



ANALYSIS OF DATA

HIV Voluntary Counseling and Testing in Kenya, 2001–05

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Family Health International

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Acronyms

AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
FHI	Family Health International
HIV	Human immunodeficiency virus
ICRH	International Centre for Reproductive Health
IMPACT	Implementing AIDS Prevention and Care
KAPC	Kenya Association of Professional Counsellors
KEMRI	Kenya Medical Research Institute
KNH	Kenyatta National Hospital
MOH	Ministry of Health
NASCOP	National AIDS and STD Control Program
NGO	Nongovernmental organization
PLWA	People living with AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
STI	Sexually transmitted infection
USAID	US Agency for International Development
VCT	Voluntary counseling and testing

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Over the past five years, many people have contributed to bringing the VCT concept to where it is now in Kenya. To all of them, *asante sana*.

Executive Summary

Kenya has witnessed an unparalleled upsurge in voluntary and counseling (VCT) services since 2001. This increase was assisted by the USAID-funded IMPACT (Implementing AIDS Prevention and Care) Project, which is managed by Family Health International (FHI). IMPACT is a pioneer in VCT, and has helped establish 217 of Kenya's 687 VCT sites.

This paper investigates trends in client utilization of VCT service between 2001 and 2005 within a sample of these IMPACT-supported sites. The analysis sought to

- establish sociodemographic and sexual behavior profiles of VCT clients and their HIV prevalence
- correlate these client profiles with the service delivery model chosen
- ascertain how clients learned about VCT services and whether this information influenced them to seek and use other interventions
- investigate links, if any, between types of referrals made and the sexual behavior profiles and serostatus of VCT clients
- establish whether mass communication campaigns and the availability of antiretroviral therapy (ART) influenced clients to come to the sites

Data were derived from information routinely asked of 107,047 clients at 17 IMPACT-supported VCT sites in four provinces between 2001 and 2005. They suggest that mass media campaigns and the introduction of ART services contributed to a gradual increase in the number of clients at these sites over the four-year period. The data also reveal that VCT services have mostly attracted young people: 55.5 percent of clients were ages 20–29. Most clients sought VCT because they were planning for the future, though women were also more likely to visit because of a partner's risky behavior or when they felt unwell.

The analysis also suggests that young males were more likely practice abstinence than their female counterparts, and single, sexually active women—whether separated, widowed, or never married—have higher HIV prevalence than other groups. Condom use remains low, even for risky sexual encounters.

Freestanding VCT sites were attractive to clients in every age category, but even more so for couples and for educated and professional people. However, VCT sites integrated into other health facilities were more likely to refer clients for other services than the more popular freestanding sites.

Background

Kenya has witnessed an unparalleled upsurge in voluntary counseling and testing (VCT) services since 2001, and had 687 sites offering VCT by end of 2005. The USAID-funded IMPACT (Implementing AIDS Prevention and Care) Project, a pioneer in this area, has made a key contribution, and the number of IMPACT-supported VCT sites increased from 4 to 217 between 2001 and 2005.

Notwithstanding, VCT sites have been unevenly distributed, and they remain inaccessible to a large majority of Kenyans, especially those in the rural areas. Other constraints have included

- an inadequate supply of test kits
- insufficient numbers of fully dedicated staff, since many VCT sites are integrated into government health facilities and make use of the same service providers
- a shortage of programs offering effective linkages for those needing care, treatment, and support

Project partners have been implementing HIV prevention activities since 1999 in four provinces—Western, Coast, Nairobi, and Rift Valley—and this work has promoted the desire of people to learn their own HIV serostatus. Some of these activities included peer education for men, women, sex workers, and young people both in and out of school; workplace interventions; and the prevention and treatment of sexually transmitted infections.

When VCT services were initiated, the number of clients increased rapidly. Contributing to this increase was a mass communication strategy coordinated by the National AIDS and STD Control Program (NAS COP) of the Kenya Ministry of Health (MOH), with the assistance of IMPACT partner Population Services International and the active collaboration of local VCT stakeholders and partners. The US Centers for Disease Control and Prevention and USAID provided technical and financial assistance.

Overall, the MOH has largely implemented VCT using the integrated service delivery model, in line with the ministry's HIV/AIDS strategic plan for 2000–05. However, freestanding (standalone) sites have also been established in Kenya by non-governmental organizations (NGOs) and some community-based organizations.

Initially, IMPACT supported MOH efforts to establish VCT centers through NGO implementing partners, such as Liverpool VCT and Care, the Strengthening STD/HIV Control in Kenya Project of the University of Nairobi and the University of Manitoba, and the International Centre for Reproductive Health. Later IMPACT supported the MOH directly by providing technical assistance, commodities, and training for VCT establishments.

Of the 217 VCT sites that IMPACT helped to establish, 36 were freestanding. In the rest, VCT services were integrated into existing health facilities whose healthcare workers provide the services.

IMPACT's main target groups for VCT were youth; sexually active men and women; couples, especially those entering new

relationships or planning to marry or have children; and individuals whose partners migrate for work. Such migratory populations have been targeted by several IMPACT workplace programs.

Communication Campaigns

IMPACT's VCT communication strategy was based on a formative assessment conducted in 2001. The objective was to increase interest in knowing one's personal serostatus and fostering a sense of self-worth relating to knowledge of this status and how to manage it. The strategy also sought to create awareness of VCT and inspire consumer confidence in the new service.

The promotion campaign used billboards, posters, flyers, and radio and TV spots. The first phase aimed to create general awareness about VCT and promote existing sites. Provocative questions about knowing one's serostatus were broadcast, such as "If you have HIV, can you have sex with your partner?" During this initial campaign, VCT services were branded with a yellow and purple logo, one that is now readily recognized.

After the first campaign, VCT promotion targeted youth. The "Take Control of Your Status" campaign employed popular figures who had taken HIV tests and become trendsetters for other youth. Well-known singers and entertainers and upwardly mobile young adults used in the campaign created awareness of VCT services, reduced stigma associated with VCT, and increased the use of the service. At 52 VCT sites, the number of young people ages 14–24 rose from 3,608 between April and June 2002 to 7,650 during the youth campaign between July and September in that year.

The third mass communication campaign targeted adults—particularly couples—but its impact on service use was low, compared to the campaign that targeted young people.

HIV Testing and Counseling

The 1998 Kenya Demographic Health Survey demonstrated that 66 percent of men and 63 percent of women of reproductive age wanted to know their own HIV serostatus, but only a small percentage reported that they ever had been tested for HIV. In 2002, the behavioral surveillance survey reported that an even higher percentage of certain cohorts wanted to know their own HIV serostatus, though few had taken HIV tests. HIV testing became even more dominant as the entry for care with the introduction of antiretroviral therapy (ART), which became more generally available in Kenya in 2004 and 2005.

Until 2005, the HIV-testing algorithm in Kenya was parallel testing, using rapid HIV-1 and HIV-2 tests (Determine and Unigold) and whole blood specimens. If results were discrepant, another blood specimen was drawn and tested on long Elisa or instant screen at the nearest hospital. In 2005, the algorithm was changed to serial testing. This change was due to frequent shortages of test kits, but was also stimulated by growing confidence that serial testing was equally reliable, with the proper selection of test kits.

During 2002, strategies were put in place to ensure quality of service, both in counseling and testing. The Kenya Medical Research Institute (KEMRI) and the Kenya Association of Professional Counsellors (KAPC) were contracted to help establish quality assurance and continuous quality improvement systems. KAPC sensitized implementing partners, including MOH supervisors in regions where IMPACT operated, on the importance of support supervision for the overall VCT program.

KEMRI and KAPC jointly identified potential counselors who would be trained to offer support and supervision to individual counselors and groups. KEMRI conducted training of all counselors in standard operating procedures for HIV testing, and also provided the mechanism for validating every fifth sample tested, a far higher percentage than government guidelines recommended. At the initiation of the program (when few clients were being tested for HIV infection), using the recommended 2–3 percent would have resulted in very few blood samples being validated. Soon, the number of clients tested increased, and the number was changed to every twentieth sample.

IMPACT has always stressed that VCT is not only a means for behavior change, but is an entry to care and support. For example, VCT provides women with opportunities for early access to prevention of mother-to-child transmission (PMTCT) programs. Clients are referred for treatment of opportunistic infections and for positive-living education and counseling, and they are directed to support organizations that offer psychological and social support. However, the number of such organizations in Kenya

has been very small, and the few available suffered from lack of funding and societal stigma. As VCT rolled out, IMPACT funded support groups called post-test clubs, and it initiated programs to address stigma and discrimination.

A midterm IMPACT evaluation in 2002 found that there had been a rapid expansion of VCT at the very beginning of the national rollout. The evaluation also noted the need for linkages to care and support for people tested. It added that VCT centers were unevenly distributed in the country, and that test kits were in inadequate supply. It referred to the lack of fully dedicated staff to offer services, since many sites were integrated into government health facilities whose staff had additional responsibilities.

Since 2002, IMPACT's VCT strategy has been to

- provide technical assistance to NASCOP in the national rollout of VCT
- work with MOH district HIV/AIDS coordinators to establish more VCT services
- provide technical assistance to standardize and strengthen the quality of VCT services
- strengthen counselor skills through training
- strengthen referral links through community mobilization
- increase referrals for HIV-positive clients to comprehensive care clinics being established around the country for programs in prevention and treatment of tuberculosis and the prevention and management of opportunistic infections
- strengthen and work with partners to establish post-test clubs

Analysis of VCT Client Data

Study Objectives

This study sought to establish trends in the use of VCT services by analysing client data from selected IMPACT-supported VCT sites. More specifically, the study aimed to

- establish the sociodemographic profile and sexual behavior of clients who use IMPACT-supported VCT services
- establish the level of HIV prevalence among VCT clients
- investigate how client profiles relate to their choice of a VCT service delivery model
- ascertain how clients learn about the VCT services and other IMPACT intervention programs
- establish the types of referrals given to VCT clients and how these correlate to their sexual behavior profiles and serostatus
- establish trends in client utilization since the establishment of IMPACT-supported VCT services and the relationship, if any, to mass communication campaigns and the availability of ART

Data and Methods Used

The study relied on information derived from the National Voluntary Counseling and Testing Form used at all Kenya's VCT sites. These forms are routinely filled out by counselors, and contain information on each client's sociodemographic characteristics and sexual behavior. The data form was introduced after several VCT sites had opened, and it has undergone several changes. It was originally based on a form used at the AIDS Information Centre in Uganda, and was subsequently adapted by a committee of VCT-implementing organizations and donors.

