



YOUTH RESEARCH WORKING PAPER SERIES

# Voluntary HIV Counseling and Testing Services for Youth and Linkages with Other Reproductive Health Services in Tanzania

Youth Research Working Paper No. 5

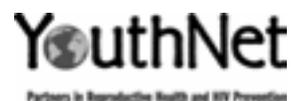




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## Acknowledgments

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Many thanks to the African Medical and Research Foundation (AMREF), the Infectious Disease Centre (IDC), and Marie Stopes International for their excellent collaboration. Special thanks go to Dr. Annefrida Kisesa and Dr. Chalamilla Guerino. Thanks to the Ministry of Health and the Dar es Salaam City Council. Special thanks also to the research assistants who collected the data and to the supervisors, providers, and young men and women who participated in the study.

Others from Family Health International (FHI) who contributed to this study include Cathy Toroitich-Ruto and Zablon Omungo from the FHI/Kenya office and former FHI employee Stirling Cummings. Review comments came from Barbara Janowitz, Theresa Hatzell, and JoAnn Lewis of FHI and from Shanti Conly and Sarah Harbison of the U.S. Agency for International Development (USAID). Production assistance came from William Finger.

YouthNet is a five-year program funded by the USAID to improve reproductive health and prevent HIV among young people. The YouthNet team is led by Family Health International (FHI) and includes CARE USA and RTI International. This publication is funded through the USAID Cooperative Agreement with FHI for YouthNet, No. GPH-A-00-01-00013-00. The information and views contained in the publication do not necessarily reflect FHI or USAID.

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FHI Working Paper Series No. WP06-02

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## Abbreviations

ABC	Abstain, Be faithful, Use condoms
FHI/NC	Family Health International/ North Carolina
FP	Family Planning
PHSC	Protection of Human Subjects Committee
RA	Research Assistant
RH	Reproductive Health
STI	Sexually Transmitted Infection
VCT	Voluntary Counseling and Testing

## Executive Summary

More information is needed to address questions that affect the design of HIV voluntary counseling and testing (VCT) services for youth. With the School of Nursing at the Muhimbili University College of Health Sciences in Tanzania, YouthNet conducted a descriptive study of youth attending VCT and other reproductive health (RH) services in Dar es Salaam, Tanzania. (RH services include sexually transmitted infections, family planning, and other services.) Using a combination of quantitative and qualitative evaluation methods, the study produced information on youth clients' risky sexual behaviors, perceptions and intentions, and the quality of care provided by the various "youth friendly" service delivery models available in Dar es Salaam.

### Objectives

The overall goal of this study was to provide information to policymakers to improve services at clinics providing a mix of VCT and RH services at four youth-friendly clinics in Dar es Salaam, Tanzania. To achieve this goal, the study had the following objectives: 1) To determine the risk of HIV/AIDS and unintended pregnancy among youth attending either VCT or other RH services; 2) To assess the quality of VCT and RH care offered to youth at these clinics; and 3) To document correspondence between youth's intended and actual risk behaviors following VCT.

### Methods

Exit interviews were conducted with 719 youth (310 males and 409 females) ages 15 to 24 as they were leaving four clinics in Dar es Salaam. The clinics represent four types of sites where youth might seek VCT for HIV, with approximately the same number of youth interviewed from each type of site: 1) a youth-only, combined VCT/RH site, where different providers address VCT and RH needs; 2) a youth-only, combined VCT/RH site, where the same provider offers all services; 3) a general VCT-only site for all ages, and, 4) a general VCT/RH site for all ages with special hours for youth, where the same provider offers all services.

Youth were interviewed only if they had received *either* VCT *or* RH services, not if they received both. (In two sites that offered RH services, there were very few male clients who received only RH services.) A subset of these youth clients (n=142) were asked to participate in an in-depth interview directly after the exit interview, and to return six months later for a follow-up interview. We also conducted interviews with 36 providers at the same clinics.

### Results

The main results are as follows:

- HIV risk was measured by looking at three risk factors: condom use at last sex, numbers of sexual partners in the past three months, and having had an STI in the past 12 months. Approximately one-fourth of the exit interview clients reported two or more risky behaviors. Single male and female RH clients were most likely

- to report two or more risky behaviors (53% and 44% respectively) while female VCT clients were the least likely (12%).
- In comparing calculated risk with clients' self-assessment of risk, about half had self-assessments that matched their reported risk behaviors. However, close to half of those reporting no or one risk factor believed they are at moderate to high risk and nearly one-third reporting 2-3 risk behaviors believed they were at no to low risk.
  - Females in both VCT and RH clinics were more likely to report using a contraceptive method compared to males. The group with the highest modern method use was married RH females (76%) and the group with the lowest percent was single RH males (37%). Males were far more likely to report using condoms as their family planning method (over three-fourths) while married RH females relied primarily on injectables and single RH and VCT females used a variety of methods including condoms, injectables, and traditional methods.
  - Unmet need for family planning was determined based on if a client did not want a baby in the next 24 months and was not using a modern method of contraception. Married RH females had the lowest percent of unmet need (9%) and single VCT females the highest (34%). Unmet need in the other groups ranged from 24%-29%.
  - VCT youth clients reported that they were most likely to change their behavior by being faithful (60%) and least likely to change it by abstaining (68%). Of the 45 VCT youth clients who participated in the baseline and six month semi-structured interviews, all but four said they had changed something in their sexual behavior. Most said they had either abstained, were faithful, or were faithful *and* used condoms.
  - As reported by the clients, the quality of care of the studied VCT and RH services was relatively good. Three of the four clinics were rated very well in their provision of both VCT and RH information. All of the clinics were rated well in terms of their service provision with respect to privacy, comfort, etc. Only the Youth Hours clinic did not clearly provide basic information about the clinic.
  - Interviews with VCT providers showed that they were fairly knowledgeable about correct VCT counseling procedures. On average, providers correctly responded to 6.5 questions out of eight. Fewer providers were trained for family planning counseling (56%) than VCT counseling (92%). On average they responded correctly to 6.1 questions out of seven on family planning provision specific to youth. Attitudes toward family planning provision were also reasonably good with the exception of attitudes toward use of condoms to reduce the risk of the most common STIs to an acceptable level.

