
In Uganda, VCT has been accessed by more people living in urban areas compared to those living in rural areas and yet over 85% of Uganda's population lives in rural areas (MOH & Macro 2006; UBOS 2007). This shows that there is a rural-urban inequity in access to VCT in Uganda. The TASO HBVCT programme attempts to address this inequity because only 14.6% of the family members tested live within 5km of a TASO centre (See figure V) and TASO centres are all located in urban areas; actually within Government Hospitals.

In addition, HBVCT literally brings VCT to people's doorsteps and addresses the barrier of 'not knowing where to go' cited by some men and women.

Other barriers to accessing VCT like fear of knowing one's serostatus, the cost of testing, and inaccessibility to treatment if found HIV positive (MOH & Macro 2006) are also addressed by HBVCT through counselling, free testing,

and enrollment of those found HIV positive into care, support and treatment respectively.

Figure V. Family members tested by distance from TASO center.



Source: TASO MIS.

5.2.3. Identification of "silent infections".

The overall prevalence of HIV infection among family members tested was 6.6%; 5.6% in the under five years, 2.4% in those 6-13 years and 9.4% among those ≥14years.

i. High prevalence of infection among children.

The percentage of those infected among those under 5 years is about 8 times the prevalence rate among the under 5 years found in the 2004/05 national sero behavioural survey (0.7%) which shows that majority of these children are in households where there is an HIV infected adult and probably got the infection from these adults . The percentage of under fives infected in all the TASO centres combined (5.6%) is less than that found in the HBVCT study by Were et al (2006) in TASO Tororo (9.5%) between may 2003 and December 2004 probably because in TASO Tororo the index clients were all ≥18 years, and therefore likely to have children of their own, who would have a higher risk of being HIV infected, while for the data the author is analysing, index clients are from all ages; including children (who do not have children of their own). Therefore children living in a household where there is an HIV infected adult are more likely to be HIV infected compared to their counterparts living in households where there is no HIV infected adult.

ii. Identification of discordance.

From the TASO HBVCT data, discordance rate among TASO clients with sexual partners is 65%. This is higher than both the Ugandan and Sub-Saharan African average discordance rate of 50% and 49% respectively among couples where at least one partner is HIV-1 infected (Lingappa et al 2008; UAC 2007b). In addition, only 12% (34/274) of the co-wives of the female index clients who underwent HBVCT were found to be HIV infected.

This is important since having concurrent sexual relationships is a major risk factor for HIV transmission although it is more risky during the early stages of the infection in the HIV positive member of the concurrent partnership (Beyrer 2007). Over 90% of the HIV negative partners were testing for the first time. Therefore, HBVCT greatly increases the uptake of VCT services for partners of TASO clients, and helps identify discordance. For those who have difficulty disclosing their serostatus to their spouse, the HBVCT programme also provides an opportunity for supported disclosure with a counsellor present, prior to the testing exercise, since HBVCT cannot be conducted if the index client has not disclosed his/her serostatus to the family members.

5.2.4. Increased access to care.

As earlier described, the identified infected persons are referred for HIV care and support, and if they chose to come to TASO, as the majority choose to, then they are immediately considered for ART screening. Thereafter, those who are not eligible for ART continue to receive care and are encouraged to practice 'Positive Living' which involves daily co-trimoxazole prophylaxis, prevention of malaria using insecticide treated bed nets, use of safe water, continuing to earn an income, maintaining a balanced diet, practicing safer sex, avoiding harmful habits like drinking alcohol and smoking cigarettes, and seeking prompt medical care. Evidence exists that co-trimoxazole prophylaxis alone reduces mortality; the rate of hospitalization, diarrhoea, and malaria; the annual rate of CD4 decline; and the annual rate of viral load increase significantly (Mermin et al 2004). Those who are found eligible for ART are started on ART treatment in addition to the above services. The 2,529 HIV infected persons identified through HBVCT in TASO have therefore benefited from the above care, treatment and support services.

5.2.5. Access to ARV treatment.

Access to ARV treatment is very important for HIV infected people as it is the only known means of preventing death once they develop AIDS or once their level of immunity has reduced to a certain extent (CD4 count ≤200 cells/µl). From the TASO Tororo study, 39% of the identified HIV infected family members were clinically eligible for ART (Were et al 2006). If this is true of all the TASO centres, then about 980 of the identified 2,529 HIV infected individuals were in need of ARV treatment, which was made accessible to them because of HBVCT. With good adherence, ART treatment leads to a reduction in blood viral load in more than 50% of the patients to undetectable levels (<400 copies/ml) within 9 months, and restoration of immunity. Fewer illnesses occur once the immunity is restored which means less visits to the health units and eventually less burden on the health infrastructure (Spacek et al 2006). However, identification and enrolment into care of many HIV infected people means an increased workload for the staff, and an increased resource requirement. From TASO's experience, not

all clients need contact with a counselor or a clinician on a monthly basis, especially if they have been receiving care, treatment, and support services for sometime already and are practicing 'positive living'. Some clients can be seen once every two months, or even once every three months; and some clients only come to the clinics for their monthly co-trimoxazole and/or ARV refills because they have no complaints. This, coupled with an appointment system whereby the majority of clients seen in a clinic are seen on appointment helps to reduce the workload to manageable levels.

Undetectable blood viral levels also mean less transmission to sexual partners and for pregnant women, less transmission from mother to child during pregnancy, child birth or breast feeding (Thorne et al 2004; Quinn et al 2000).

5.2.6. Improved Survival of children less than 10 years.

The survival of children less than 10 years, even those that are HIV uninfected has been shown to improve by keeping their parents alive (Mermin et al 2008). The use of ARVs to improve the quality of life and postpone death helps parents to live longer and plan for the economic and social survival of their children once they are dead, by writing wills and memory books, for instance, while still alive. Treatment of ART eligible children is important as a human right and to reduce infant and under 5 mortality rates since 8% of the deaths in children under 5 years in Uganda is due to HIV/AIDS (WHO 2006). This percentage could actually be higher because HIV/AIDS could be an underlying cause of some of the deaths due to pneumonia, diarrhoea, and malaria. For the children who are not eligible for ARVs, HIV/AIDS care involving routine medical check ups, co-trimoxazole prophylaxis, use of Insecticide Treated Mosquito Nets, and use of safe drinking water is important to slow down progression to AIDS.

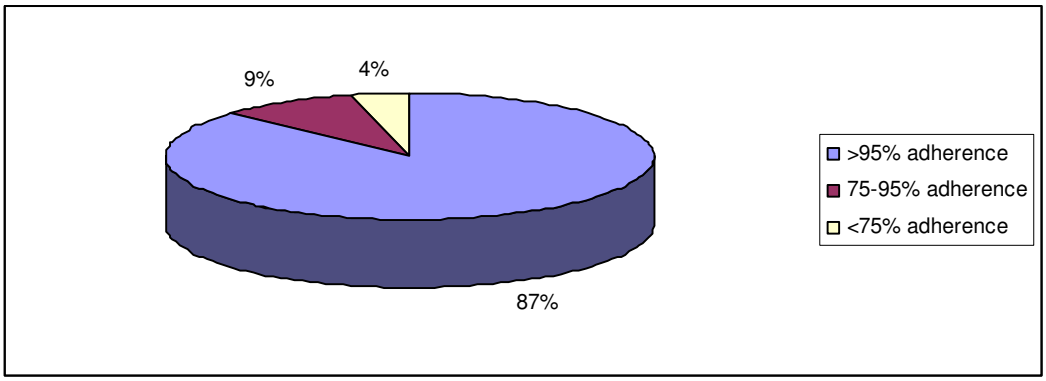
ARV treatment and HIV/AIDS care for both adults and children are therefore very important for the reduction of infant and child mortality rates; and for these particular people, this care is made possible because of HBVCT.

5.2.7. Improved Adherence to ART.

By end of 2005, ART adherence among clients was as can be seen below.

Lack of adherence among some of the TASO clients was attributed to stigma, lack of adequate family support, smoking, over drinking, and some clients being too sick to take medicine. Therefore, the clients who were not adhering were identified and handled case by case through adherence counselling (TASO 2006).