Counselors were trained on the use of this data form from the outset. Information from clients was collected during first and subsequent visits, with a new form filled out at each visit. To keep anonymity, only client codes were entered on data collection forms.

Data were collected on gender, age, and marital and pregnancy status; occupation and education; type of counseling session (whether for couples, individuals, or groups); type of service required and type of referral service; reasons for visiting the VCT site and sources of information on it; sexual history and use of condoms; and whether the client had ever been tested for HIV and the result of such tests.

Once the counselor completed the form, a designated supervisor randomly checked it for completeness and accuracy. Basic data analysis was done at the site to fill out a standard data summary tool required by NASCOP. The client form was then either forwarded to the facility's data entry person or to the nearest FHI field office for data entry, using EPI Info software. Accuracy and completeness of data and other quality assurance checks were the responsibility of VCT managers and monitoring and evaluation personnel. Data summaries were reported to NASCOP and FHI on a quarterly basis. Though much attention has been focused on counseling, testing, and data collection, the major challenges faced in data management have been lack of

computerized systems for data management at sites, a shortage of staff to manage both the clients and the data, and sporadic shortages of the data collection tool or periodic changes to it.

Basic data summaries reported to NASCOP and IMPACT have been used for program planning and management, projection of supply requirements such as test kits, and assessments of the effectiveness of VCT campaigns and the demand for and use of VCT services.

Data analyzed for this study were derived from 17 IMPACT-supported VCT sites, all of which had been in existence for at least three years and were consistent in data collection (see appendix). The study used the computer program SPSS for Windows to manage and analyze data, both within each site and pooled across sites. The main method used was bivariate analysis, which produced point estimates for various indicators, by gender and sites.

VCT clients are self-selected; they are not representative of the adult population in the catchment area. It is also important to note that VCT centers were established at different times between 2001 and 2005. Data was thus selectively analyzed to meet some study objectives.

The VCT Sites

In February 2006, there were 687 VCT sites in Kenya. Of these, IMPACT supported 217, which were located all over the country. Thirty-seven of them were standalone sites, and 180 were integrated into other health facilities. IMPACT also supports various health facilities or institutions, including national NGOs, faith-based organizations, private for-profit institutions, and government hospitals.

The 17 sites selected for investigation comprised the following:

- Nine sites established by the International Centre for Reproductive Health (ICRH) through IMPACT (referred to as ICRH sites), which are located in Mombasa District of the Coast Province. It is worth noting here that Mombasa, Kenya's second largest city, is the coastal gateway to the country on the Indian Ocean, and has all the characteristics of port cities, such as tourism, opportunities for transactional sex, and many people with disposable incomes.
- A VCT center within the grounds of the urban-based Kenyatta National Hospital (KNH). This is the largest referral hospital in the country and is a teaching hospital for the University of Nairobi and other tertiary medical institutions. As a public hospital, it serves many middle- and low-income people.
- Rift Valley Provincial General Hospital, based in Nakuru, the fourth largest town in Kenya. It is a referral hospital that attracts patients and clients from rural areas. The population in the region is mainly agricultural, and many workers and pastoralists are employed in subsistence and large-scale commercial farming.

- St. Mary's Hospital in rural Western Kenya, into which VCT services were integrated in 2001. Before that, the missionary-run hospital had been implementing home-based care activities. Because it has had higher volume of clients and serves a distinctive population of agriculturalists and factory workers, data has been analyzed separately.
- Six VCT sites in Kenya's Western Province. These are a diverse collection of sites that were established in collaboration with the MOH, the Pathfinder International COPHIA Project, and the University of Nairobi STD Project. Apart from St. Mary's hospital described above, two sites are within missionary-run hospitals: one rural—Butula Hospital—and the other peri-urban—St. Elizabeth Mukumu Hospital. The other four are within public hospitals.

SITE AND LOCATIONS	STATUS
ICRH, Mombassa District, Coast Province	
Bomu (Mkomani Society Clinic)	Integrated
Ganjoni	Integrated
Kisauni	Integrated
Likoni HC	Integrated
Mikindani	Integrated
Mombasa Youth Counseling Centre	Standalone
Mvita	Integrated
Tudor	Integrated
Port Reitz Hospital	Integrated
Nairobi	
Kenyatta National Hospital	Integrated
Nakuru, Rift Valley Province	
Rift Valley Provincial General Hospital	Integrated
Western Province	
Butula Hospital	Integrated
St. Elizabeth, Mukumu	Integrated
Busia District Hospital	Integrated
Port Victoria	Integrated
Kakamega Provincial General Hospital	Integrated
St. Mary's Hospital, Mumia	Integrated

Results of Data Analysis

VCT Uptake

Figure 1 shows the trend in VCT uptake in the 17 selected sites between 2002 and 2005. In that period, 107,047 clients came to these sites, including 45,743 who visited the nine ICRH-supported sites, 36,518 who came to KNH, 10,560 clients who came to St. Mary’s, the 7,442 who were served at sites in Western Province (hereafter called Western), and 6,784 who came to Nakuru.

VCT uptake has been increasing steadily since 2003, when the high-volume Nakuru site was established. Beginning in mid-2003, the number of clients at ICRH sites gradually increased, an occurrence not seen at other sites and likely caused by the initiation of ART services in Mombasa. Similarly, IMPACT-supported ART services began to be regularized at St. Mary’s Hospital in the fourth quarter of 2003 and first quarter of 2004, potentially contributing to a significant increase in number of VCT clients at that site in the last quarter of 2003 (figure 2).

This pattern occurred in Western sites and the KNH when subsidized government antiretroviral drugs were introduced, but the number of clients immediately fell after the initial increase.

There was a reduction for all sites in first quarter of 2005, which was mainly due to a sharp drop in clients at ICRH-supported sites. This slump was caused by a strike by health workers and their subsequent suspension from work in the health facilities.

VCT Use by Young People and Couples

Mass communication campaigns may have played a role in the general utilization trend, including, for example, the “Youth—control your status” campaign from June to December 2002, the “Young couples” campaign from August to December 2003, and the “*Onyesha mapenzi yako*” campaign from December 2004 to April 2005.

A significant increase in the number of young people 15–24 at the sites between the third and last quarter of 2002 corresponded to the period of the youth campaign. Though fewer people (10 percent) generally come to VCT sites as couples, their number has been steadily increasing, especially in KNH and ICRH sites in the Coast region. The urban-based young couples campaign, with urban prototype figures, may explain this increase at KNH, more so than at other sites.