### ***Discussion and recommendations***

Youth VCT and RH clients both need and desire integrated VCT and RH services, but these needs are not being met. In this study we found many missed opportunities for asking youth about their reproductive desires, for providing information about contraception, and for distributing condoms to those at immediate risk of HIV and unintended pregnancies. Training providers on youth-friendly service provision may help to raise awareness among providers about such opportunities. However, a restructuring of

VCT services may also be necessary in order to meet all sexual and reproductive health needs of youth.

Youth VCT and RH clients are not always accurate in their risk perceptions after speaking with providers. This is likely not completely due to the quality of the service. However, it is clear from interviews with youth that there are some misunderstandings around the “being faithful” messages that could be affecting their risk perceptions. Therefore, providers need to be trained to nuance messages when counseling youth clients to “be faithful.” Youth need to fully understand that this strategy is only successful in reducing one’s risk to HIV and other STIs if they are in a mutually monogamous relationship with a tested partner. Furthermore, this strategy alone will not protect youth from unintended pregnancies.

The quality of services provided was generally high in this study, although it should be pointed out that the studied clinics were either run or assisted by non-governmental organizations. However, there are still some areas for improvement. Providers need to receive fully updated information on the effectiveness of condoms in prevention of STIs and HIV. Further, providers need to receive more encouragement to follow established protocols of referrals for clients who wish to receive a contraceptive method when these methods are not available on-site.

This study should help program and policymakers in Tanzania to begin to examine what kinds of change may be helpful to youth in that country. In addition, we feel that many of the findings also contribute to the global body of knowledge on youth VCT services and their linkages to other reproductive health services.

## I. Introduction

In randomized trials, voluntary counseling and testing (VCT) for HIV has been shown to result in behavior change among adults, including decreased unprotected intercourse among those at risk of acquiring or transmitting the HIV infection.(1) Because youth ages 15-24 contribute to one-half of the new HIV infections in developing countries,(2) facilitating youth's access to services where they can find out their HIV status, get counseling on behavior change, and get referrals to other needed health services could make an important contribution to combating the spread of HIV. There is some indication that youth who have had an HIV test intend to adopt safer sex practices; however such evidence is limited.(3) Furthermore, many adolescents say they want to be tested for HIV but experience barriers such as availability and acceptability of VCT, biases on the part of providers, high service costs, long waiting times, and concerns about confidentiality.(3,4)

One potential way of increasing youth uptake of VCT is to provide services that are high-quality from youth's perspective (i.e. "youth friendly"). For example, in Tanzania youth desire health care sites that: 1) provide a wide range of services (family planning, STI treatment and prevention, HIV prevention and care, and VCT); 2) employ young health workers and counselors who are better able to identify with the unique needs of young people; 3) employ well-trained adult staff who empathize with and advocate for youth; 4) guarantee privacy and confidentiality of clients; and 5) provide a friendly, comfortable setting.(5) Little is known, however, about whether or not services that are promoted as youth-friendly actually respond to youth's desires and whether or not this has an impact on behavior change.

In addition to tailoring services to clients' demands, youth services must also meet other more objective standards of quality, such as ensuring that personnel are properly trained, follow appropriate procedures, and have the equipment they need to carry out their tasks. Providers also need to be aware of the special needs that youth have in HIV counseling. For example, youth, as opposed to adults, may not be as interested in actual testing as they are in getting information.(6) Some youth may not even be sexually active, and thus will need messages and information that are different from those provided to sexually active youth. All of these considerations need to be taken into account by VCT providers who serve youth and should be examined when evaluating such programs.

In addition to looking at the way services are provided, it is necessary to examine what *kinds* of youth are attending such services. Is it those who are at greater risk of contracting HIV, or is it just the "worried well" who come out of curiosity and place an extra burden on the system? This is an important question because of the large amount of resources needed to sustain VCT sites, such as lab personnel, nurse-counselors, and test kits. Apart from the level of risk, there is also the question of socioeconomic background. It may be that only certain types of youth are receiving messages about the need for testing because they are being segmented to a certain population, or because they are

being transmitted with certain types of media (such as television) that are only accessed by certain parts of the population.

One potential way to heighten the acceptability and effectiveness of VCT services is to link them to other reproductive health (RH) services. In developing countries with generalized epidemics, HIV is transmitted primarily through heterosexual contact. In these settings, youth who seek VCT services will likely also need contraception and access to treatment for sexually transmitted infections (STIs), regardless of their HIV status. Therefore, serving all of youth's sexual and reproductive health needs should translate into better quality care for youth. In addition, youth prefer to receive all of these services in one location and may therefore be more likely to use them.(5) However, the evidence of the effectiveness and cost-effectiveness of integrated services is still missing.(7) Thus, there is a continued need to monitor the way that integrated services are provided to ensure that quality care can be maintained or even improved (as they better meet youth's needs). In addition, even if services are not integrated, VCT should at the very least be seen as an excellent opportunity to refer both HIV- and HIV+ youth for RH services, although it is not known if this is actually happening.