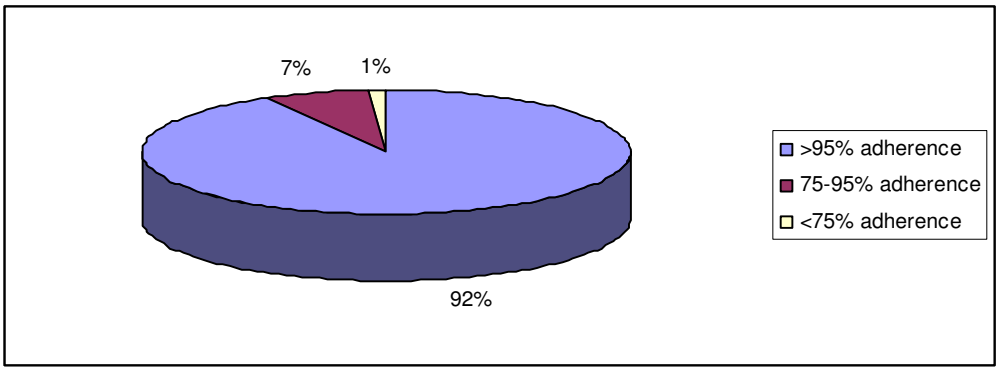
Figure VI. ART Adherence levels reported during adherence Support sessions from 2003-2005.



Adapted from: TASO. 2006. 2005 TASO Annual report. TASO Uganda Limited.

Consequently, adherence has been improving overtime as evidenced by that in 2007 shown below. In the author's opinion, some of this improvement can be attributed to the increasing coverage overtime of HBVCT among TASO clients initiating ART which led to better family support and therefore better adherence.

Figure VII: ART Adherence Levels reported during Adherence Support Sessions in the period April 1 to December 31 2007.



Source: TASO MIS Report as cited in TASO. 2008a. Non-competing Continuation Application proposal.

5.3. Efficiency

To ensure that resources are efficiently used, before the roll-out of the program, an assessment of the centres' readiness to implement the program was done and challenges of space, human resource numbers and capacity,

equipments and supplies were addressed. A monitoring and evaluation plan involving conducting monthly supervisory visits to the community by the centers, quarterly visits by monitoring and evaluation staff from the head office, compiling monthly, quarterly, annual and ad hoc reports, and operational research was made (See annex 6).

The outcomes that can be attributed to the program include the 90% family members tested for HIV who were testing for the first time, the HIV positive family members who were able to access care and support through the program, discordance identified through the program and the resultant prevention measures taken.

However, in the author's opinion, the improved adherence realized cannot solely be attributed to the program since adherence to ART has been shown to improve with the duration of treatment (Muyingo et al 2008); and factors that have been identified to lead to sub-optimal adherence to ART in Sub-Saharan Africa, eg, alcohol abuse, non disclosure of serostatus for fear of stigmatization, and difficult regimens, travel, and migration (Nachega et al 2004; Weisser et al 2003;) could have been addressed using other means for example client and family counselling, and peer support, and not necessarily HBVCT.

In spite of the above, the author thinks TASO's HBVCT program is a worthwhile intervention, considering it's achievements that would not have been realized without it, for example testing the people who would not have otherwise had access to VCT, identification of discordant couples, and increasing access to HIV/AIDS prevention and care.

From the author's analysis, these achievements were possible because of timely and adequate donor support; conducive political, health policy, and socio-cultural environment; committed and accountable TASO leadership; committed frontline staff and receptive TASO clients.

5.4. Impact

The major results of the HBVCT program related to the clients are disclosure of serostatus of the index client to the family members including sexual partners, and HIV testing of family members.

A qualitative study done in TASO Jinja showed that disclosure of serosatatus by parents to their children increased family cohesiveness and support to the HIV infected individual, even before ART became widely available in Uganda. In addition, HIV testing of children gave their parents some emotional relief, regardless of the outcome of the test (Rwemisisi et al 2008).

Fear of breakup of marriage and violence is a major barrier to disclosure of serostatus to sexual partners. However, a study in TASO Jinja showed that this disclosure resulted in more positive than negative outcomes. Positive outcomes included risk reduction, love, HIV testing, and PMTCT. Negative outcomes included temporary and permanent separation, but no physical violence was reported (King et al 2008).

There was no coverage bias in terms of the beneficiaries. 45.2% of the family members tested were children under 14 years, and from demographic information, 49.4% of Uganda's population is between 0-14years. Males tested constituted 42.1%. This is not very surprising because 60% of TASO clients are females; many of whom are widows. Also, the 2004/5 UHSBS showed that more women test for HIV compared to men. Therefore, of the 7% of the family members who were not tested through HBVCT, the author expects the majority to be men because they may not be at home at the time of testing because of work, and they are more likely not to want an HIV test because they think that since their spouses are HIV infected, they are also definitely HIV positive. They also think that once they test HIV positive, their social standing in the society will be lowered (Bwambale et al 2008).

From the experience of implementing HBVCT, many people are willing to test for HIV and know their serostatus when the test is offered at home. Neighbours of clients and other non family members would often come and request to access VCT during the HBVCT exercise; but because of issues of family confidentiality and accountability to the project design, this was not possible. Instead, they were referred to the nearest VCT centre.

Another favourable impact of the programme is that it created jobs for unemployed graduates. This includes the Field Officers and the counselors, many of whom were initially qualified as teachers and social workers.

5.5. Sustainability

5.5.1. Institutional sustainability.

TASO has a wealth of experience in HIV/AIDS work and an extensive network for care. Its network for care extends from the top TASO management right up to the grassroots communities where it includes AIDS community workers, community nurses, and community ART support agents.

TASO's strategy was to construct all its health facilities within Government hospitals and to share some of her resources with the Government hospital. This is because TASO was aware of sustainability issues. In this way, incase

donor support ends or in case TASO's services are no longer relevant, the Government Health services can continue using the physical infrastructure.

The institutional arrangement consists of a Board of Trustees which is a team of volunteers periodically elected by the General Assembly of Members to provide policy direction and appoint and supervise the Executive Director. There are 4 Regional advisory Committees and 11 Centre Advisory Committees which represent the board at regional and centre levels respectively. The Executive Director is the overall leader of the organization and is for the implementation of policies approved by the board. S/He is assisted by 2 deputy Executive Directors; one in charge of programs and strategic information; and the other in charge of support services. S/He heads a team of 6 Heads of department who include: Human Resource and Administration, Finance, Advocacy and Networking, Training and Capacity Building, Program Management, and Planning and Strategic Information. Below these is a team of 1034 staff and Volunteers; several Community Nurses, AIDS Community Workers, Community ART Support Agents and PLWHA networks who make what TASO is today.

TASO's collaboration with NGOs, CBOs, and Government Health units to create mini TASOs and CBOs is another strategic move to bolster sustainability.

Training and capacity building is a core TASO service; therefore, management, staff, PLWHA, and community volunteers including those at mini TASOs and CBOs have been adequately trained to deliver quality services. Refresher trainings are conducted regularly, usually annually, and the training curriculum is regularly revised so that it always fits the context and the need.

5.5.2. Financial Sustainability.

The HBVCT program in TASO is 100% PEPFAR funded. TASO relies on it's good name and it's capacity to deliver in order to attract funding to continue to serve PLWHA. Infact, TASO has edged other local service organizations on donor funding because of its more than 20 years experience, its ability to achieve its targets and account for funds, its capacity in terms of infrastructure, human resources, and institutional organisation. In the words of another author, "*TASO's exemplary program performance, integrity, accountability and transparency in resource management are likely to ensure continuity in funding"* (Van de Kwaak 2008).

Funding of the program did not result into overburdening of the system by external funding. This is because TASO has in place the human resources and policies to ensure optimal and efficient use of resources. In addition, the

Government of Uganda HSSP is only 45-61% funded and TASO is in such a position that it complements the Government efforts to deliver health care to PLWHA and psychosocial support to their families.