Figure 1. Number of VCT clients at all sites by quarter, 2002–05

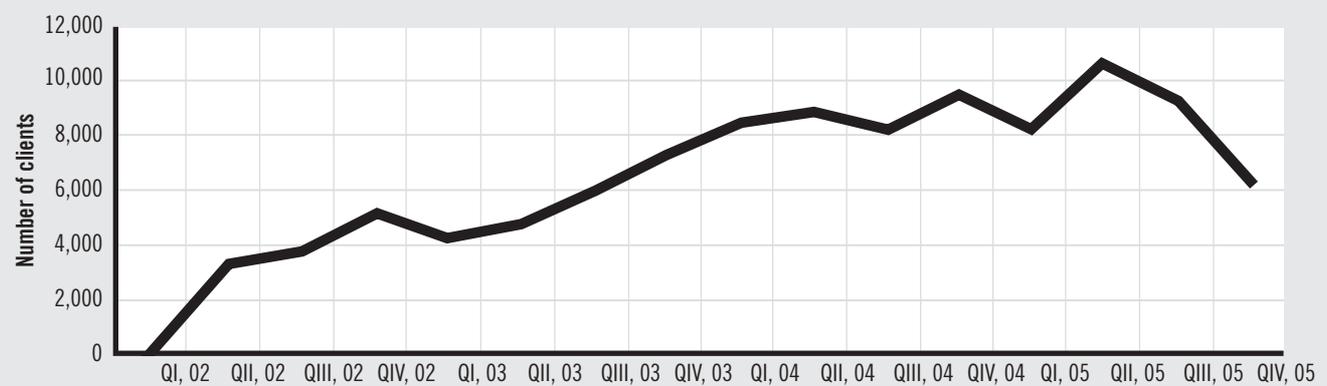


Figure 2. VCT use by site, 2002–05

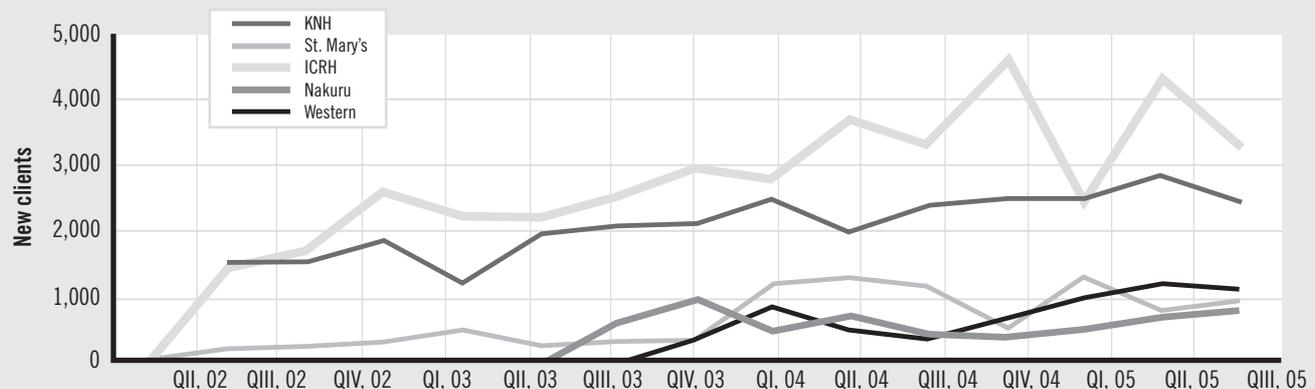


Figure 3. VCT use by young people 15–24, 2002–05

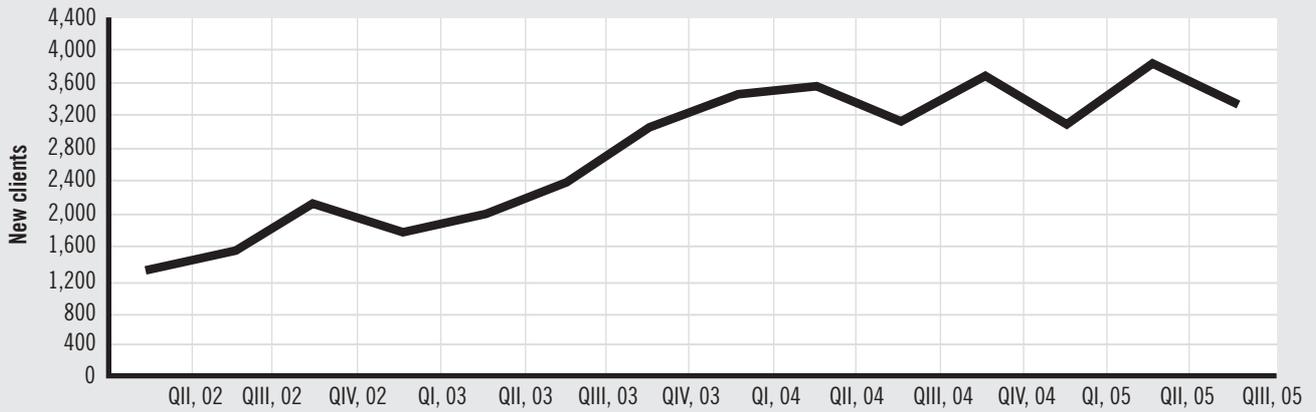
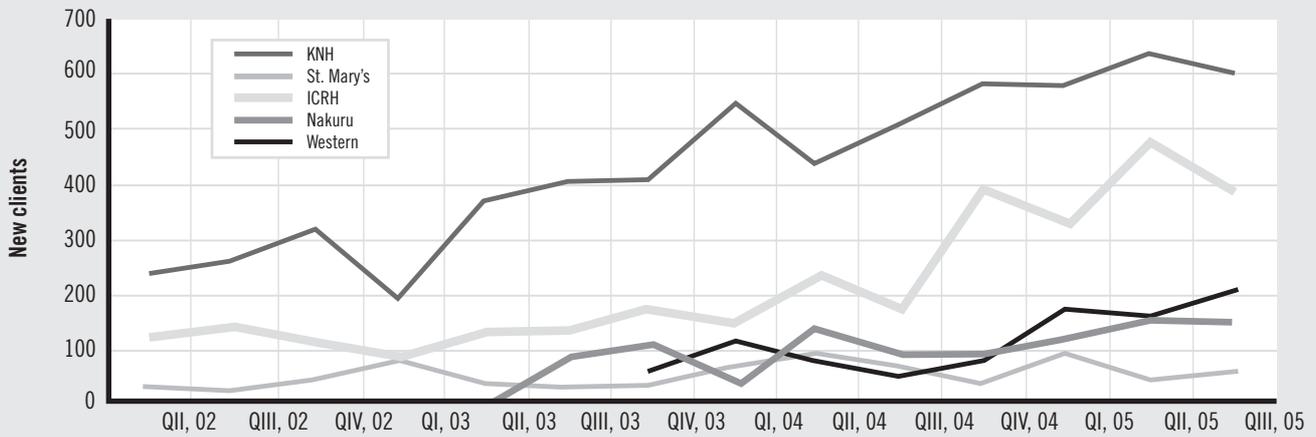


Figure 4. VCT use by couples, 2002–05



Profile of First-visit Clients

VCT Clients by Age

Among the 107,047 new clients who visited VCT sites between 2002 and 2005, the majority—55.5 percent—were young people 20–29 and 32.8 percent were 30–49. The average age of clients was 29, and less than 10 percent were 15–19.

Over half of first-visit clients—52 percent—were men. On the average, men were older than women by two years (the mean age for men was 29.3 and 27.6 for women).

Clients visiting Nakuru and Western sites were older than clients at other sites: the mean age was 30.5 at Nakuru and 31.0 at Western sites, compared to a mean age of 28.5 at KNH, 28.6 at St. Mary's, and 28.4 at ICRH sites.

Table 1. VCT clients by age and site

# of clients and age group	SITES											
	KNH				St. Mary's				ICRH			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	16,803	19,708	7	36,518	7,669	2,870	21	10,560	20,902	24,825	16	45,743
<15	0.3	0.1		0.2	1.0	0.6	14.3	0.9	0.2	0.1		0.1
15–19	6.3	3.7		4.9	17.5	9.8	9.5	15.4	10.4	5.6		7.8
20–24	37.4	29.8		33.3	30.2	26.5	9.5	29.2	34.7	27.5	6.3	30.8
25–29	25.3	27.5	14.3	26.5	20.2	16.7		19.2	25.0	27.3	12.4	26.2
30–39	21.6	27.1	14.3	24.6	20.5	20.5	4.8	20.4	21.1	26.4	6.3	24.0
40–49	7.0	8.2		7.6	7.4	14.0		9.2	6.7	8.9	6.3	7.9
50+	2.1	3.5		2.8	3.2	11.6		5.5	1.8	4.0		3.0
Don't Know	0.0	0.1	71.4	0.1	0.0	0.3	61.9	0.2	0.1	0.2	68.7	0.2
Mean age	27.6	29.3		28.6	27.2	32		28.6	27.1	29.5		28.4
Median age	25.0	27.0		26.0	25.0	28.0		26.0	25.0	27.0		26.0

# of clients and age group	Nakuru				Western				All Sites			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	3,144	3,617	23	6,784	3,866	3,560	16	7,442	52,384	54,580	83	107,047
<15	1.9	0.8	13.1	1.3	2.0	1.0	6.3	1.5	0.6	0.2	8.5	0.4
15–19	5.7	4.0	4.3	4.8	9.6	8.2		8.9	9.8	5.2	3.6	7.4
20–24	24.1	21.7	4.3	22.7	23.6	24.2	6.2	23.9	33.4	27.7	6.0	30.4
25–29	24.7	27.8		26.4	18.3	18.5	6.2	18.4	23.9	26.3	4.8	25.1
30–39	28.0	27.4	4.3	27.6	26.7	24.4		25.5	22.0	26.3	4.8	24.2
40–49	11.2	11.7		11.4	13.9	13.4	6.3	13.6	7.7	9.4	2.4	8.6
50+	4.3	6.6		5.5	5.7	10.0	12.5	7.8	2.5	4.8	2.4	3.7
Don't Know	0.1	0.0	74.0	0.3	0.2	0.3	62.5	0.4	0.1	0.1	67.5	0.2
Mean age	29.8	31.1		30.5	30.2	31.9		31.0	27.7	29.9		28.8
Median age	28.0	28.0		28.0	28.0	29.0		28.0	25.0	27.0		27.0

VCT Clients by Education and Occupation

Table 2 shows the education status of clients of VCT sites. More than two-thirds had secondary education and above. On average, men tended to be more educated than women; nearly three-quarters of all men had some secondary and postsecondary education, compared with two-thirds of women.

As expected, the KNH site attracted clients with higher education than other sites, and St. Mary's attracted more clients with lower levels of education.

Table 2 also shows variables under the occupation category, which had been loosely defined and left to the discretion of the counselor or the client filling out the form. While the category "skilled occupation" included artisans; "unskilled" encompassed, for example, hawkers, shopkeepers, and kiosk and mar-

ket vendors. Unless prompted, many women without office jobs often categorized themselves as having no job.

Occupation tabulations indicated that the KNH site saw more skilled or professional clients than those categorized as unskilled or with no occupation. At other sites, the proportion of unskilled clients was higher than the proportion of either skilled or professional clients. With an exception of St. Mary's, the sites saw a significant number of students.

Gender differences persisted at all sites, and the proportion of women said to be lacking skills or an occupation was higher than the proportion of men in this category. Most of the women clients at ICRH, Western sites, and St. Mary's reportedly had no occupation. However, this is the customary response of women subsistence farmers when asked to identify their occupation.