### **Tanzania**

Tanzania could benefit from strong VCT and RH care services focused on youth. In 2004, an estimated 8.8% of the general adult population (or about 2 million people) in Tanzania was HIV infected.(8) Young Tanzanians, who account for 60% of all new HIV infections in Tanzania, bear a large part of this infection burden.(9) Young women are particularly affected, with between 6.4 and 9.7% living with HIV/AIDS, as opposed to 2.8-4.3% of young men.(10) Tanzanian youth are also particularly vulnerable to other undesirable sexual and reproductive health outcomes. For example, it is estimated that 40% of all maternal deaths in Tanzania occur among women between 15-24.(11) Young men, as compared to men over 25, have the highest self-reported rates of a sexually transmitted infection (STI) or symptoms of an STI in the last twelve months: 6.8% of 15-19 year olds and 7% of 20-24 year olds.(12)

Risky sexual behaviors amongst youth are the driving factors behind these undesirable sexual and reproductive health outcomes amongst Tanzanian youth. For example, 12% of females aged 15-24 and 9% of males had had sex by the age of 15 in 2004.(12) Furthermore, youth aged 20-24 are more likely to have had more than one sexual partner in the last twelve months (5% females, 37% males) than the general Tanzanian population aged 15-49.(12) Condom and other contraceptive use is also very low. In 2004, only 30% of unmarried, sexually active females aged 15-19 (42% aged 20-24) were currently using a modern method of contraception in Tanzania.(12) At the same time, unmet need for family planning was estimated to be 19% among 15-19 year olds and 23% among 20-24 year olds, and approximately 20% of births to women under 24 were unwanted.(12)

Given the burden of morbidity and mortality in this age group, and because of their greater likelihood to engage in risky behaviors compared to the rest of the population, youth in Tanzania are considered an important target group for sexual and reproductive

health services, including VCT, STI testing and treatment, and family planning. For this reason, the Prime Minister's Office has as two of its goals to 1) reduce by 30% the percentage of young people aged 15-24 who are HIV infected, and to 2) increase by 95% the percentage of young people who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission by 2007.(13) To monitor progress toward that goal, program managers need information about the quality of VCT and RH services, in addition to the types of youth who are receiving the services and whether or not the services are achieving their goal which is ultimately behavior change.

### ***Study Objectives***

The overall goal of this research is to provide information to policymakers to improve services at clinics providing a mix of VCT and reproductive health (RH) services at four youth-friendly clinics in Dar es Salaam, Tanzania. To achieve this goal, this study has the following objectives:

1. To determine the risk of HIV/AIDS and unintended pregnancy among youth attending either VCT or other RH services;
2. To assess the quality of VCT and RH care offered to youth at these clinics; and
3. To document correspondence between youth's intended and actual risk behaviors following VCT.

## **II. Methods**

### ***Target population and study sites***

We selected four sites in Dar es Salaam for data collection. Three of the sites offered some kind of youth-friendly service; the fourth was a general site where 60% of the clientele were under 25. All four sites offered VCT services, but only three offered other reproductive health services, such as STI testing and treatment and/or family planning services. Because of this, we selected a "companion site" from which to recruit enough reproductive health clients to have an equal number of VCT and RH clients in the sample. Thus, in the final sample are included the following:

1. A youth corner,<sup>1</sup> with both VCT and RH services offered by the same provider.
2. A youth-only site, with family planning services available in the same compound on certain days of the week.
3. A general (all ages) site offering all sexual and reproductive health services, with special youth hours.
4. A general (all ages), stand-alone VCT site (with its companion site nearby to which RH clients are often referred).

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<sup>1</sup> The youth corner is a separate building located on the grounds of a dispensary.

VCT services are free for youth at all of the above sites.

### ***Data Collection***

Data from three sources were analyzed for this report: structured exit interviews with clients, provider interviews, and semi-structured interviews with clients. The purpose of this multi-method approach was to be able to triangulate results and thus better understand the situation.

#### ***Client exit interviews***

We interviewed youth clients attending VCT services and those attending other RH services who had never used VCT but who were sexually active. The data collection instrument was comprised of both open and fixed-response questions concerning knowledge, risk behaviors, perceived risk, referrals, and experience with the service (i.e. client-evaluated quality). Research assistants (RAs) spent up to three months at each site to recruit the numbers of clients needed. Providers served as “gatekeepers” to clients. That is, interviewers enlisted providers’ support for recruiting participants. Those participants who the providers felt were mature enough (or mentally able) to participate, were referred to the data collectors.

#### ***Provider interviews***

In order to complement the information gathered from clients on the quality of care experienced, we also interviewed all providers at the selected clinics on their knowledge, attitudes and practices regarding adolescent sexual and reproductive health.

#### ***Semi-structured interviews***

To document youth’s intended and actual risk behaviors following VCT, a subset of youth participating in the exit interviews at the VCT and RH sites was asked to participate in a qualitative, semi-structured interview directly following the exit interview and again six months later. Participants were given a card with contact information and time and place of follow-up interview. At follow-up they received a small amount of money to reimburse them for their transportation.