Donor aid is increasing the dependency of Uganda on external support, but, on the other hand, it is strengthening local systems and building human capacity and infrastructure for health care delivery. TASO works in close collaboration with the MOH at all levels and TASO staff are always abreast of procedures and new developments in the public health sector. They are therefore a valuable resource to the Ugandan health sector and, under the right conditions, can easily work as government employees.

5.5.3. Political Sustainability.

Increasing access to VCT and therefore HIV prevention, care and treatment is a major priority of the Government of Uganda as evidenced by the finalization of the HCT Policy Implementation Guidelines, integration of HIV Counselling and Testing data into the HMIS, and development of HCT training standards by the MOH-Uganda (MOH 2007). The intention of the MOH to scale up various VCT service delivery models (UAC 2007a) is also an indicator that the programme is politically sustainable. The MOH Uganda works in partnership with various NGOs and Civil society organizations to provide health care including prevention and health promotion services to the population and TASO's HBVCT programme is a welcome intervention that complements the MOH efforts.

5.5.4. Socio-cultural sustainability.

In the African context, the family is a very important institution in the care of the sick and in the care of orphans although the AIDS epidemic has led to adverse psychosocial and economic consequences that have disrupted this structure. (Ankrah 1993). However, TASO demonstrated that with appropriate counselling, PLWHA are accepted by their families and the community, are cared for at home, and PLWHA and their families can live positively with HIV/AIDS. (Kaleeba et al 1997). This can also be seen from the results of the HBVCT programme whereby 93% of the family members of clients accepted and underwent VCT and received their results.

5.5.5. Technological sustainability.

In medical matters, TASO strictly adheres to the national guidelines and protocols, for eg in ARV treatment; management of STIs, TB, malaria, etc; laboratory services including HIV testing algorithms. The medical coordinator supervises the medical team to ensure this; and the TASO centre is supervised by TASO Headquarters and the office of the District Director of Health Services of the district where the TASO centre is located for the same reason. Whenever new guidelines or protocols are developed, the office of

the District Director of Health Services where the TASO centre is located invites TASO for the dissemination.

5.5.6. Environmental Sustainability.

The medical waste materials generated from HBVCT activities are collected and incinerated in the Government Hospital incinerator, just like all other medical wastes generated from TASO services. At certain centres, TASO has assisted in the construction or renovation of these incinerators.

5.6. Challenges.

The challenges faced by TASO and the HBVCT program overlap because TASO's challenges affect the HBVCT program and vice versa.

5.6.1. Challenges faced by HBVCT.

Reaching school going children has been a challenge since they are at school for 9 months in a year. The only time to reach them is when they are on holiday or over the weekend. However, due to cost constraints, weekend activities are often scaled down.

Development of the community-based ART delivery model involving the identifying and training Community ART Support Agents, mobilising clients and communities, participatory identification of Community Drug Distribution Points, and supervision of Community ART Support Agents diverted some attention from HBVCT and affected outputs in 2007. The situation is improving as the model stabilizes and gets consolidated (TASO 2008c)

5.6.2. Challenges faced by TASO.

There is an overwhelming numbers of clients registered for care because of the good quality of services that TASO offers. However, human resources cannot be proportionately increased to match the increasing number of clients because of cost constraints. In addition, the coordination of multiple programs coupled with an influx of new clients often stretches the available human resources and compromises the quality of care.

The attraction and retention of some cadres of staff especially medical officers and pharmacy technicians has been a challenge. Attraction is difficult because of the low pay; and retention is even more difficult because of the low pay and because TASO staffs are highly trained in HIV/AIDS care and are therefore very attractive to other AIDS service organizations that offer better pay.

The space issue has been addressed within the limits of the available resources. However, space still remains a challenge at some centres and

outreaches. Staffs engaged in direct service provision often have to share rooms which compromise outputs and quality of care.

Resources are often not adequate; for eg, following suspension of the global fund which TASO uses to finance mini-TASOs and CBOs, and strengthening of shilling against the dollar, which often leaves TASO with a budget deficit in Uganda shillings. The cost of living in Uganda has also recently increased because of high food and fuel prices which affect both TASO as an organization and TASO staff as individuals.

There is a high demand for TASO to expand its services to other areas; directly by creating new TASO centres and indirectly by financing new mini-TASOs and CBOs.

The majority (90%) of TASO clients are very poor. Many are unemployed but with an average of 7 dependants. This makes it very difficult for them to support themselves and their dependants. As a result, they often look up to TASO to support them. While TASO continues supporting clients through appropriate sustainable livelihood interventions, the Government of Uganda should strengthen the fight against absolute poverty in Uganda.

While stigma and discrimination against PLWHA has greatly reduced in Uganda, some TASO clients continue to face it. Some of this is self stigmatization, but some is enacted by family members and the community. This affects the uptake of some services for instance home-based services; and the attainment of some targets for example disclosure of serostatus especially to sexual partners.

The improved quality of life of clients has led to a revival of previous way of life including sexual activity among clients, and a desire for children among certain clients, and for a few clients, resumption of previous harmful behaviour for example alcohol intake. The challenge here is counselling and support to reduce transmission of HIV to sexual partners, prevent unwanted pregnancies, and increase uptake of PMTCT services among those who desire to have children, and to generally encourage positive living among clients so as to have a better quality of life.

TASO uses many community volunteers in service delivery. Sustainability and motivation of these volunteers is a major challenge. Many of them genuinely want to contribute to the HIV/AIDS response but they also need to earn an income in order to sustain themselves and their families.

From the author's observation, there has also been an unhealthy competition of other service organizations dealing with HIV/AIDS with TASO. They perceive TASO as a threat to their existence because TASO is in a better position to compete for funding since it is well known for delivery of quality services accountability. Therefore, they often refuse to serve TASO clients who seek support from them or who are referred to them. This is being addressed by having regular advocacy and collaboration meetings with these organizations to enable them work together with TASO and complement each other.

Insecurity in Northern Uganda has been a major challenge. At the peaks of insecurity, outreaches and home visits become impossible in certain areas, decreasing access to care for clients in these areas. Disease outbreaks, for example Ebola, also have the same effect.

5.7. Potentials for scaling up the program by the Government.

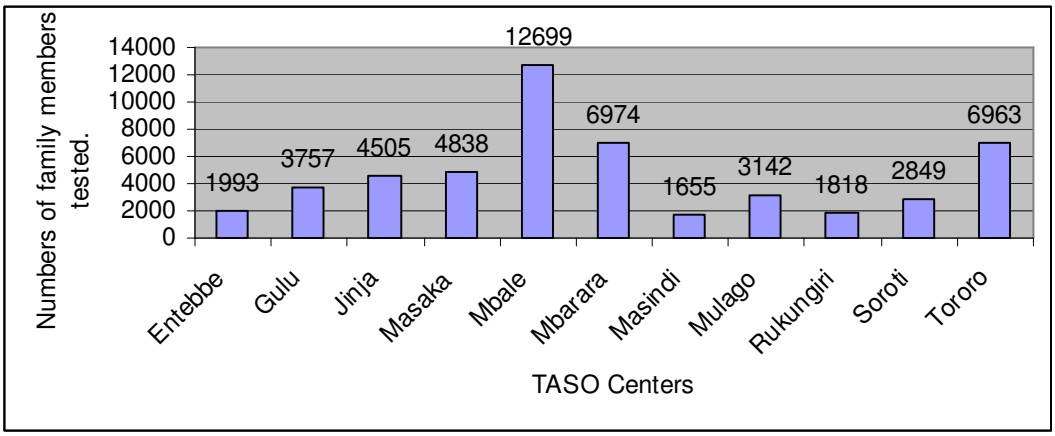
The author was unable to get sufficient financial information on HBVCT in TASO that would enable her assess the cost-effectiveness of the programme. In addition, during the literature review, no study was found that conclusively looked at the cost-effectiveness of delivering HBVCT services; although many agree that it is an expensive undertaking (Bateganya et al 2008; Matovu et al 2007).