Table 2. VCT clients by education, occupation, and site

# of clients, education, and occupation	SITES											
	KNH				St. Mary's				ICRH			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	16,803	19,706	7	36,518	7,669	2,870	21	10,560	20,902	24,825	16	45,743
Education (%)												
None	1.3	0.8	71.4	1.0	12.0	6.4	66.7	10.5	6.6	2.6	75.0	4.4
Some primary	17.6	12.8		15.0	61.0	43.7	23.8	56.3	36.8	29.3	18.7	32.8
Some secondary	51.0	55.1	14.3	53.2	33.3	33.3	9.5	24.3	37.1	43.7	6.3	40.7
Some post secondary	30.1	31.3	14.3	30.8	16.6	16.6		8.9	19.5	24.4	0.0	22.1
Occupation (%)												
None	16.9	9.7	71.4	13.0	18.4	18.4	76.2	29.6	39.0	18.3	81.2	27.8
Unskilled	17.3	17.9	14.3	17.6	33.8	33.8	14.3	46.3	17.0	19.4		18.3
Skilled	27.4	33.7	14.3	30.8	28.5	28.5	9.5	14.3	24.2	38.0	18.8	31.6
Professional	17.6	19.1	0.0	18.4	10.3	10.3	0.0	6.0	9.9	14.3	0.0	12.4
Student	20.8	19.6	0.0	20.2	9.0	9.0	0.0	3.8	9.9	10.0	0.0	9.9

# of clients, education, and occupation	SITES											
	Nakuru				Western				All Sites			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	3,144	3,617	23	6,784	3,866	3,560	16	7442	52,384	54,580	83	107,047
Education (%)												
None	4.1	2.3	78.3	3.4	11.4	4.6	62.5	8.2	5.9	2.2	71.1	4.1
Some primary	36.9	28.0	8.7	32.0	41.7	34.1	12.5	38.1	34.6	24.3	14.5	29.2
Some secondary	33.1	37.2	4.3	35.2	31.2	37.4	12.5	34.1	38.5	46.5	8.4	42.6
Some post secondary	25.9	32.5	8.7	29.4	15.7	23.9	12.5	19.6	21.0	27.0	6.0	24.1
Occupation (%)												
None	17.6	6.8	74.0	12.1	40.9	18.8	81.3	30.4	30.0	14.5	77.2	22.1
Unskilled	41.0	33.1	8.7	36.6	27.0	28.1	6.3	27.6	24.2	21.1	8.4	22.6
Skilled	21.3	33.6	8.7	27.8	12.3	21.6		16.7	22.0	34.5	9.6	28.4
Professional	11.6	16.5	4.3	14.2	11.2	20.0	12.4	15.4	11.8	16.4	3.6	14.1
Student	8.5	10.0	4.3	9.3	8.6	11.5		9.9	12.0	13.5	1.2	12.8

VCT Clients by Marital Status

Except for Western sites (including St. Mary's), other sites saw more single men than men in any other marital category (table 3). By contrast, with the exception of the KNH site, women in monogamous relationships visited VCT sites more often than women in other marital categories. In addition, widows were more likely than widowers to visit a VCT site.

Table 3. VCT clients by marital status and site

# of clients and marital status	SITES											
	KNH				St. Mary's				ICRH			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	16,803	19,706	7	36,518	7,669	2,870	21	10,560	20,902	24,825	16	45,743
Marital Status (%)												
Not married	60.2	63.5	85.7	62.0	14.2	42.0	71.4	22.0	49.9	59.7	93.8	55.2
Monogamous	26.4	28.8	14.3	27.7	52.7	37.5	19.1	48.5	31.6	31.6		31.6
Polygamous	1.6	1.6		1.6	24.1	14.2	9.5	21.4	4.4	2.9		3.6
Widowed	4.1	1.9		2.8	5.5	2.0		4.4	4.3	1.3		2.7
Separated/divorced	7.7	4.2		5.9	3.5	4.3		3.7	9.8	4.5	6.2	7.0

# of clients and marital status	SITES											
	Nakuru				Western				All Sites			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	3,144	3,617	23	6,784	3,866	3,560	16	7,442	52,384	54,580	83	107,047
Marital Status (%)												
Not married	42.2	52.6	82.6	47.9	25.7	47.1	75.0	39.5	33.6	45.9	80.7	52.7
Monogamous	32.1	34.8	17.4	33.3	33.6	37.7	12.5	35.4	35.3	34.1	13.3	32.3
Polygamous	3.8	2.4		3.0	11.3	6.6	6.3	9.2	7.0	3.3	3.6	5.0
Widowed	7.7	2.8		5.1	12.2	3.6	3.1	8.0	5.2	1.8	1.2	3.4
Separated/divorced	14.2	7.4		10.6	10.4	5.0	3.1	7.8	8.5	4.6	1.2	6.5

Clients' Reasons for Visiting a VCT Sites

Information about why clients come to VCT sites usually assists the preparation of communication and promotional campaigns. As tables 4 and 5 illustrate, women went to VCT services for different reasons than men. Reportedly, planning for the future and getting married were two major incentives for visiting sites for all clients, but women also went because they felt unwell or because of their partners' risky behaviors. These were the two main reasons cited by women for visiting St. Mary's and KNH, while women visiting ICRH and Western sites cited feeling unwell as the major reason. At all sites, requests for full VCT service were universal.

Table 4. VCT clients by type of service required and site

# of clients and type of service (%)	SITES											
	KNH				St. Mary's				ICRH			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	16,803	19,706	7	36,518	7,669	2,870	21	10,560	20,902	24,825	16	45,743
Information only	0.3	0.3		0.3	0.1	0.7	4.8	0.3	0.2	0.3		0.3
Counseling only	0.9	0.7	14.3	0.8	0.1	0.7		0.3	2.0	1.4		1.7
Full VCT	98.7	98.8	14.3	98.7	99.6	97.4	23.8	98.8	97.7	98.2	25.0	97.9
Did not declare	0.1	0.2	71.4	0.2	0.2	1.2	71.4	0.7	0.1	0.1	75.0	0.1

# of clients and type of service (%)	SITES											
	Nakuru				Western				All Sites			
	Women	Men	Not declared	Total	Women	Men	Not declared	Total	Women	Men	Not declared	Total
#	3,144	3,617	23	6,784	3,866	3,560	16	7442	52,384	54,580	83	107,047
Information only	1.0	1.9	8.7	1.5	1.6	2.5		2.1	0.4	0.6	3.6	0.5
Counseling only	0.8	0.8		0.7	3.2	3.3		3.2	1.4	1.2	1.2	1.3
Full VCT	97.2	93.0	21.7	94.7	95.0	93.8	31.3	94.3	98.0	97.7	24.1	97.8
Did not declare	1.1	4.4	69.6	3.1	0.2	0.4	68.7	0.4	0.2	0.5	71.1	0.4

Table 5. VCT clients by reasons for visit and site

Reasons for visit	SITES											
	KNH				St. Mary's				ICRH			
	Total (#)	Women (%)	Men (%)	Not declared (%)	Total (#)	Women (%)	Men (%)	Not declared (%)	Total (#)	Women (%)	Men (%)	Not declared (%)
Plan for future	28,775	45.8	54.2	0.0	8,581	72.3	27.6	0.1	36,868	45.1	54.9	0.0
Plan to marry	5,351	42.9	57.1	0.0	737	44.6	55.2	0.1	6,857	41.7	58.3	0.0
Own risky behavior	3,939	35.4	64.6	0.0	161	58.4	41.6	0.0	6,928	38.7	61.3	0.0
Feel unwell	2,732	46.6	53.4	0.0	1,056	61.4	38.5	0.1	5,083	52.5	47.5	0.0
Partner's risky behavior	2,586	63.8	36.2	0.0	1,625	85.1	14.8	0.1	3,851	64.8	35.2	0.0
Previous test	1,133	54.2	45.8	0.0	100	45.0	55.0	0.0	1,018	4.0	55.0	0.0
Post-window period after risky sex	888	35.2	64.8	0.0	365	56.7	43.3	0.0	3,994	37.1	62.9	0.0
Plan to get pregnant	644	74.5	25.5	0.0	231	61.5	37.7	0.9	742	71.2	28.8	0.0
Partner HIV-positive/died	607	55.8	44.0	0.2	140	77.9	22.1	0.0	589	58.7	41.3	0.0
New sexual partner	502	50.6	49.4	0.0	75	53.3	46.7	0.0	652	52.0	48.0	0.0
Reunited after separation/divorce	354	49.4	50.6	0.0	73	54.8	45.2	0.0	383	50.4	49.6	0.0
Referred by health worker	226	56.6	43.4	0.0	269	59.9	40.1	0.0	501	62.3	37.7	0.0
Pregnant/pregnant partner	180	64.4	35.6	0.0	2	0.0	100.0	0.0	40	0.0	100.0	0.0
HIV-positive child	162	66.0	34.0	0.0	13	76.9	23.1	0.0	84	65.5	34.5	0.0
Raped	145	89.7	10.3	0.0	3	66.7	33.3	0.0	57	94.7	5.3	0.0
Had blood transfusion	86	53.5	46.5	0.0	31	71.0	25.8	3.2	106	57.5	42.5	0.0
Referred by another client	50	64.0	36.0	0.0	157	51.0	49.0	0.0	261	51.0	49.0	0.0
Bought or sold sex	21	85.7	14.3	0.0	4	25.0	75.0	0.0	24	54.2	45.8	0.0
Had circumcision	5	0.0	100.0	0.0	4	25.0	75.0	0.0	24	54.2	45.8	0.0
Intravenous drug user	2	50.0	50.0	0.0	13	61.5	38.5	0.0	50	12.0	88.0	0.0