At baseline, we used a semi-structured instrument to ask about clients’ experiences with the health service, including its quality and how they thought that the counseling session would affect their behavior. At follow-up we asked if and how they actually changed their behavior.

### ***Study size and selection***

Our goal was to recruit a total of 400 males and 400 females aged 16-24 from all four clinics over a three-month recruitment period for an average of 100 males and 100 females per study clinic. Doing so would give us 90% confidence intervals for the proportions of clients reporting risky sexual behavior by clinic, sex, and type of clients. Approximately 40 clients per site were to be administered the semi-structured interviews (total of 160 interviews). This would allow for 20 girls and 20 boys per site. Half of the girls and boys were to be VCT clients, and the other half would be RH clients (10 clients per category). Because only 20 clients per clinic were needed to answer the study

questions, this sample size allowed for a 50% loss to follow-up at the six-month interview.

Below are the final numbers recruited compared to the targets:

***Table 2.1. Targeted and actual sample size by data collection method***

<b>Method</b>	<b>Targeted Sample</b>	<b>Target number</b>	<b>Actual number</b>
<b>Exit interviews</b>	Male VCT clients	200	198
	Female VCT clients	200	203
	Male RH clients	200	112
	Female RH clients	200	206
	<b>Total</b>	<b>800</b>	<b>719</b>
<b>Semi-structured interviews – Baseline</b>	Male VCT clients	40	39
	Female VCT clients	40	40
	Male RH clients	40	25
	Female RH clients	40	38
	<b>Total</b>	<b>160</b>	<b>142</b>
<b>Semi-structured interviews – 6 month follow-up</b>	Male VCT clients	20	25
	Female VCT clients	20	22
	Male RH clients	20	8
	Female RH clients	20	14
	<b>Total</b>	<b>80</b>	<b>69</b>
<b>Provider interviews</b>	All providers	all	36
	<b>Total</b>		<b>36</b>

As this table indicates, we fulfilled our targets for the most part, except for male reproductive health clients. There were simply not enough of them at the sites to recruit the target numbers, even though we had interviewers stationed at the sites for three months or until the target numbers for the other groups were reached.

### ***Data entry and analysis***

For the exit interviews and provider surveys, appropriate range checks and skip patterns were programmed into EpiInfo, version 6.0 software templates by FHI staff in North Carolina (NC). Data entry specialists based in Tanzania used the templates to enter quantitative data and short pre-coded text data as it arrived, to check for any errors in the entered data, and to conduct preliminary analyses as necessary. Responses to open-ended questions that were too long to be coded by hand for entry into EpiInfo were entered into a word processing program and sent to FHI/NC for analysis. The semi-structured interviews were tape-recorded and then the transcripts were translated and transcribed in a word processing program in the field and sent to FHI/NC.

Quantitative data were analyzed with SAS, and were then transferred to SPSS for table generation. For the most part, only frequencies were reported, stratified by sex, clinic

type, and service received. In addition, two composite variables were created to evaluate risk for unintended pregnancy and client-evaluated quality of care:

1. *Risk for unintended pregnancy* was calculated for clients who had had sex within the past twelve months. Clients were considered at risk if they did not desire a pregnancy in the next 24 months and were using a traditional method of contraception or if they reported they were not using any method.
2. *Client-evaluated quality of care* was calculated for VCT clients only. The score included 21 questions regarding the ease of obtaining information about the clinic, overall clinic quality and satisfaction, specifics of the VCT visit, and the extent to which RH information was also provided. A scoring system was used whereby one point was assigned for each positive response, with a possible total of 21 points.

Qualitative data were coded and analyzed at FHI/NC using a text data software program called NVivo 2.0. A coding tree was developed based on the question guide. Matrices were created from code sorts in order to display the data both quantitatively and qualitatively and examine them for emerging themes. The remaining processes included reducing the data to distinguish major themes and interpreting the findings.

Interpretation of all results was a joint process between collaborating partners. After study completion, a data interpretation meeting was held with key stakeholders, including representatives from the studied clinics and YouthNet/Tanzania staff. The purpose of this was to ensure in so far as possible that the results of this study would be useful to policymakers in Tanzania and elsewhere in their decisions of how to best serve the VCT and RH needs of youth.

### ***Ethical considerations and informed consent***

FHI's Protection of Human Subjects Committee (PHSC) and the ethics review board at Muhimbili University College of Health Sciences reviewed and approved the study protocol and the informed consent process, in accordance with Tanzania's policies on youth access to health services.

## **III. Results**

The results are divided into four sections. The first section summarizes the sociodemographic and reproductive health characteristics of the youth reproductive health (RH) and voluntary counseling and testing (VCT) clients participating in the client exit interviews. The next section explores their risk of becoming infected with HIV/AIDS, their risk of an unintended pregnancy and their dual risk. In addition, this section explores whether VCT clients have RH needs and RH clients have VCT needs, and whether these reciprocal needs are being met during their clinic visits. The following section documents clients' intended behaviors after their VCT clinic visit and also compares these intentions to their actual reported behavior changes six months later.

Finally, the quality of the clinic sites is examined from both the client and the provider perspective in the final section.