Looking at TASO's approach, a lot of resources went into the preparation to implement the programme. This involved recruitment of new staff, training of existing and newly recruited staff, purchase of equipments including vehicles, motorcycles and the actual supplies for testing. Maintenance of the program is also expensive considering fuel costs and costs of maintaining machines, salaries, and supplies. However, for TASO, the whole program is integrated and the same resources have multiple uses; for eg, the same motorcycles used for HBVCT are also used for the delivery of ARVs at home and sometimes for home care.

By June 2007, 51,190 family members of TASO clients had been tested for HIV. The distribution by centre can be seen in the figure VI. By December 2007, an additional 3,255 family members had been tested.

TASO is the only organization providing HBVCT to the family members of PLWHA in Uganda, and this is restricted to the family members of TASO clients. Only 17% of the people on ART in Uganda receive ART from TASO. Therefore, the majority of PLWHA in Uganda on ART treatment and their family members do not have access to the benefits conferred by the program.

Figure VIII: Family members tested by TASO centres from 2004 to June 2007.



Source: TASO MIS as cited in TASO 2008. CDC closeout report.

HBVCT in TASO was extended to the family members of all clients, regardless of whether or not they are on ART during 2007 because most families of clients on ART had already been reached. This started in March 2007 with the Masaka and Mbale TASO centres, but has not been scaled up to all the TASO centres. This means that HBVCT was made accessible to the family members of an additional 70,000 TASO clients considering that 87,444 clients received TASO medical and counseling services in 2007 (3,627 counseling only, 27,495 medical only, and 56,322 both counseling and medical services). At the current rate of implementation, it will take TASO about 20 years[1] to test the family members of all these clients. In the meantime, new clients will also continue to be registered.

The high infection rate found in children ≤5years, 8 times the national average indicates an unmet need for HIV diagnosis in children living in households with HIV infected adults. This need can be met if HBVCT for family members of all PLWHA was scaled up.

In addition, considering the number of PLWHA in Uganda, many PLWHA are accessing care and treatment from other providers. Since discordance rate among couples where one partner is HIV infected is high, the HIV negative

[1] On average, each TASO client has 7 dependants. If 26,000 family members were tested in 2006, the year when all the TASO centres were performing HBVCT optimally, then it means that on average 2100 (26,000/12) family members can be tested in a month at the current level of operation. 2100 family members belong to 300 households/index clients (2100/7). Therefore, the family members of 300 clients will be reached/month. To reach the family members of 70,000 clients, it will take 233 months (70,000/300); an equivalent of about 19 years.

partner(s) of these clients are constantly at risk of HIV infection because they are often not aware of each other's status. Even when the HIV negative partner is aware of their spouse's status, they assume that they too are infected.

In the author's opinion, what should be considered as the major achievement of the program is the diagnosis of previously undiagnosed HIV infection; the linkage of these people to care, prevention and support; and counseling on HIV prevention provided to both those HIV negative and those positive.

HIV counseling and testing is the most cost-effective means of HIV prevention; especially in low income countries with high prevalence of HIV infection. The cost-effectiveness of blood screening is 3.35$ per life-year saved; compared to the cost-effectiveness of STD control among sex workers at $3.95 per life-year saved, or PMTCT using AZT at $213.66 per life –year saved. ARV treatment is the least cost-effective means; with treatment using donated drugs costing $857.95 per life-year saved, and treatment at UNAIDS negotiated prices costing $2017.20 per life-year saved. (Masaki et al 2003)

Since HIV/AIDS causes the most mortality (25%) among all Ugandans, causes 8% of the deaths in children under 5 years (WHO 2006); and is probably an underlying cause of death in many of the deaths reported as being due to malaria, diarrhea, and pneumonia; it deserves all the attention that it is getting in the author's opinion. The only problem is that not enough attention is being paid to prevention. Some of the evidence to this effect include the fact that although there are many organizations providing VCT services in the country, VCT uptake still remains low; there is limited knowledge and awareness of discordance (MOH 2006); and proven effective methods of prevention like male circumcision of HIV negative males have not been scaled up (Wilson et al 2008).

The major limitation to the scale up of TASO's HBVCT model by the government would be resources; human, financial and material, especially for the initial setup. Once the setup is done, maintenance may not be as difficult if the program is extended up to HC II level since the catchment areas will be smaller. However, stigma and confidentiality may be major issues here for the same reason (smaller catchment area where the service providers may know the people more intimately) since during a national survey where HBVCT was done as well, one of the reasons the respondents cited as enabling them participate in the study was that those conducting the study were not from their community thus do not know them, and their neighbours will not know what took place in the privacy of their home

(Stanley et al 2006). Among most TASO clients and their family members however, stigma has not been noted as a major challenge. They freely identify with TASO and are not afraid of TASO staff and TASO labelled motorcycles being seen in their homes.

In the author's opinion, the most important limitation is financial resources. If the financial resources were available, it is possible for the government to contract TASO to train people to conduct HBVCT in partnership with the MOH. TASO has the capacity to conduct this training because it has one international training centre that has trained people from all over Sub-Saharan Africa in HIV/AIDS care, and a training centre in each of its four regional offices. In addition, sometimes TASO conducts trainings in collaboration with the Regional AIDS training Network (RATN) and the programme for Strengthening HIV Counsellor Training in Uganda-SCOT (TASO 2007b). The lay unemployed or underemployed people with at least an "ordinary level" certificate of education can be trained to conduct HBVCT.

The network of mini-TASOs and CBOs spread all over the country can also be a valuable resource in case of scale up of HBVCT by the government to cover the families of all PLWHA in Uganda. A number of the mini TASOs are HIV/AIDS projects within Government health units for example the Arua and Lira mini TASOs. The outreaches that TASO conducts within Government Health centres can also be a valuable resource. Thus, TASO and the Government health service have an intricate interwoven network that can potentially make the scaling up of TASO's approach to HBVCT to cover the family members of all PLWHA relatively easier.

A major challenge in case resources were available and HBVCT is scaled up would be management and supervision of the programme to ensure the delivery of quality services. The monitoring system to ensure accountability for both funds and programme targets within the MOH is not as strong as that in TASO. In addition, the widespread corruption and mismanagement of public funds that occurs in Uganda (Cohen 2008) will pose a challenge to the management of the programme. Supplies chain management in the MOH is also weak (WHO 2008; Ocen et al 2008) so that stock out of supplies like test kits would be likely to occur.

If financial resources were available, the author thinks that it would be worthwhile to invest in this approach to HBVCT with strict measures for monitoring and accountability. Although the minimum health care package in Uganda is under-funded, funding of HIV/AIDS programmes including HBVCT does not necessarily take away money from primary health care services. Instead, it helps build infrastructure and strengthen systems that provide the primary health care services as well.

Chapter 6. Conclusion and Recommendation

6.1. Conclusion.

The HBVCT programme in TASO has generally been successful because of its contextual relevance and efficient management. It has led to improved access to VCT for the family members of TASO clients initiating ART, identification of "silent HIV infections" among these family members, better family and adherence support for the index clients, increased access to HIV prevention, treatment, and support services for families of TASO clients, and created jobs. However, the programme is only financially sustainable with continued donor support. The major limitation for the Government to scale up this approach to the families of all PLWHA in Uganda is therefore financial resources. Other challenges include monitoring and ensuring accountability.

6.2. Recommendations.

6.2.1. To TASO.

The organization should continue providing HBVCT to the family members of TASO clients initiating ART treatment and accelerate the scale up of the programme to all TASO clients.

Counseling of TASO clients on prevention of HIV transmission to sexual partners of unknown HIV serostatus should continue.

An evaluation of the clients' perspective of the benefits of this program should be done to aid prioritization of services.

A detailed cost-benefit analysis of the TASO ART and HBVCT programme should be done so that the most money is spent on the most cost-effective interventions.

6.2.2. To the Government of Uganda.

Free VCT services should be availed at all HC3 levels and also at some HC2 levels so that coverage within all districts is adequate.

There should be automatic linkage of all VCT services to prevention, care, and treatment services so that all those diagnosed with HIV infection can access the basic services to promote 'positive living'.