Reasons for visit	SITES											
	Nakuru				Western				All Sites			
	Total (#)	Women (%)	Men (%)	Not declared (%)	Total (#)	Women (%)	Men (%)	Not declared (%)	Total (#)	Women (%)	Men (%)	Not declared (%)
Plan for future	8,334	30.4	69.6	0.1	5,700	50.5	49.5	0.1	85,758	48.5	51.5	0.0
Plan to marry	1,240	40.2	59.7	0.2	952	43.5	56.4	0.1	15,137	42.2	57.7	0.0
Own risky behavior	1,865	32.9	67.1	0.0	760	37.2	62.8	0.0	13,653	37.1	62.9	0.0
Feel unwell	887	55.1	44.9	0.0	999	56.7	43.2	0.1	10,757	52.5	47.5	0.0
Partner's risky behavior	929	71.6	28.4	0.0	854	79.5	20.3	0.2	9,845	69.8	30.2	0.0
Previous test	233	52.8	46.8	0.4	256	50.8	49.2	0.0	2,740	50.0	50.0	0.0
Post-window period after risky sex	378	41.0	59.0	0.0	490	40.0	60.0	0.0	6,115	38.5	61.5	0.0
Plan to get pregnant	313	42.8	57.2	0.0	156	67.3	32.7	0.0	2,086	66.6	33.3	0.1
Partner HIV-positive/died	403	64.5	35.5	0.0	398	75.4	24.6	0.0	2,137	63.4	36.6	0.0
New sexual partner	202	40.6	59.4	0.0	84	48.8	51.2	0.0	1,515	49.9	50.1	0.0
Reunion	173	50.3	49.7	0.0	96	55.2	44.8	0.0	1,079	50.8	49.2	0.0
Referred by health worker	216	56.5	43.5	0.0	95	58.9	41.1	0.0	1,307	59.6	40.4	0.0
Pregnant/pregnant partner	12	0.0	100.0	0.0	12	0.0	100.0	0.0	246	47.2	52.8	0.0
HIV-positive child	29	65.5	34.5	0.0	13	92.3	7.7	0.0	301	67.4	32.6	0.0
Raped	113	89.4	10.6	0.0	73	94.5	5.5	0.0	391	91.0	9.0	0.0
Had blood transfusion	42	64.3	35.7	0.0	28	42.9	57.1	0.0	293	57.3	42.3	0.3
Referred by another client	168	42.9	57.1	0.0	64	67.2	32.8	0.0	700	51.4	48.6	0.0
Exchanged sex for money	8	87.5	12.5	0.0	3	33.3	66.7	0.0	75	77.3	22.7	0.0
Had circumcision	2	50.0	50.0	0.0	1	0.0	100.0	0.0	36	41.7	58.3	0.0
Intravenous drug user	8	50.0	50.0	0.0	3	66.7	33.3	0.0	76	30.3	69.7	0.0

Integrated Versus Freestanding Sites

Only 36 of the 217 IMPACT-supported VCT sites were free-standing. Such sites tended to charge user fees that averaged 70 Kenyan shillings (approximately US\$1).

As table 6 shows, male clients generally tended to prefer stand-alone sites, whereas female clients preferred integrated sites. However, there was no significant age difference between the clients of integrated and standalone sites. Table 6 also indicates that standalone sites tended to be preferred (over integrated sites) by skilled or professional clients, those with secondary education and above, and clients who had never been married.

Figure 5. VCT clients by session type and site model

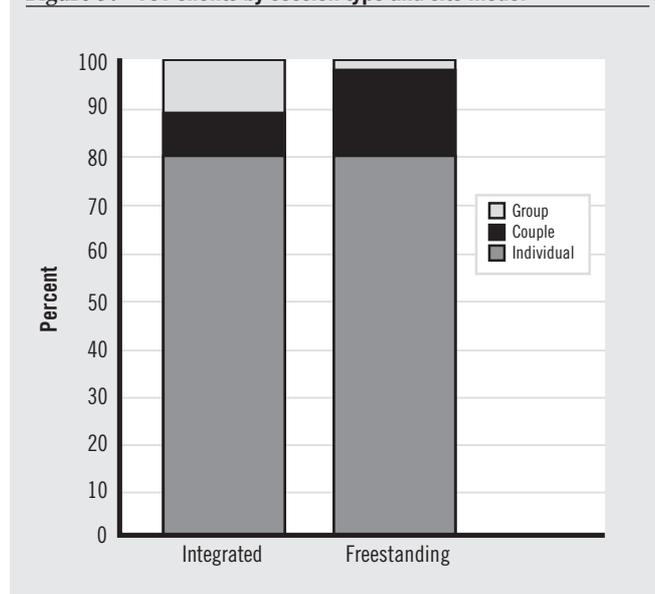


Figure 5 shows the distribution of session types by VCT model. While both types of sites conducted mainly individual sessions, couples were more likely to visit standalone sites than integrated sites. Integrated sites also tended to conduct a significant number of group sessions.

Table 6.

Site model preference of VCT clients by sociodemographic backgrounds

# and sociodemographic characteristics (%)	VCT site	
	Integrated	Freestanding
# of clients	74,387	32,639
Gender (%)		
Male	49.8	53.7
Female	50.1	46.3
Not declared	0.1	0.0
Age (%)		
<15	8.3	5.7
15–19	29.2	33.5
20–24	24.8	25.8
15–29	24.2	24.3
30–39	8.9	7.7
40–49	4.1	2.8
50+	0.2	0.1
Don't know	0.2	0.1
Mean age* (years)	29	28
Education (%)		
None	5.4	1.0
Some primary	35.5	15.3
Some secondary	37.7	53.6
Some post-secondary	21.4	30.0
Marital Status (%)		
Not married	48.6	62.1
Married, monogamous	34.5	27.4
Married, polygamous	6.5	1.7
Widow or widower	3.8	2.8
Separated/divorced	6.8	6.0

Sexual Behaviors and Condom Use of VCT Clients

In Kenya, the chief mode of HIV transmission is unprotected, heterosexual intercourse. All clients who went through full VCT (more than 97 percent) were asked how many sexual partners they had experienced in the previous 12 months and whether they had used condoms. Their responses, organized by gender, are presented in table 7. Overall, 5.7 percent of women and 4.1 percent of men at the sites had never had sex.

Table 7. Number of sexual partners of VCT clients by sociodemographic background and site

Sociodemographic background and site	GENDER														
	Women					Men					Not declared				
	# of clients	Never had sex (%)	# of sexual partners in last 12 months (%)			# of clients	Never had sex (%)	# of sexual partners in last 12 months (%)			# of clients	Never had sex (%)	# of sexual partners in last 12 months (%)		
0			1	2+	0			1	2+	0			1	2+	
Age group															
<15	304	21.1	17.1	52.3	9.5	122	27.9	21.3	29.5	21.3	9	0.0	0.0	77.8	22.2
15–19	5,323	10.9	8.9	60.8	19.3	2,966	13.0	19.2	39.5	28.3	3	0.0	0.0	66.7	33.3
20–24	18,476	8.0	11.4	64.1	16.4	16,172	5.4	15.9	47.4	31.3	5	0.0	40.0	40.0	20.0
25+	31,404	3.3	16.2	69.3	11.2	39,632	2.8	13.6	54.5	29.1	14	0.0	21.4	57.1	21.4
Don't know	57	1.8	26.3	59.6	12.3	81	8.6	18.0	54.3	21.0	78	0.0	97.4	1.3	1.3
Education															
None	3,379	4.1	18.4	63.9	13.6	1,317	4.4	15.4	49.1	31.1	81	0.0	95.1	3.7	1.2
Primary	19,122	3.8	12.1	70.4	13.8	14,336	3.4	12.7	51.0	32.9	14	0.0	14.3	64.3	21.4
Secondary	33,162	7.1	14.5	64.8	13.6	43,320	4.3	15.2	52.0	28.5	14	0.0	14.3	57.1	28.6
Marital status															
Never married	18,631	12.2	19.4	50.4	18.0	27,030	7.0	21.8	42.4	28.8	53	0.0	83.0	9.4	7.5
Monogamous relationship	25,466	2.8	5.5	81.1	10.8	26,192	1.6	6.4	64.3	27.7	41	0.0	68.3	24.4	7.3
Polygamous relationship	3,867	0.8	6.2	83.4	9.9	1,955	0.6	3.8	24.0	71.8	5	0.0	40.0	40.0	20.0
Widow or widower	2,873	3.8	44.7	42.8	8.7	1,067	2.6	36.4	43.0	18.0	8	0.0	87.5	12.5	0.0
Separated/divorced	4,726	2.4	25.5	53.9	18.3	2,729	1.9	21.1	46.2	30.8	2	0.0	0.0	100.0	0.0
Site															
KNH	17,685	7.1	17.9	63.2	11.8	21,044	3.9	18.5	51.8	25.8	11	0.0	90.9	9.1	0.0
St. Mary's	8,233	1.3	8.6	79.7	10.3	3,379	2.2	11.3	50.0	36.5	28	0.0	67.9	21.4	10.7
ICRH	22,284	6.4	10.8	65.0	17.7	26,983	4.6	11.6	51.7	32.2	17	0.0	76.5	17.8	5.9
Nakuru	3,176	5.2	23.3	61.8	9.8	3,651	3.5	19.3	49.9	27.3	32	0.0	78.1	15.6	6.3
Western	4,186	5.0	17.0	68.4	9.6	3,916	4.1	12.5	54.7	28.8	21	0.0	66.7	23.8	9.5
Site type															
Integrated	39,634	4.5	17.4	68.3	14.3	40,222	3.7	17.1	51.7	31.2	97	0.0	71.1	20.6	8.2
Freestanding	15,929	8.7	24.5	63.2	12.3	18,751	5.0	21.3	52.2	26.5	12	0.0	100.0	0.0	0.0
Mean		5.7	19.4	66.9	13.7		4.1	18	51.9	29.7		0.0	74.3	18.3	7.3

Integrated sites tended to attract more clients with multiple partners than standalone sites did. Women clients ages 15–24 at ICRH-supported sites who had never married or were separated or divorced were more likely than other women to have had multiple partners. Their male counterparts were more likely than other age groups to have had multiple partners.

Men who had only primary or no formal education more frequently reported multiple partners, as did those in polygamous unions and those visiting St. Mary's and ICRH sites. Since polygamy is practiced in the Coast region and the area surrounding St. Mary's, it was not surprising that men at local sites reported multiple partners.

Sexual Behaviors of Young VCT Clients and Condom Use

Table 8 summarizes sexual behavior among youth 15–24 by gender, with particular attention to abstinence and faithfulness, along with the percentage of clients in categories of risk for HIV sexual transmission.

Young males were more likely than females to delay debut into sexual activity, and they were more likely to abstain from sex after sexual debut. Females ages 15–24 who were sexually active during the previous 12 months were more likely than males to be faithful to one partner.