## 1. Background Characteristics

### *Sociodemographic characteristics*

Table 3.1 shows that the average age of both male and female RH clients and male VCT clients was 21. The female VCT clients are on average one year younger with an average age of 20. VCT clients have attained higher education levels than RH clients with a higher percentage having attended secondary school or university. Finally, with the exception of the female RH clients, few ( $\leq 11\%$ ) of the clients in the other groups are married or cohabiting; 56% of female RH clients report they are married or cohabiting.

**Table 3.1: Background characteristics of client-exit population (N=719)**

	Male VCT (N=198)	Female VCT (N=203)	Male RH (N=112)	Female RH (N=206)
<b>Client's age</b>				
Mean	21	20	21	21
Median	21	20	22	21
Range	15-24	15-24	16-24	15-24
<b>Highest level of education (%)*</b>				
Primary	50	56	73	82
Secondary	43	40	25	17
University/College	6	4	2	1
No response	1	1	1	0
<b>Marital status (%)*</b>				
Married (including common-law)	1	6	7	29
Co-habiting, but not married	4	5	1	27
Not married or co-habiting	96	89	92	44

\* Percents are not always equal to 100% due to rounding.

Married or cohabiting clients likely have very different reproductive health and VCT needs and motivations from single and non-cohabiting clients and therefore are analyzed separately. Since there are too few married or cohabiting clients to analyze as a separate group in both VCT groups and the male RH group, they will be dropped from subsequent analyses. The female RH group has a sufficient number of single and married or cohabiting clients to be analyzed separately and they will be presented as two distinct groups.

### *Sexual history*

Most, but not all, of the clients had ever had sex (Table 3.2). Nine percent of both VCT males and females reported they had never had sex as did 13% of the RH males and single RH females. For those who did report ever having sex, the average age at first sexual experience was 17 for all groups. Among the clients who reported that they had had sex, not all of them are currently sexually active. Not surprisingly nearly all of the married RH females have had sex in the last three months but the percent for the other groups is lower, ranging from 53%- 73%, with the single VCT males the least likely to report having had sex. Overall, a higher percent of the single RH males and females had sex in the past three months compared to the single VCT males and females. The gap was particularly large between the two males groups with 20% more RH males reporting sex in the past three months compared to VCT males.

**Table 3.2: Reproductive health characteristics of the client-exit interview population (n=679)**

	Male VCT Single (n=190)	Female VCT Single (n=180)	Male RH Single (n=103)	Female RH Single (n=90)	Female RH Married (n=116)
<b>Have you ever had sex?</b>					
(%)	90	90	87	87	100
Yes	9	9	13	13	0
No	1	1	--	--	--
No Response					
<b>At what age did you first have sex? (Years)</b>	(n=171) 17	(n=162) 17	(n=90) 17	(n=78) 17	(n=114) 17
<b>When did you last have sex? (%)*</b>					
3 months or less	53	67	74	73	96
4-12 months	33	25	14	18	4
Over 12 months	15	9	12	9	--
<b>Have you ever been pregnant or gotten a girl pregnant? (% Yes)</b>	21	25	26	45	90
<b>Average number of pregnancies for females only</b>		(n=41) 1.2		(n=35) 1.3	(n=104) 1.4

\* Percents are not always equal to 100% due to rounding.

Differences between single and married clients are particularly evident with respect to pregnancies. Nearly all of the married RH females have ever been pregnant with an

average of 1.4 pregnancies. The percent is far less for the single RH females (45%) and single VCT females (25%). About one-fourth of the male RH clients and one-fifth of the male VCT clients reported that they had ever gotten a girl pregnant.

***Services received during visit***

As expected, the main services received by male and female VCT clients were HIV related and include getting an HIV test, receiving the results or HIV counseling only (Table 3.3). RH clients mostly received family planning services though one-third of male RH clients and about one-fifth of single RH female clients got STI services.

***Table 3.3: Main services received by client-exit interview population (n=679)***

	Male VCT Single (n=190)	Female VCT Single (n=180)	Male RH Single (n=103)	Female RH Single (n=90)	Female RH Married (n=116)
	%	%	%	%	%
<b>Services Received*</b>					
Pregnancy Test	--	--	--	2	3
Family Planning	--	--	43	54	87
Education	5	3	8	14	12
HIV Counseling Only	36	38	--	1	--
STI Test	2	2	21	14	4
Results of STI Test	2	2	12	7	2
HIV Test	95	98	--	2	1
Results of HIV Test	74	76	--	2	--
Pre- or Post-Natal Visit	--	--	--	1	2
Other	1	2	40	32	7

\*Note: More than one response possible.

***2. Risk Factors for HIV/AIDS and Unintended Pregnancy***

***HIV/AIDS risk factors***

To explore risk of HIV infection we looked at the following factors: condom use at last sex, numbers of sexual partners in the past three months, and having had an STI in the past 12 months.

Reported condom use was low. In no group did at least half of the respondents report that they used condoms. RH females, both single and married, were the least likely groups to report condom use at last sex (Table 3.4). Less than 20% of these groups used a condom while about 40% of the clients in the other groups reported they had used one. The main reason the females said they did not use a condom was because their partners don't like them (data not shown). Males more often report they don't use them because they don't like them or it makes sex uninteresting (data not shown).

About one-fourth of the males in both the VCT and RH groups reported more than one sexual partner in the past three months. Married RH females were the most likely to have

had only one partner in the last 3 months (91%) followed by single females in both the VCT and RH groups (approximately 70%).