The MOH should consider training lay people including PLWHA to provide HIV counseling and testing so that the available health workers provide mainly medical oriented care and treatment.

For the time being, the Government should concentrate on scaling up RCT in clinical settings and provide it to family members of patients as well.

VCT should be encouraged for all in Uganda, but specific focus should be on spouses or sexual partners and children of PLWHA, parents of children that are diagnosed with HIV infection, sex workers, and all couples intending to initiate a sexual relationship.

Continue promoting and scaling up other HIV prevention strategies including the ABC approach, male circumcision targeting HIV uninfected males, PMTCT, safe blood transfusion, and post exposure prophylaxis. All these should be done with a clear communication strategy addressing all the facts and myths of these.

Design programmes to sensitise the masses on discordance, encourage couple testing within marriage, and couple HIV testing before marriage even when there has been premarital unprotected sex.

Comprehensive evaluation of the cost-effectiveness of various VCT service delivery models in Uganda so that the most cost-effective models are scaled up.

More research into new strategies for HIV prevention should be done.

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Annex 1. HEALTH INFRASTRUCTURE

Health Centre	Level and approx. population	Services to be provided	Staffing requirement	Cu nu
I	Village-1000.	-Community Based Preventive and Promotive Health Services. Village Health Committee or similar status		0
II	Parish - 5,000	-Preventive, Promotive and Outpatient Curative Health Services, outreach care	-1 enrolled nurse, 1 enrolled midwife & 2 nursing assistants.	18
III	Sub-county - 20,000	-Preventive, Promotive, Outpatient Curative, Maternity and In-patient Health Services and Laboratory services.	-1 clinical officer, 1 enrolled nurse, 2 enrolled midwives and 1 nursing assistant, 1 health assistant, 1 laboratory assistant and a Records Officer.	90
IV	County – 100,000	- Preventive, Promotive, Out patient Curative, Maternity, Inpatient Health Services, Emergency surgery and Blood Transfusion and Laboratory services	-1 medical officer, 2 clinical officers, 1 registered midwife, 1 enrolled nurse, 1 enrolled midwife, 1 comprehensive nurse, 2 nursing assistants, 1 laboratory technician, 1 laboratory assistant, 1 health inspector, 1 dispenser, 1 public health dental assistant, 1 Anaesthetic Officer, 1 Assistant Health Educator, 1 Records Assistant, 1 Accounts Assistant and 2 support staff.	16
V	General Hospital – 500,000	-In addition to services offered at HC IV, other general services will be provided. It will also provide in-service training, consultation and research to community based health care programmes. and medical services.		90
VI	Regional Referral Hospital - 2,000,000	-In addition to services offered at the general hospital, specialist services will be offered, such as psychiatry, Ear, Nose and Throat (ENT), Ophthalmology, dentistry, intensive care, radiology, pathology, higher level surgical		9
VII	National Referral Hospital	-These provide comprehensive specialist services. In addition, they are involved in teaching and research		2

Multiple sources: MOH. 2000. Health Sector Strategic Plan 2000/01-2004/05; MOH. 2007. Annual Health Sector Performance Report 2006/07; MOH. 2008. *Health Infrastructure.* MOH.

Annex 2. OTHER TASO SERVICES

Social Support
The Social Support program comprises of services that mitigate the impact of HIV/AIDS on clients, and their families. The OVC package includes formal education, Vocational training and facilitation for start up of Income Generating Activities for out of school youths. Supplementary food aid is provided to the most food insecure clients and their families including those who are on strong medication like TB drugs. Our clients are trained in skills for sustainable livelihoods when phased out of nutritional support. The AIDS Challenge Youth Club continues to use strategies that are youth friendly in addressing youth sexual reproductive health issues. ACYC has a network of clubs based both at TASO centers and schools comprising of youth, some infected and others directly affected.

Training
Training and capacity building is a vital component of TASO's programmatic work and it aims at building competencies of HIV/AIDS service providers. Comprehensive packages, covering counselling and medical related courses/interventions, have been developed overtime. These are offered at the Training Centre in Kanyanya, Regional Training Offices (in Gulu, Kampala, Mbale and Mbarara), TASO Centres and through partnerships like Strengthening Counselor Training in Uganda (SCOT) and TASO Experiential Attachment to Combat HIV/AIDS (TEACH)

Community Mobilization and HIV Education
TASO provides support to organized communities to respond to the AIDS epidemic. This is through:
• Community mobilization & sensitization by TASO Drama groups; training of grass root level partners to provide AIDS education, care and support services. This is propagated through local governance structures.
• Enhancement of capacities of institutions, CBOs and government health units; through training in HIV/AIDS counseling, medical care & PPM, to improve service delivery. Some CBOs receive grants through TASO to enable them offer TASO-like services, especially in districts where there are no TASO centers.

Advocacy and Networking
TASO continues to participate in policy and other important strategic meetings, conferences and seminars at District, National and International levels. production of IEC materials with messages that advocate for their rights and responsibilities. In TASO the meaningful participation of People Living with HIV/AIDS is quite evident at governance, management

and programme implementation levels.
TASO is fully involved in various HIV/AIDS networks that promote common voice advocacy for policy formulation, and resource mobilization.

Research
TASO is involved in a number of research projects with various partners among whom are Medical Research Council (MRC), Centres for Disease Control (CDC) and the University of Washington. Operations research and collaborative effort, will continue in the coming strategic period (2008 – 2012)

Annex 3. TASO ART CARE PATHWAY SUMMARY

Annex 4. HBVCT HOUSEHOLD EDUCATION SESSION: INTRODUCTION TO TASO ART PROGRAM, ARV'S VCT AND ELIGIBILITY

Session # 1 HOUSEHOLD EDUCATION SESSION: INTRODUCTION TO **TASO ART** PROGRAM, **ARV'S** VCT **AND** ELIGIBILITY

Purpose:

All household members of TASO clients who have consented to receive Anti Retroviral treatment will be visited at home and will be offered an education session to:

- Introduce the TASO ART program
- Increase awareness and their understanding of Anti-Retroviral Therapy
- Enlist adherence support for the TASO client
- Inform them about the opportunity for VCT
- Inform them of opportunity to enroll on the ART program if eligible and encourage them to participate

This session will be folded into series of home visit sessions provided by the counselor and Field Officer

Outcome:

- Household member aware about the decision by TASO client to join TASO ART program
- Household member aware and understand:
  The TASO ART program

  ARV'S, their benefits, limitations and adherence issues

  Participant commitment form and eligibility criteria
- Household members aware that they have an opportunity to have VCT
  Group pre-test counseling

  Check who wants to get their results, where and how they want to receive them
- Household members aware and understand
  Any eligible household member can receive free TASO services

  Medical examination and tests will be done to determine eligibility for ARV treatment, monitoring and they can access this from TASO

ARV's do not benefit all people with HIV or AIDS

Household members cannot do anything physically or materially to fit into the selection criteria

Participation in the ART program will involve regular home visits from field officers and counselors to ensure adherence

There will be need for consent and commitment

- Medicine companion identified and educated about the importance of client's adherence to ART and the support the client will require for adherence
  Family members educated on the importance of adherence and behavior change

Setting: Client's home.

Methods: Group discussion, question and answer

Materials: Pictures, posters, flip chart notes and booklets.

Who: TASO counselor or Field Officer

Session outline

1. Greeting and rapport
2. Client introduces the team
3. Counselor and Field Officer
   i. Introduce purpose of visit to the household members and seek their consent for the discussion
   ii. Explain Confidentiality issues related to this discussion and set "ground rules" for the discussion
   iii. Introduce the TASO ART program
   iv. Provide information about the role of household members in supporting their relative who is due to start ARV's.
   v. Explain that household members have an opportunity to have VCT and join the TASO ART program.
   vi. Provide **information** about the enrollment process (eligibility issues) and other TASO services.
   vii. Solicit feedback from household members about the ART program, their support roles, the enrollment process and clarify issues.

viii. Explain that further information on enrollment process may be obtained from the counselor, Field Officer and at the TASO center.