Table 8 also shows the following:

- Only 1 in 10 (11.6 percent of women and 9.4 percent of men) had never experienced sexual intercourse.
- By comparison, fewer women (7 percent) but more men (12.6 percent) reported they had experienced sexual intercourse, but not within the last 12 months.
- About 12.5 percent of women and 14.6 percent of men reported that they had sex with only one partner during the previous 12 months, and that they had used a condom the last time they had sex.

Compared to men in the age group 20–24, a much larger proportion of males 15–19 reported abstinence—meaning that they had either never experienced sex or had had no sex during the previous 12 months. However, no comparable differences were seen between females in the 15–19 age group and those in the 20–24 age group. An almost equal proportion in both age groups who had only one partner reported that condoms had not been used the last time they had sex.

The following trends move up the scale of risk:

- Over half the female and 32 percent of male clients reported that they had sex with one partner during the last 12 months, but had used no condom the last time they had sex. Significantly more females (51 percent) than males (32 percent) were in this category. By age groups, 51 percent of females 15–19 and 52 percent of those 20–24 were in this category. Males ages 20–24 were proportionally slightly more represented in this category (33 percent) than their counterparts 15–19 (27 percent).
- Five percent of women and 11 percent of men reported that they had more than one sexual partner during the last 12 months and that they had used condoms the last time they had sex.
- At the riskiest level, 12 percent of women and 20 percent of men reported they had sex with more than one partner in the last 12 months and that no condoms were used the last time they had sex.

Future studies may discover why many who report one sexual partner and no condom use also seek VCT because they do not trust their partners.

Condom use is an important tool in curtailing the spread of HIV/AIDS. Although effective protection requires condoms to be used for every sexual encounter, their use is most important for sexual encounters considered to be higher risk—defined in this report as sex with multiple partners in the period 12 months before visiting the VCT site.

Table 8. Young VCT clients' sexual behavior and condom use by age group

Sexual behavior	Women			Men			Total		
	15–19	20–24	15–24	15–19	20–24	15–24	15–19	20–24	15–24
Age group									
# of clients	5,137	17,804	22,941	2,778	15,301	18,079	7,918	33,105	41,020
% never had sex	14.0	11.0	11.6	18.1	7.8	9.4	15.4	9.5	10.7
% have not had sex in last 12 months	4.9	8.0	7.3	12.9	12.5	12.6	7.7	10.1	9.6
% with one partner and used condom for last sex	10.5	13.1	12.5	13.3	14.9	14.6	11.4	13.9	13.4
% with one partner and did not use condom for last sex	51.0	51.5	51.4	26.8	33.2	32.3	42.5	43.0	42.9
% with more than one partner and used condom for last sex	4.2	5.2	5.0	9.6	11.1	10.9	6.1	7.9	7.6
% with more than one partner and did not use condom for last sex	15.4	11.3	12.2	19.3	20.5	20.3	16.8	15.8	15.8

Table 9 shows the proportion of women and men who engaged in higher-risk sex within a period 12 months before visiting a VCT site and their reported use of condoms during their most recent sexual encounter. By the report's definition, 67 percent of sexually active women and 61 percent of sexually active men engaged in higher-risk sex, and only 14.3 percent of women and 20.1 percent of men reported that they had used condoms the last time they had sex with any partner.

Involvement in higher-risk sex was highest among women ages 15–19, those never married, and those divorced or separated. The rate for women was also high at ICRH-supported sites. The same groups accounted for the largest proportion of men engaging in higher-risk sex, and these rates were highest at St. Mary's, Nakuru, and integrated sites.

Table 9. Young VCT client's sexual behavior and condom use by background and site

Socio-demographic background and site	GENDER											
	Women				Men				Not declared			
	# tested	% engaged in high-risk sex	% had sex in last 12 months	% using condom for last sex in last 12 months	# tested	% engaged in high-risk sex	% had sex in last 12 months	% using condom for last sex in last 12 months	# tested	% engaged in high-risk sex	% had sex in last 12 months	% using condom for last sex in last 12 months
Age group												
<15	288	61.1	66.8	7.9	118	45.8	64.0	24.6	9	77.8	100.0	22.2
15–19	5,300	66.8	81.7	18.1	2,959	47.5	70.8	33.2	3	100.0	100.0	0.0
20–24	18,396	63.0	81.6	22.5	16,114	53.5	80.7	32.6	4	50.0	75.0	33.3
25+	31,248	69.4	82.2	15.2	39,411	66.0	85.3	21.6	12	91.7	91.7	0.0
Don't know	52	76.9	86.5	12.2	76	64.5	86.8	25.0	2	50.0	100.0	50.0
Education												
None	3,236	73.9	81.3	9.0	1,284	73.4	85.8	14.4	4	75.0	100.0	50.0
Primary	19,032	57.7	86.0	11.9	14,274	70.6	93.7	17.2	13	92.3	92.3	0.0
Secondary +	33,016	61.2	79.4	22.5	43,120	58.2	82.2	28.0	13	75.0	92.3	42.9
Marital status												
Never married	18,535	51.0	70.8	27.8	26,920	48.3	74.2	24.3	10	77.8	88.9	11.1
Monogamous relationship	25,346	78.3	91.8	14.2	26,046	74.0	92.3	18.7	14	85.7	85.7	15.4
Polygamous relationship	3,839	87.7	93.6	6.3	1,940	84.9	96.6	11.5	3	100.0	100.0	0.0
Widow/widower	2,858	49.5	58.9	16.8	1,063	51.4	64.8	21.2	1	100.0	100.0	0.0
Separated/divorced	4,706	60.9	75.8	19.5	2,709	59.0	79.9	25.5	2	100.0	100.0	0.0
Site												
KNH	17,613	59.4	75.6	20.8	20,937	57.5	78.4	24.8	2	50.0	50.0	0.0
St. Mary's	8,202	85.6	91.0	5.8	3,357	71.5	87.5	17.6	9	100.0	100.0	0.0
ICRH	22,185	67.0	84.2	20.4	26,866	63.4	86.4	26.1	5	60.0	80.0	25.0
Nakuru	3,135	77.2	74.4	18.2	3,625	59.2	78.5	23.0	7	74.1	100.0	28.6
Western	4,149	67.1	83.3	19.7	3,893	64.3	88.0	26.4	7	85.7	100.0	14.3
Site type												
Integrated	39,415	70.0	84.2	16.7	40,019	63.4	85.0	24.7	30	80.0	93.3	14.3
Freestanding	15,869	59.3	76.1	21.3	18,659	57.6	79.4	25.6	0	0.0	0.0	0.0
Mean		67.0	81.9	14.3		61.6	83.2	20.1		80.0	93.3	13.3
Totals												
	55,284	37,014	45,259	7,908	58,678	36,133	48,829	11,812	30	24	28	4

HIV Prevalence of VCT Clients

Figure 6 shows the five-year trend in HIV prevalence for VCT clients. On average, 10 percent of men were infected with HIV, while women had an HIV prevalence averaging 20 percent. This 2 to 1 ratio was nearly constant for the last two years of data, and prevalence for both male and female VCT clients was twice as high as Kenya’s national prevalence.

These data are derived from clients who voluntarily come for VCT services, but they nevertheless reflect national HIV trends at VCT sites, which are 23 percent HIV prevalence for female clients and 11 percent for male clients. The data also confirm that women are particularly vulnerable to HIV infection compared to men, and that women who suspect they are HIV-positive are more likely than men to come for VCT.

Figure 6. HIV prevalence of VCT clients by gender, 2002–06

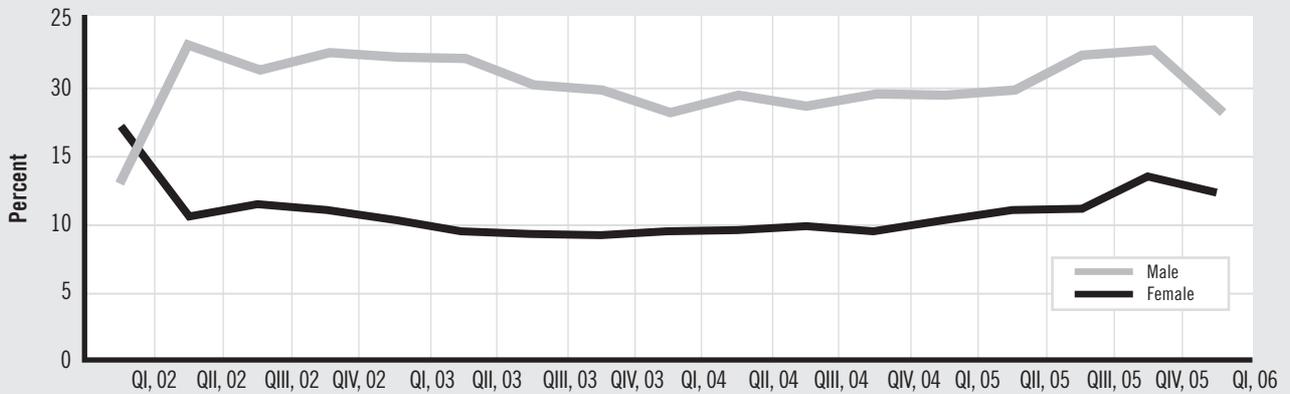
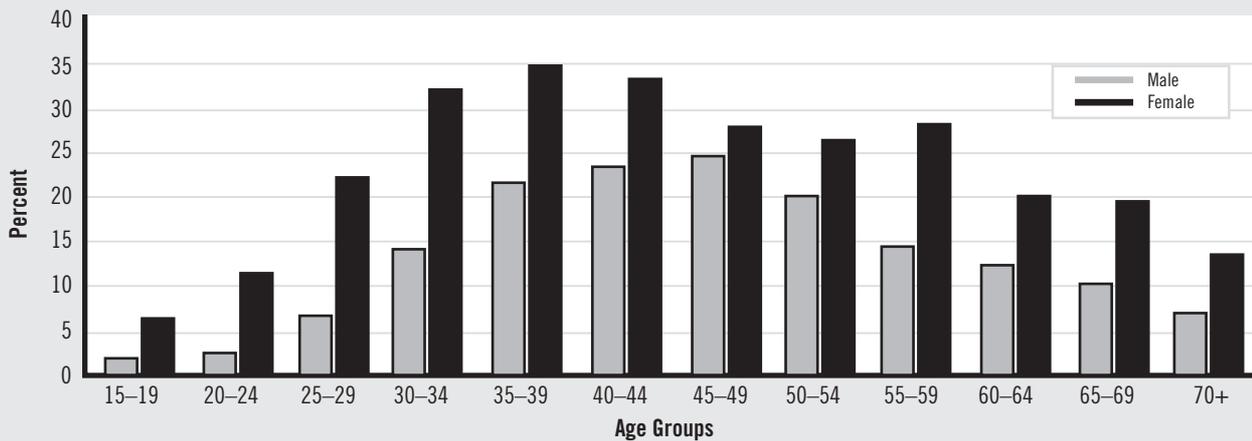


Figure 7. HIV prevalence of VCT clients by age group



HIV Prevalence of Clients by Age

Figure 7 presents overall HIV prevalence by age for women and men. For every age group, women were more likely than men to be HIV-infected. For example, 6 percent of women 15–19 were HIV-infected, compared with less than 2 percent of men 15–19, and HIV prevalence among women 20–24 was almost four times that of men in that age group—11 percent and 3 percent, respectively (figs. 8 and 9).