Far more RH clients than VCT clients had been diagnosed with an STI in the past 12 months. This should not be surprising since many of the RH clients came to the clinic for an STI-related visit. Male RH clients were the most likely to report having an STI (55%). About one-third of single female RH clients reported having one as did 16% of the married RH clients. By contrast, only about 10% of the male and female VCT clients reported they had had an STI.

**Table 3.4: Risk factors for HIV/AIDS among clients who have had sex (n=617)**

	Male VCT (n=172)	Female VCT (n=162)	Male RH (n=89)	Female RH Single (n=78)	Female RH Married (n=116)
	%	%	%	%	%
<b>No condom use at last sex</b>	60	56	60	83	87
<b>Number partners in past 3 months*</b>					
None	30	20	24	17	1
One	48	71	49	69	91
Two or more	23	9	27	14	8
<b>Had STD in past 12 months</b>	12	11	55	36	16

\* Percents are not always equal to 100% due to rounding.

Figure 3.1 shows the number of different risk factors faced by the client. About one-fifth of the sexually active clients had no risk factors while just over half had one. About one-fourth had two or three factors.

**Figure 3.1: Percent distribution of clients who had had sex in the past 12 months according to number of risk factors (n=560)**

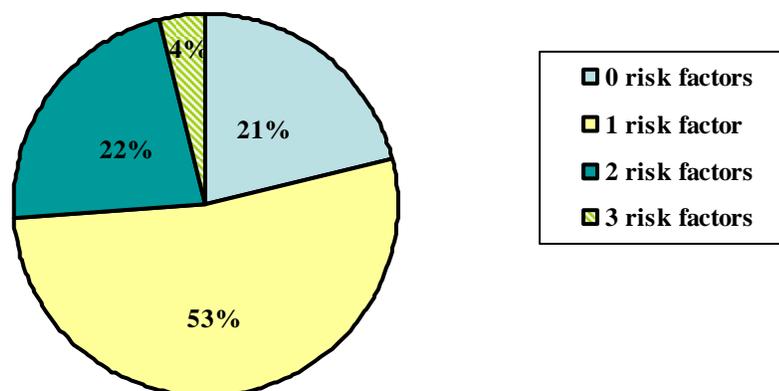


Figure 3.2 shows the distribution of risk factors by client type. While it might be expected that VCT clients would have more risk factors, in fact, a higher percentage of the single RH males and females have two to three risk factors compared to VCT clients. The high percent of RH males who reported having an STI and multiple partners and RH females who did not report condom use would account for this finding.

**Figure 3.2: Percent distribution of risk factors among clients who had sex in the past 12 months by client type**

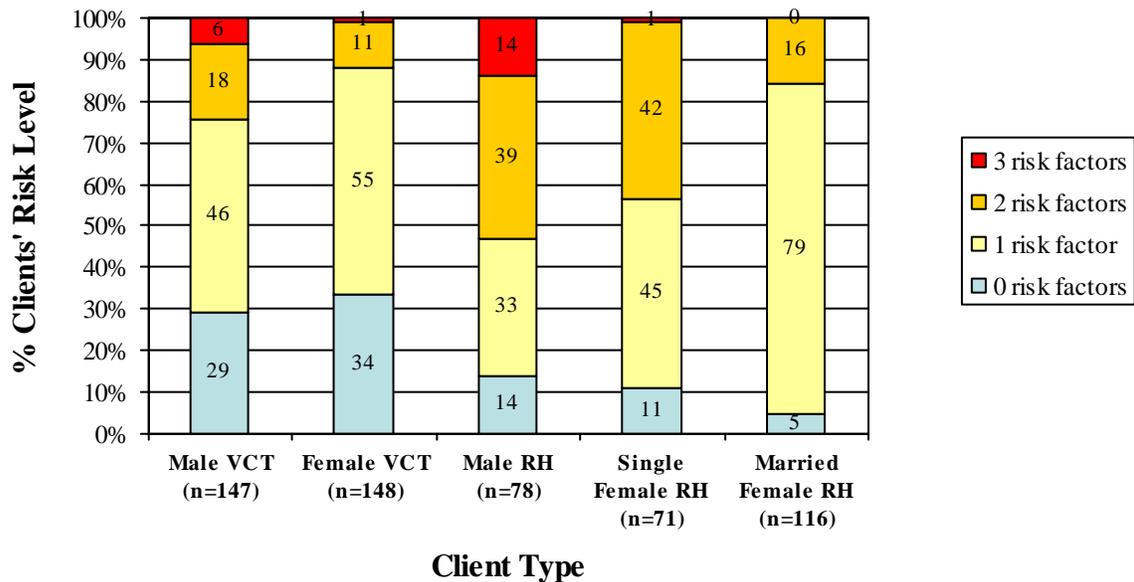
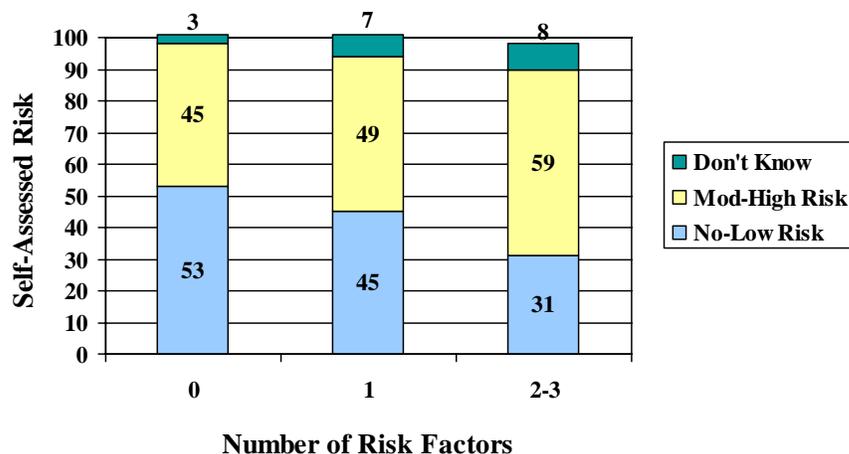