Content

1. **Greetings and introductions**
   "Good morning/good afternoon! We are (Introduce yourselves by name) and we have come to visit…… (Client) and his or her family.
2. **Introduce purpose of the household session**
   We are here to discuss with you information about the TASO ART program and TASO services that you might already have heard about from…… (Client). We would like you to consider participating in this program. Please feel free to ask any questions on what on what may not be clear to you and any other questions about the program that you may wish to know.
3. **Ask for agreement of confidentiality for this session**
   "If you are comfortable, if would be fine for you to ask questions or talk about some things in this meeting that are personal. We will keep every thing confidential. After this session, you will have an opportunity to meet us individually if you have other personal issues you wish to discuss privately."
4. **What have you heard about the TASO ART program?**
   The counselor and Field Officer give an overview of the ART program at TASO:

   Overview of TASO ART program-confirm or clarify

   The TASO ART program works under the guidelines of the Ministry of Health and is funded by PEPFAR and with support from CDC.

- The service will include giving drugs called ARV's that help people when they have a lot of HIV in their blood.
- Not everybody with HIV/AIDS needs ARVs immediately. ARVs are good for only a person whose immune system has been severely damaged by HIV.
- ARVs have been used allover the world to help improve the health of people with HIV.
- ARVs are not a cure.

- ARVs are very expensive. However, TASO will provide these drugs free of charge to its registered clients who will meet the requirements for the drug.
- TASO intends to provide ARVs for up to 10,000 clients and their family members by 2007.
- TASO is enrolling clients who are registered with the organization and meet eligibility criteria beginning with those who have been registered with it for a long time.
- …… (Client) has accepted to enroll in the TASO ART program and will continue to receive other TASO services.
- It is very important that you support …… (Client) when …… (Client) starts taking ARVs and any other member of this household who might enroll for the program. S/he will be taking ARVs as you are told; therefore s/he will benefit from your encouragement and support.
- TASO is extending its services, including ART to all household members of the client. For a household member to be eligible for TASO services, HIV counseling and testing is being provided today at home. **(Explain the eligibility criteria for the TASO ART program).**
- The client and family members who will be eligible for ARVs will need to consent and commit themselves to the treatment.
- We will be visiting this home regularly to supply ARVs and check on …… (Client) and any family members who will qualify to be put on ARVs.
- Remember, sharing ARVs is not allowed. If this happens the drugs will not work for either of the persons; instead both of them will develop resistance to the drugs, which will be more dangerous to them (Refer to the analogy of the cooking pot).
- The ARVs will be given free of charge but the clients will continue to contribute the service fee of Shs 500/= (Five hundred shillings only) whenever they attend the clinic.

Counselor and Field Officer:

Seek the opinion of the family members: What do you think about the program?

Answer questions from the family

"What questions do you have about the TASO ART program"?

"What support will you give …… (Client) to help him/her to take the drugs as will be required of him/her"?

Confirm and clarify the responses from the family members.

Clarify that household members have an opportunity to have more information on the TASO ART program.

Information on VCT for household members:
This sub-session intends to sensitize family members of the TASO client about the importance of VCT and the procedures involved in the voluntary counseling and testing that TASO is offering

The counselor introduces the subject of VCT to the family members:

Now I would like to talk to you about HIV antibody testing and its benefits. TASO wishes to give an opportunity to the family members of its clients who enroll for ART, to know their sero-status. The purpose of this is to enable the family members to benefit from the same services like the TASO client. This will help to enlist support to one another as a family and to improve the health status of everybody who requires care and support in that family.

Household members of TASO clients initiating ARVs will be offered free VCT, either in their home or TASO center. The counselor and Field Officer are prepared to provide counseling and testing to all members present today who consent. Testing will be done using a finger prick and test results will be availed today before the counselor and field officer leave your household. At the end of the group session all those interested will meet either the field officer or the counselor for counseling and testing. Household members can have the option of individual or couples counseling or a combination. In this session, counselors will provide information and counseling about what can be expected during the testing process, the meaning of test results and what options can be taken after learning the test results.

It is important to note that:

- Not everybody who will take the test in this family will turn out to be HIV positive. In fact, most are likely to be HIV-negative.
- Not everybody who might test HIV positive will need ARVs right away. Remember, ARVs are given to a person whose strength to fight diseases has been grossly damaged by HIV; the ARVs help rebuild this strength and improves the person's health.

- ❖ People whose defense systems are still strong are educated on what they can do to remain strong. This is called "Positive Living". They will benefit from other TASO services if they register with TASO.

Benefits of VCT to the family members: Counselor and field officer outline the benefits of VCT.

Explain the procedure of testing to Household members

- Finger prick and rapid testing
- Not painful
- Results available the same day

VCT will help to:

- Provide you with more information about HIV infection and disease.
- Establish your HIV status and those who will test positive can access care and support services early.
- Promote behavior change, hence prevention of HIV infection particularly in case of discordance (Explain discordance- see discordance messages)
- Enhance adherence to medication in AIDS care i.e. Septrin, ant T.B., ART etc
- Enhance social support for the family members to cope with the infection.
- Reduce the pressure of sharing ARV drugs, because each person who needs treatment will receive his/her own share of drugs. This will promote adherence and effectiveness of the treatment.
- An excellent opportunity for disclosure.

You have the right to decide to test. It is not compulsory but it is helpful to know your HIV status in relation to what we have discussed above.

Please feel free to ask any questions you may have about what we have said.

Sub-session: Education of the medicine companion:

The counselor discusses with the medicine companion about his/her roles in the presence of the client.

Thank you for offering to support …… (Client) to ensure that s/he will take the drugs as will be prescribed by the doctor.

It is important for you to know that if ……(Client) does not take the ARVs as will be prescribed (fails to adhere), the HIV in his/her blood will grow stronger and the drugs will no longer be able to help him/her. This is called resistance. If this happens, it will be difficult for him/her to get other drugs that will help him/her in future and the goal of helping him improve his/her health will be lost.

Now I would like us to discuss how best you will support him/her:

First I would like you to know that it will be important and helpful to:

- See and spend a moment with……(Client) as he takes his/her ARVs at least once a day and record how s/he is taking them (Check the pill boxes and record the doses that will have been taken, and reasons if any, for not taking).
- Check on the storage of the pillboxes.
- Look out for and record any problems that …… (Client) may experience while he takes the ARVs.
- Agree to watch over this process for the next 6 months.
- Identify together with the client, the possible reminders to use alongside your support, record and report them to the counselor or the field officer.

Are there any challenges/difficulties both of you can envisage? If so how do you plan to resolve them? Are there any other questions you wish to ask?

From your assessment:

If the client is psycho-socially ready to be started on ART; make an appointment for the client to return to the clinic together with his/her medicine companion.

Summarize the family session and emphasize the key issues on:

1) The TASO ART program.

2) The importance of:

- VCT for family members in relation to ART.
- Adopting positive behavior change in relation to ART.
- The importance of the medicine companion.
- Adherence.

3) Establish a way forward for the household members on VCT:

We would like you to consider what we have discussed about the chance to test. If you are ready to take the HIV test today, please wait for one of us to offer it to you immediately after here. We shall also need to talk with those who are not prepared to test today, to work out an alternative plan for their testing.

Wrap up session:

Give a chance to family members for private discussions. Then move into the VCT protocols.

Annex 5. VCT FOR INDIVIDUAL HOUSEHOLD MEMBERS

Protocol: VCT for INDIVIDUAL Household members of TASO clients

Household members of TASO clients initiating ARVs will be offered free VCT, either in their home or at TASO depending on their preference. Testing will be done using a finger prick and test results will be availed the same day (before counselor leaves household). Household members can have the option of individual or couples counseling or a combination. In this session, counselors will provide information and counseling about what can be expected during the testing process, the meaning of test results and what options can be taken after learning the test results.

This protocol is to be implemented at the time of providing HIV testing in a household with a TASO client initiating ART.

Purpose

This session is intended to provide VCT to a household member of TASO clients.