The peak prevalence among women was reached at ages 35–39 (35 percent), while prevalence rose gradually with age to peak at 40–44 (25 percent) for men. While there was a low trough for men 55–59, HIV prevalence reached another peak for women in that age group.

Figure 8. HIV prevalence of VCT clients ages 15–24, 2002–05

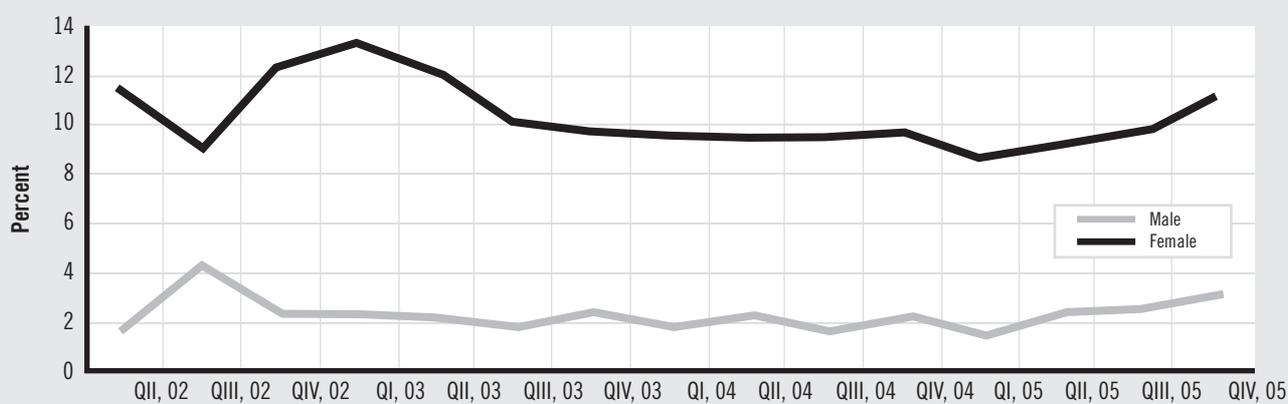
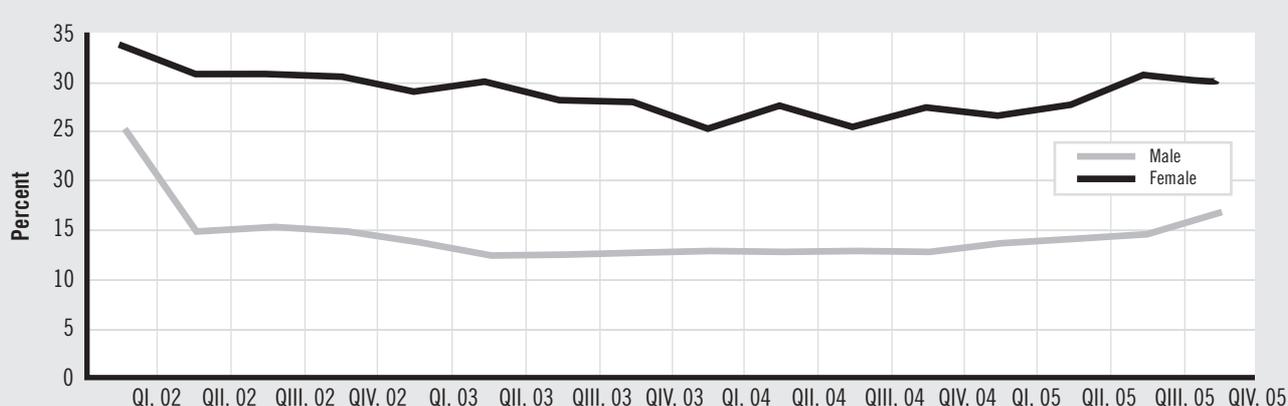


Figure 9. HIV prevalence of VCT clients ages 25–50, 2002–05

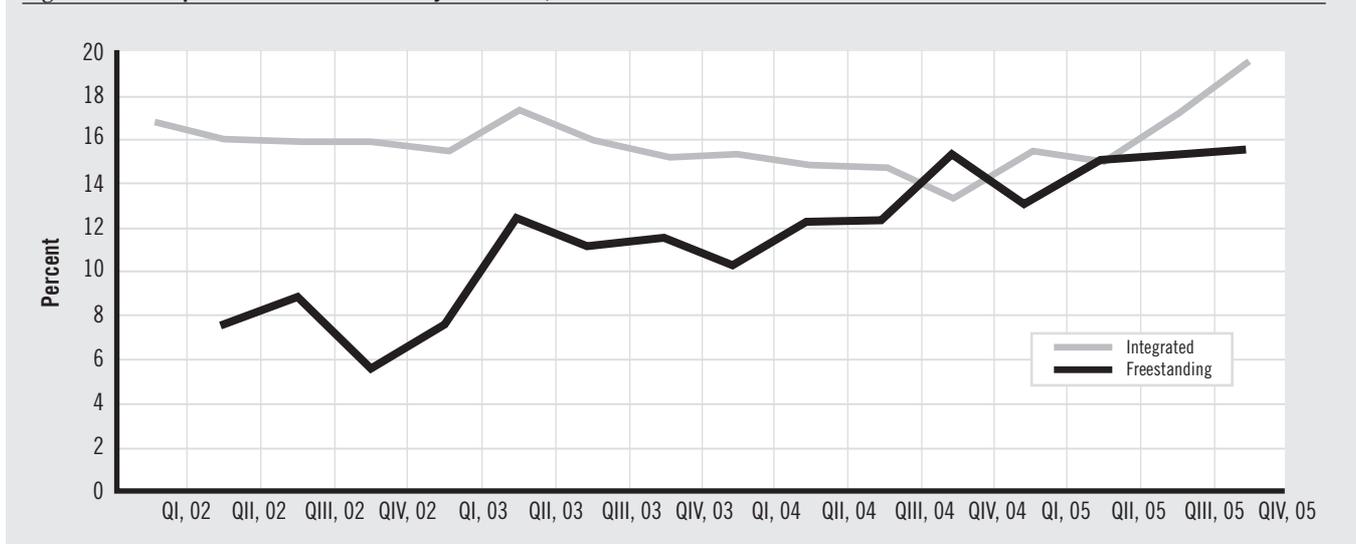


HIV Prevalence of Clients by VCT Model

When HIV prevalence is tabulated by VCT model, opposite trends emerge. Although prevalence among VCT clients attending integrated sites has been declining, HIV prevalence of clients at standalone sites seemed to be increasing.

Gender differences persisted at all the sites, and HIV prevalence also varied greatly with site location. Nakuru had an overall prevalence of 21 percent, followed by Western sites. St. Mary's reported the lowest prevalence at 12 percent.

Figure 10. HIV prevalence of VCT clients by site model, 2002–05



HIV Prevalence of Clients by Sociodemographic Characteristics

Table 10 relates HIV prevalence to the sociodemographic profiles of VCT clients. Those with no education had almost twice the infection levels than those with secondary and higher education.

As expected, HIV prevalence was correlated to marital status. HIV prevalence of married, monogamous clients was lower than that of polygamous clients, and was also high among widows and widowers. Compared to any other marital status, widowed clients had a significantly higher risk of HIV infection (54 percent). In addition, women who reported they have had sex but had never been married were at three times higher risk than men

in the same category (12 percent and 4 percent, respectively). Divorced or separated women also had higher HIV prevalence than women in either monogamous or polygamous relationships. HIV prevalence among non-pregnant women was 12 percent, almost twice that of pregnant women. This draws attention to the need for PMTCT services for this group.

Table 10 also shows that a significant number of clients—especially women—were infected with HIV through non-sexual behaviors, since HIV prevalence of women who had never had sex was almost twice as high as men in that category. Further studies may be needed to explore the kinds of behaviors that resulted in 7.8 percent prevalence for women who had never had sex.