Figure 3.3 compares risk factors with clients' own self-assessment of risk. Those with the least number of risk factors are more likely to believe they are at low risk and those with more risk factors believe they are at higher risk. Nonetheless, it is interesting to note that close to half of those with zero or one risk factor believe they are at moderate to high risk of HIV. Conversely, nearly one-third of those with two to three risk factors believe they are at no to low risk. In addition, 8% of those with two to three risk factors said they didn't know their risk.

**Figure 3.3: Percent distribution of self-assessed risk by number of risk factors**



\*One person who already has AIDS is not included.  
 Note: Percents not always equal to 100% due to rounding.

We then explored the reasons for these seeming inconsistencies between risk behaviors and self assessments. Of those with zero risk factors who thought they were at moderate to high risk, the main reasons were because they don't use condoms (26%), because their partner is unfaithful (17%), because they are sexually active (15%), or because they have had sex with those who have had lots of partners (13%). This may seem contradictory in that those with zero risk factors have reported condom use at last sex, but their response appears to indicate that they are not using condoms consistently. Similarly, zero reported risk factors indicate that they do not have multiple partners but it does not take into account if their partner is not faithful.

For those with two to three reported risk behaviors, the reasons why they felt they were at no or low risk were because they remain faithful to one partner (49%), they use condoms (42%), they've reduced their number of sexual partners or they avoid sex with those have lots of partners (9%), and they avoid sharing razors (9%). Again, these responses appear to contradict answers to previous questions. These contradictions may suggest some misunderstandings of ABC messages.

Finally, we look at the risk assessments of those clients who have never had sex or haven't had sex in over 12 months. Of the 62 clients who never had sex, about one-fourth (16 clients) believed they are at moderate to high risk of HIV infection. The main reasons they believe they're at moderate to high risk is because "youth have many temptations," they cared for HIV/AIDS patients, and they share razors (data not shown). Nearly half of those who haven't had sex in the past 12 months (26 clients out of 57) also believed they are at moderate to high risk. Their main reasons for believing this are somewhat different from those who have never had sex and often reflect the fact that they

have had sex in the past although not recently. The main reasons are not using condoms, having an unfaithful partner, and having had a blood transfusion.

***Unintended pregnancy risk***

Sexually active youth who said they do not want a baby within 24 months and who are not using a modern method of contraception are considered as being at risk for unintended pregnancy.

There is little variation among the groups in terms of wanting to have a baby. Most of the clients in all groups (over 90%) still want to have a baby (Table 3.5). Of those that do, a higher percent of VCT males and females (nearly two-thirds) compared to single RH males and females (nearly one-half) wanted to wait more than 24 months to get pregnant. The rest either wanted a baby sooner or didn't know. A little over one-half of married RH females wanted to wait at least 24 months before having a baby.

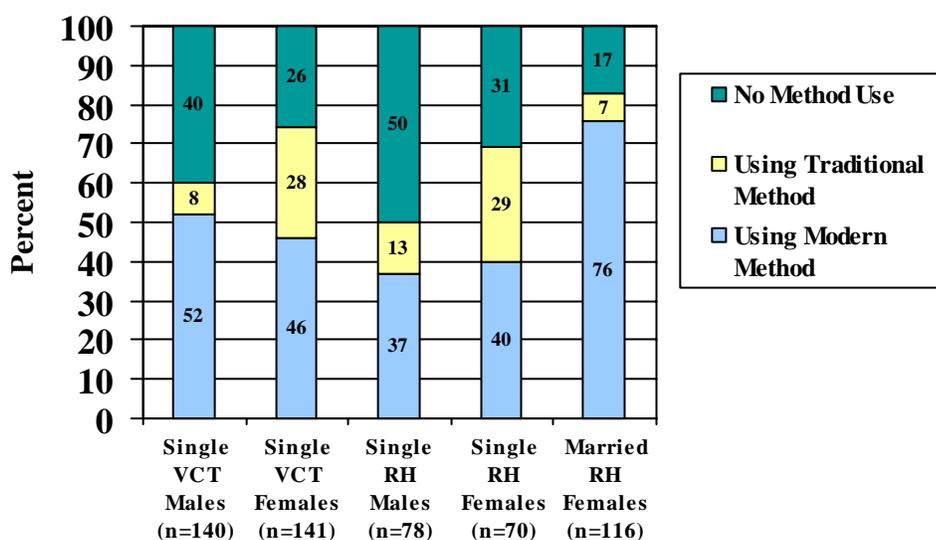
***Table 3.5: Fertility intentions among youth clients***

	<b>VCT Males (n=172) %</b>	<b>VCT Females (n=162) %</b>	<b>RH Males (n=89) %</b>	<b>RH Single Females (n=78) %</b>	<b>RH Married Females (n=116) %</b>
Wants to have a baby	94	91	94	90	91
<b>If yes, when?*</b>	(n=162)	(n=148)	(n=84)	(n=70)	(n=106)
-Within 24 months	27	27	37	36	41
-More than 24 months	62	62	48	46	56
-No answer	11	12	16	19	4

\* Percents are not always equal to 100% due to rounding.