Outcomes

- Knowledge of sero-status
- Coordination with TASO enrollment and/or linkage to supportive services
- Enhanced understanding of personal risk for HIV infection and plan to reduce risk of infection

Setting: TASO client's home
Who: TASO Field Officer or Counselor
Methods: Group session, one-on-one discussions with individuals aged 13years and above; discussions with parents/guardians of children aged below 13 years
Materials: TASO HIV Testing record form; counseling protocol and cue cards; testing kits and supplies

Session outline

1. **Pre-Test counseling**

1) Introduction and orientation to session

2. Blood sample drawn and test done as per testing protocol

3. Test results counseling

1) Negative result
    a. Provide test result
    b. Review risk reduction plan; HIV discordance counseling as needed
    c. Identify support for risk reduction plan
    d. Negotiate disclosure and partner referral
    e.

2) Positive result
    a. Provide test result
    b. Identify sources of support
    c. Negotiate disclosure and partner referral
    d. Review risk reduction plan
    e. Discussion of possible referral for care and support

1) Introduction and orientation to the session Time: 2- 4 minutes	
Protocol	Content
Explain confidentiality	I want you to know that what we are going to talk about today will be kept private. That means your personal information will be absolutely confidential and will not be discussed with any one else.
Review the test process and meaning of results. • If positive, infected with HIV • Accurate, same day test results • If negative, not infected • Testing algorithm • Choose how to receive results (individual or couple; at home or at TASO	Today, you will receive a test that detects if you are infected with the virus that causes AIDS. This test is very accurate. A negative result does not necessarily mean that you are free of HIV. (Explain the window period). If the test is positive, it means you are infected with HIV. You have the choice of how you would like to have the test and receive your results today at your home or come to the TASO clinic for testing. You also have the choice to receive the test alone as an individual or as a couple if you have a partner in this household. Many couples find it easier to get their results together while I am here so that I can help clarify any questions about your results.

Address immediate questions and concerns	Before we go any further, do you have any concerns or questions you need to talk about right now?
Assess pattern of risk (occurring regularly, occasionally, due to an unusual incident). Counselor can do this while filling in the VCT card	**Look at VCT card to discuss this section *sexual partners of unknown HIV sero-status**

2) **HIV Test Preparation**	**Time: 3 – 4 minutes**
Protocol	**Content**
Discuss the client's understanding of the meaning of positive and negative HIV test results. Clarify client's misunderstanding about the meaning of HIV test results.	What would a positive HIV test result mean to you? How would you understand a HIV negative result?
Assess client's readiness to receive the test results. Response to positive results Response to negative results	What test results are you expecting? Have you thought about how you would deal with each of the possible test results? How would your life change? How would your behavior change if you were to find out you were not infected with HIV? How would you deal with an HIV-positive result? How would you reduce the risk of transmitting the virus to your partners?

Draw blood "Finger stick" and do the testing as per testing protocol
Outline

1. Explain testing procedure to client – e.g. I'm going to prick your finger, etc……
2. Do the screening test on all individuals who consent; using "Determine" kit
3. Do a confirmation test for all individuals testing positive on the determine kit using the "Unigold kit"
4. Perform a tiebreaker test for all individuals where the screening test and confirmatory tests are discordant.
5. Provide HIV test results.

Session 2: Providing HIV Negative Test Results

1) Inform client of test result	**Time: 2 – 6 minutes**
Protocol	**Content**
Provide results clearly and simply (show the client his or her test result)	Let's look at your test result, and then we'll talk about how to best understand the result. The test result is negative, which means you have not been infected with HIV.
Explore the client's reaction to the test results	What does this result mean to you? How does it feel to hear that it is very likely that you are not infected with HIV
Review the meaning of the results	I want to clarify that this means that as of 6 weeks ago, which would be before……, you were not infected with HIV.
Note the need to consider the test result in reference to the most recent risk exposure	This result does not tell us about the exposure that occurred (specify) most recently. You may want to consider another test in 6weeks from today (or date of last risk)
If client has ongoing risk, convey concern and urgency about the client's risks (as appropriate)	If you have been involved in risky behavior (unprotected sex with a partner of unknown status/HIV positive), you need to commit yourself to practice safe sex or you may become infected with HIV. Let's talk about a plan to reduce your risk.***If this is a spouse of a TASO client, please do DISCORDANCE counseling and go over the discordance messages

Activity: Negotiate Risk-Reduction Plan

Time: 4 – 6 minutes

Protocol	*Content*
Assess pattern of risk (occurring regularly,	**Look at table on VCT Card to discuss this section** If person has any partners of unknown sero-status or

occasionally, due to an unusual incident).	known discordant status, need to discuss CONDOMUSE AND PARTNER TESTING
Identify priority risk-reduction behavior.	It is important that we prioritize. What are the most important issues that we need to address to reduce your risk?
Explore behavior(s) that the client will be most motivated about or capable of changing.	As we talked earlier, you have some options for reducing your risk. Let's look at the options you feel are available for you.
Identify a reasonable yet challenging incremental step toward changing the identified behavior.	What first step can you think of that you could complete in the next week that would move you closer to reducing your STD/HIV risk?
Break down the risk-reduction action into specific and concrete steps	Now that you've identified something you would like to do, tell me how you feel you could go about making this happen. When do you think you could do this?
Identify supports or barriers to the risk reduction steps.	What could make it more difficult for you to complete this step? What could help make it easier for you? If you are able to complete this step, how do you think it would make you feel?
Problem-solve issues concerning the plan.	How will you handle it if something (specify) gets in the way of trying your plan?
Role-play the plan.	Let's practice how you could deal with this. Imagine that I am your partner, what would you say? All right, let's switch roles.
Confirm with the client that the plan is reasonable and acceptable.	Now that you are comfortable with the plan, does it seem realistic to you?
Ask the client to be aware of strengths and weaknesses in the plan while trying out.	When you try this plan, think about what feels good and works for you and what parts are hard or uncomfortable.
Recognize the challenges of behavior change.	You will really have done something good for yourself by trying out this plan.
Document any challenges to the risk reduction plan with a copy to client and counselor.	Let's write down any changes or additions to your plan on this card.

Negotiate Disclosure and Partner referral-For most clients, this section

may not be necessary given that we are doing household testing with "shared confidentiality".
It is important for the counselor to also offer to help with supported disclosure.

Time: 2 – 3 minutes

Protocol	Content
Explore client's feelings about telling the partner(s) about HIV negative test results.	What are your feelings about talking to your partner(s) about your test results? What are your concerns?
Remind client that his or her results do not indicate partner's HIV status	It is essential that you understand that your test result does not indicate whether or not your sex partner is infected with HIV. Your partner(s) must be tested in order to know his or her result.
Support client to refer partner for testing.	Tell me your thoughts about asking your partner(s) to be tested. What would you do if your partner had a positive result?
Anticipate potential partner reaction	How do you believe your partner will react to your telling him or her your result and asking him or her to test?
Practice and role-play different approaches to disclosure.	What would you like to say to your partner? Let's imagine that I am your partner. Tell me about your results and ask me to also get tested. I will respond. It is good to practice.
End the session, providing the client with motivation and encouragement.	You've really addressed a lot of issues today. It seems you are really ready to address the challenge of protecting yourself and your partner(s) from HIV. We hope you become a community ambassador for preventing HIV. Share your experience and encourage others to test.

Identify support for risk reduction

Time: 2 – 5 minutes

Emphasize the importance of discussing the intention and content of the plan with a trusted friend or relative.	It's important for you to share your risk reduction plan with some one. Whom could you trust to tell about your HIV test experience? Also, who in your life can provide support so that you can avoid situations that put you at risk?
Identify a person to whom the client feels comfortable disclosing the plan.	Whom do you usually talk with about challenges you are facing? So, do you believe you could tell (name) about this plan?
Establish a concrete and specific approach for the client to share the plan with his or her friend or a relative.	It is important to tell him or her about your plan and then to report to him or her on how it went. When and how will you tell him or her?
Convey confidence in the client's ability to complete the plan.	This is a plan you've come up with. It is a good plan, and I believe it is something you really want to do and are capable of accomplishing. You've really challenged yourself.