Table 10. HIV prevalence of VCT clients by sociodemographic background, sexual experience, and site

Sociodemographic background and site	GENDER							
	Women		Men		Not declared		Total	
	# tested	% HIV-positive	# tested	% HIV-positive	# tested	% HIV-positive	# tested	% HIV-positive
Age group								
<15	293	16.7	121	26.4	9	11.1	423	19.4
15–19	5,136	6.5	2,873	1.5	2	0.0	8011	4.7
20–24	17,974	11.2	15,821	2.4	4	0.0	33,799	7.1
15–24	23,110	10.2	18,694	2.2	6	0.0	41,810	5.9
25+	30,507	28.1	38,610	13.7	14	21.4	69,131	20.1
Don't know	53	22.6	75	14.7	7	0.0	135	17.0
Education								
None	3,165	28.6	1,258	16.9	9	0.0	4,432	25.2
Primary	18,636	25.0	14,024	13.0	13	23.1	32,673	19.8
Some secondary+	32,161	19.9	42,218	9.0	14	7.1	74,394	12.3
Marital status								
Never married	18,055	11.7	26,443	4.0	9	11.1	44,507	11.1
Monogamous relationship	24,602	18.8	25,323	13.4	13	7.7	49,938	21.1
Polygamous relationship	3,745	23.2	1,896	19.7	3	0.0	5,646	22.0
Widow or widower	2,814	58.5	1,031	41.2	1	100.0	3,846	53.9
Separated/divorced	4,636	36.9	2,676	18.0	2	50.0	7,314	30.0
Pregnancy status								
Pregnant	6,313	11.2						
Not pregnant	45,988	21.7						
Sexual experience								
Never had sex	3,098	7.8	2,340	4.7	0	0.0	5,438	6.5
Ever had sex	43,205	20.9	45,313	10.2	27	14.8	88,545	15.4
Not declared	7,660	22.3	9,847	10.6	9	0.0	17,516	15.7
Site								
KNH	17,429	18.9	20,768	9.1	4		38,201	13.6
St. Mary's	7,986	12.4	3,292	10.9	10		11,288	11.9
ICRH	21,588	22.7	26,299	9.8	7	14.3	47,874	15.6
Nakuru	2,997	28.2	3,449	13.9	6	16.7	6,452	20.6
Western	3,963	24.4	3,692	12.5	9	22.2	7,664	18.6
Site type								
Integrated	38,453	21.1	39,173	10.6	33	12.1	77,659	15.8
Freestanding	15,494	18.5	18,315	8.9	1	0.0	33,810	13.3

Exposure to Interventions of VCT Clients

To assess the effectiveness of media on the dissemination of HIV/AIDS information, all clients were asked how they learned about the service at a particular VCT site. As table 11 shows, radio has been the most effective way of getting out VCT information, except for St. Mary's. Television was more effective in urban areas and the second most effective way to get out VCT information, though less so at St. Mary's and Western sites. Brightly colored yellow and purple posters that were widely distributed have also played a key role in disseminating information about VCT services.

For St. Mary's communities, health workers were the most effective communicators. Compared to other sites, Nakuru seemed to effectively use all channels to communicate its VCT services, and a higher proportions of its clients reported receiving their information from various channels.

Table 11. Young VCT clients' exposure to interventions by age, education, and site

# of clients and how exposed to VCT services (%)	Age Group			Education			Sites				
	15–19	20–24	25+	None	Primary	Secondary	KNH	St. Mary's	ICRH	Nakuru	Western
Women											
#	5,323	18,475	31,404	3,279	19,122	33,162	17,685	8,233	22,284	3,175	4,186
Television	31.6	42.7	41.4	19.3	28.9	50.9	56.5	6.9	40.6	70.7	19.4
Radio	46.2	55.1	58.9	43.7	51.7	59.7	62.0	29.9	59.8	77.3	49.0
Newspaper	22.7	31.1	31.1	12.7	20.4	39.3	41.4	7.8	28.6	55.5	21.9
Poster/signpost	29.6	39.0	38.2	19.2	29.1	46.25	44.8	14.5	37.8	64.1	31.1
Pamphlet	8.5	10.7	11.2	4.5	7.6	14.4	9.9	2.9	12.2	32.0	5.9
Relative/friend	24.6	24.1	23.2	23.3	23.2	25.2	23.9	13.5	24.1	51.3	19.0
Spouse/sex partner	5.0	6.2	6.7	4.5	6.5	7.0	3.5	2.4	7.8	27.1	3.1
Another VCT client	12.0	9.6	10.0	11.0	12.4	9.1	3.6	18.7	10.1	26.2	7.7
Community meeting	12.7	9.1	12.6	18.1	16.0	8.4	2.8	25.8	11.0	25.7	11.3
Health worker	27.5	19.0	24.0	33.9	32.0	16.4	11.3	57.6	17.6	35.1	20.9
Peer educator	10.2	8.8	9.4	10.8	9.7	9.5	2.7	5.4	14.3	75.8	6.5
Men											
#	2,966	16,172	39,628	1,317	14,336	43,320	21,044	3,379	26,983	3,651	3,916
Television	40.5	52.8	48.4	31.4	36.6	52.4	57.7	16.6	43.3	75.0	24.9
Radio	55.4	62.6	66.9	53.9	64.1	65.1	66.3	46.7	65.1	81.6	58.4
Newspaper	32.2	36.9	39.6	22.3	28.1	43.0	45.2	20.7	32.9	62.3	31.9
Poster/signpost	41.8	45.9	45.6	27.7	39.6	49.3	45.5	38.4	43.7	69.1	40.7
Pamphlet	12.5	12.4	13.3	8.2	9.9	15.3	9.8	9.0	14.0	34.3	7.4
Relative/friend	26.0	23.2	20.6	21.0	22.9	22.1	19.7	26.8	20.3	46.1	13.4
Spouse/sex partner	3.7	3.8	6.1	4.3	5.4	6.0	2.1	4.7	6.0	23.7	2.3
Another VCT client	10.3	8.5	8.2	8.3	9.4	8.6	3.3	15.0	9.5	25.7	5.8
Community meeting	9.3	7.5	9.7	13.4	12.2	8.3	2.7	19.6	10.6	23.9	10.1
Health worker	13.6	10.7	15.4	21.5	17.1	13.4	8.9	28.6	14.3	28.4	14.8
Peer educator	16.5	10.1	9.5	11.8	11.2	10.0	2.7	10.8	14.5	23.3	5.3

Referrals of VCT Clients

Referrals constitute an important part of the VCT activities, and HIV-positive clients need to be referred for specific services according to their needs. However, as table 12 shows, the proportion of clients at the 17 sites who were tested and referred to any type of service was low, perhaps as expected in a generally healthy population.

Integrated VCT sites were more likely to refer clients for various services than freestanding sites. St. Mary's and Western sites referred over 65 percent of their clients to ongoing counseling. St. Mary's referred a significant proportion of clients for PMTCT services. This is not surprising, since a significant number of pregnant women visited these sites. Before St. Mary's started referring pregnant women for PMTCT services, they were counseled and tested at the VCT site within the hospital.

Table 12. VCT clients' referrals for services by site and VCT model

# tested and type of referral (%)	SITE										VCT MODEL				TOTAL	
	KNH		St. Mary's		ICRH		Nakuru		Western		Integrated		Freestanding		Women	Men
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men		
# tested	17,429	20,768	7,986	3,292	21,588	26,299	2,997	3,449	3,963	3,692	38,453	39,173	15,494	18,315	53,963	57,500
Not referred	78.1	86.2	2.9	6.4	33.2	37.8	50.5	61.6	20.2	19.9	31.0	40.7	73.5	81.2	37.0	42.3
HIV care specialist/ARV	4.3	2.3	1.4	1.6	7.7	3.4	23.2	11.7	17.9	8.8	8.3	4.3	4.9	2.5	10.9	5.6
STI services	1.1	1.0	0.9	1.2	1.4	0.9	2.3	1.2	1.9	2.5	1.5	1.1	1.0	1.0	1.5	1.4
Outpatient services	1.2	1.1	2.3	3.2	4.0	3.4	1.5	0.7	3.3	2.3	3.2	2.9	1.2	1.1	2.5	2.1
TB services	0.3	0.2	0.7	1.1	2.3	1.3	6.0	3.9	1.5	0.9	2.1	1.4	0.3	0.3	2.2	1.5
PMTCT	1.0	0.0	41.2	1.4	1.1	0.1	0.7	0.1	0.6	0.0	9.4	0.2	1.0	0.0	8.9	0.3
Family planning	0.3	0.0	1.8	0.8	1.6	0.2	0.7	0.0	1.0	0.2	1.4	0.2	0.2	0.0	1.1	0.2
Home-based family care	0.2	0.1	2.5	2.1	4.9	2.0	1.6	0.6	0.6	0.8	3.5	1.7	0.1	0.0	2.0	1.1
Post-test club	12.6	6.4	12.8	21.0	33.8	35.0	22.2	17.6	20.2	27.2	24.5	28.0	16.4	10.2	20.3	21.4
Ongoing counseling	4.0	2.2	68.5	73.9	42.3	40.1	21.5	14.5	64.6	68.4	44.9	39.1	8.0	6.3	40.2	39.8
Spiritual support	0.5	0.2	1.9	2.1	9.0	5.8	3.5	0.8	3.7	3.2	6.2	4.5	0.4	0.3	3.7	2.4
PLWA support group	0.5	0.3	3.4	2.7	6.1	2.6	4.6	1.8	3.3	1.5	4.8	2.3	0.5	0.2	3.6	1.8
Legal services	0.0	0.0	0.0	0.0	0.7	0.3	0.3	0.2	0.5	0.2	0.5	0.2	0.0	0.0	0.3	0.1

Conclusions

The number of VCT clients has increased over time, partly as a result of the initiation of ART services and mass media campaigns. VCT services have attracted largely young people in their 20s and 30s. Most said they went because they were planning for the future or getting married, though women were also more likely to go when they felt unwell and because of their partners' risky behavior. Nevertheless, condom use remains low, even during risky sexual encounters.

Single, sexually active women—whether separated, widowed, or never married—have higher HIV prevalence than other groups. Young males were more likely to delay sex debut and to practice secondary abstinence than were their female counterparts.

Freestanding VCT sites continued to be attractive to all age categories, but more so for couples and educated and professional people. However, integrated sites were more likely to refer clients for other services than freestanding sites. This is a major problem that needs to be addressed, since VCT is claimed to be an entry point to care and support.