Session 2: Providing HIV Positive Test Result

Time: 3 – 5 minutes

Protocol	**Content**
Provide results clearly and simply.	The test result is positive, indicating that you are infected with HIV.
Review the meaning of result.	This result does not mean you have AIDS and does not indicate when you may become ill from the virus.
Allow the client time to absorb the meaning of the result.	Take your time. We have plenty of time to talk about the results.
Explore client's understanding of the result.	How do you understand this result? What does this result mean to you?
Assess how client is coping with result.	It can be difficult dealing with knowing that you are infected with HIV. How are you doing? How are you feeling about this test result?
Acknowledge the challenges of dealing with a positive result.	You need to take time to adjust to this, but in time you will be able to cope and continue with your life.
Discuss living positively and TASO ART Eligibility	There are many people who are infected with the virus and living well. Have you heard about positive

registration.	living? Let's talk about that. Positive living means taking care of your health and your emotional well being in order to enhance your life and stay well longer. Positive living involves good nutrition, follow-up medical care, such as Tb preventive treatment, support, and sense of optimism and well being. What can you do to live positively? **Benefits of cotrimoxazole prophylaxis** • It prolongs life for PLWHA • It prevents opportunistic infections, including diarrhea, malaria and certain respiratory infections. • It saves money by improving health and reducing the need for clinic visits and hospitalizations to treat opportunistic infections. You will have the opportunity to have a medical examination to determine if you will benefit from the new ARV drugs. If you would like to do this, the first step is to register with TASO

Activity: Identify Sources of Support and Provide Referral

Time: 4 – 10 minutes

Protocol	Content
Assess whom the client would like to tell about his or her positive test results.	Who can be supportive of you in dealing with this? You'll want to tell someone you trust, some one who will keep your confidence. With whom in your life would you like to share your test result? How do you think he or she would react? What do you think he or she would say?
Identify a family member or friend to help the client through the process of dealing with HIV: • Coping and support	There are a lot of issues you'll want to address over time. It is sometimes helpful to have someone to help guide you and assist you as you weigh options and make decisions. Who could help you with this? Who in your life could help you as you adjust to living

• Planning for the future • Positive living • Medical follow-up	with HIV? Paying attention to your emotional and physical health and your medical care are important parts of living positively. Who will support you in these areas?
Make referral to TASO	As I mentioned, if you would like to be evaluated for eligibility of ART, your next step is to register with TASO. Is this something you are interested in? **(If not a TASO member)** When do you think you might visit TASO?

Activity: Negotiate Disclosure and Partner Referral

Time: 3 – 4 minutes

Protocol	Content
Explore client's feelings about telling partners his or her HIV positive test result.	Have you thought about telling your partner(s) about your test result? What are your feelings about talking to your partner(s) about your test result? What are your concerns? If your partner is here in the household, we can talk with him/her together today if you would like. I can help answer any questions.
Remind client that his or her result does not indicate the partner's HIV status.	It is essential that you understand that your test result does not indicate what your sex partner's result will be. Your partner may not yet be infected. It is very important that your partner get tested.
Identify partners that are at risk and need to be informed of their risk of HIV infection.	Who do you believe may need to know about your result? Are there particular partners you are worried about? Whom do you feel you need to tell?
Discuss possible approaches to disclosure of sero-status to partners	How do you think you would tell your partner about your test result? What would you like to say? Would this be difficult for you?
Support client to refer partner for testing. (IF APPLICABLE- e.g. if person has partners	Your partner must be tested in order to know his or her result. Tell me your feelings about asking your partner to be

outside household)	tested? How would you and your partner handle it if he or she were HIV negative?
Practice and role-play different approaches to disclosure.	Let's imagine that I am your partner, tell me about your results and I will respond. It is good to practice.
Anticipate potential partner reactions.	How do you believe your partner will react to your telling him or her?
Provide the client with support.	There has been a lot we have talked about today. It is a challenge to deal with being HIV infected, however with time and support you will adjust and can live positively. Please know counselors at TASO are available for you.

Activity: Address Risk Reduction Issues

Time: 1 – 5 minutes

Protocol	Content
Assess client's plan to reduce risk of transmission to current partners.	Tell me how you plan to protect your partner from acquiring HIV? (IF APPLICABLE) How will you be intimate and close without transmitting HIV to him/her?
Explore client's plan for reducing the risk of transmission to future partners.	When you have a new partner, how are you going to protect that partner from HIV?
Address disclosure of HIV status to future partners.	How will you tell your new partner about your HIV infection?
Encourage the client to protect others from HIV.	It is important for you to care for yourself and to protect others from HIV. One person, like yourself, can change the tide of the epidemic by being honest with your partners and ensuring you engage only in safe sex behaviors.
Ensure follow-up and appointment.	COUNSELOR SHOULD MAKE REFERRAL TO TASO for registration (If client agrees to be referred)

Annex 6. WORK PLAN FOR HBVCT AT TASO CENTRES FOR THE PERIOD JULY 2005 –MARCH 2006

Work plan for Home based voluntary counseling and testing at TASO centers for the period July 2005 - March 200													
			TIMEFRAME										
ACTIVITY	TARGETED PERFORMANCE	INDICATOR	J	J	A	S	O	N	D	J	F	M	RESPONS
Assessment of centers readiness	6 centers	Number of centers assessed											ART Coor
HBVCT concept paper and plan developed	By June	Completed concept paper											ART Coor
Adaptation and dissemination of concept paper	Dissemination	Number of centers with guidelines											ART Coor
TOT in HBVCT for TASO ART trainers	All TASO ART trainers	Number of ART trainers with TOT in HBVCT											PO capac
Mobilization of TASO clients	All TASO clients	Number of mobilization meetings/health talks on HBVCT held at each center											Center ma
Training of existing center staff	Existing counselors, medical staff and Field officers from 6 centers	Number of counselors, medical staff and field officers trained											PO capac
Planning meetings	4 meetings	Number of meetings held											ART Coor
Recruitment of additional staff	8 clinical officers, 16 counselors and 16 field officers	Number of additional staff recruited											AHRD and
Training of new field officers	16 new field officers trained	Number of new field officers trained											PO capac
Orientation of new staff	40 new staff oriented	Number of new staff oriented											AHRD and
HBVCT lab kits purchased	Lab kits purchased for 35,000 people	Number of lab test kits purchased											Pharmacy
HBVCT tools purchased	64 foldable work tops, 64 aprons and 64 cool boxes	Number of each set of tools purchased											AHRD and
Purchase of ridding gear	16 sets of riding gear purchased	sets of riding gear purchased											AHRD
Purchase of computers and accessories	8 computers and accessories purchased	Number of computers and accessories purchased											AHRD
HBVCT review workshop	One review meeting conducted	Review meeting report											ART Coor
Consultations with technical partners	Key partners in HBVCT	Number of consultations											ED, DPP,
Debriefing of communities and DDHS	Meetings with the communities and DDHS	Number of meetings held with the communities and the office of the DDHS											Center ma

Documentation	All program activities	Number of activities	ART Coor
Weekly core team meetings	All core team members	Number of meetings conducted	ART Coor
HBVCT guidelines development	Guidelines	Guidelines appropriate for TASO	ART Coor
Conduct HBVCT sessions	HBVCT conducted for 35000 people	Number of individuals who have had HBVCT done	FO superv
Conduct supervisory visits to communities	9 visits by each center	Number of visits	FO superv
Compiling monthly, 1/4ly and annual reports	9 monthly, 3 quarterly and one annual report	Number of reports	PO M+E
Training in monitoring and evaluation	2 officers	Report on training of the PO M+E and PO Capacity building in M+E	PO M+E a
Development of M and E tools	Check lists, M+E guidelines, center monthly reporting format	Number of M+E tools developed	PO M+E
Operational research	One operational research conducted	Research report	PO M+E

List of abbreviations:
PO M+E = Project officer monitoring and evaluation
PO CB = Project officer capacity building
AHRD = Administration and Human Resources Director
PO = Project officer
ED = Executive Director
FO = Field Officer
DPP = Director Projects and planning
PC = Program Coordinator
DDHS = District Director Of Health Services