Among clients who have had sex in the past 12 months, females in both VCT and RH clinics were more likely to report using a family planning method compared to males (Figure 3.4). The two main reasons why males and females reported that they did not use a method were because they lack knowledge of methods or they want to have a child (data not shown). RH married females were the most likely to be using a modern method. Single RH and VCT females were more likely to rely on traditional methods (more than one-fourth of each group) compared to male VCT and RH clients or married RH females.

**Figure 3.4: Contraceptive Use Among Clients Who Have Had Sex in the Last 12 months by Client Type**



Specific method use is shown in Table 3.6, which shows differing patterns between females and males and even among the female groups. RH married females mainly used injections followed by pills. The single VCT females were mainly using condoms while the single RH females used a mix of condoms, injections, and to a lesser extent pills.

**Table 3.6: Contraceptive methods used by client group among those who have had sex in the past 12 months**

	VCT Males (n=84) %*	VCT Females (n=105) %*	RH Males (n=39) %*	RH Single Females (n=48) %*	RH Married Females (n=96) %*
<b>Contraceptive method used</b>					
Pill	5	2	0	10	16
Injection	1	5	0	25	64
Male condom	81	55	74	21	6
Rhythm/periodic abstinence	11	32	15	33	6
Withdrawal	2	3	5	6	2
Other	--	3	5	4	6

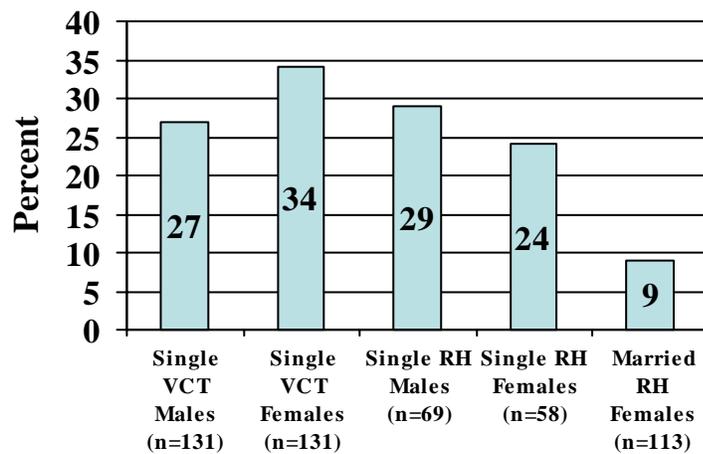
\* Percents are not always equal to 100% due to rounding.

Males in the VCT and RH group primarily used condoms though it is possible that they do not know or did not report the methods that their partners were using, which would underestimate the amount of protection from pregnancy. On the other hand, given that

condoms are a dominant method, the amount of protection would conversely be overestimated if condom use was not consistent (see Table 3.4, condom use at last sex).

Figure 3.5 combines these factors to show risk of unintended pregnancy. Respondents who did not indicate when they wanted to have a baby (i.e. within or longer than 24 months) were excluded from this analysis. Married RH females have the least risk for unintended pregnancy at 9%, while single VCT females have the greatest need at 34%. Risk for unintended pregnancy for the other groups ranged from 24-29%. Given that the majority of single male and female clients rely on male condoms for family planning, their risk for unintended pregnancy is probably underestimated, since condom use is likely not consistent.

**Figure 3.5. Risk for Unintended Pregnancy Among Sexually Active Clients by Client Type**



### **3. Youth’s Intended and Actual Risk Behaviors Following VCT**

Youth’s intended behaviors following VCT and actual behaviors six months later were compared using data from the client exit interviews, baseline semi-structured interviews and follow-up semi-structured interviews.

#### ***Intended behavior changes***

In the exit interviews, youth clients were given a list of five possible behaviors they might engage in over the next six months and asked which they were *most* likely to do and which they were *least* likely to do. Table 3.7 shows the responses of all VCT client exit interviews. The majority said they were most likely to be faithful and least likely to abstain. Very few said they would decrease their number of partners. Among those VCT clients who had more than one partner in the last three months (n=60), only 11% said they would decrease their number of partners in the next six months. Similarly, when we

omitted those who had never had sex (n=34), only 11% of those remaining said they were most likely to abstain in the coming six months.<sup>2</sup>

The data are not presented here by sex because there were almost no differences by sex, except that slightly more males than females said they would abstain (16% vs. 12%).

***Table 3.7. Youth VCT clients' intended behaviors in next 6 months (N=401)***

<b>Behavior</b>	<b>Most likely to...</b>	<b>Least likely to...</b>
Abstain	14%	68%
Be faithful	60%	10%
Use condoms	19%	15%
Decrease number of partners	4%	6%
Decrease number of times having sex	3%	2%

In the semi-structured interviews immediately following the exit interviews at baseline, the respondents were allowed to provide any answer they wanted to the question about what behaviors they were likely to change in the next six months (i.e. they were not limited to one of five possible answers, as they were in the exit interviews). Despite this, their responses were similar to the exit interviews. Table 3.8 presents the responses of intended and actual behavioral changes for those respondents who participated in both the baseline and six month interviews. There were 21 girls and 16 boys who completed baseline interviews without participating in the six month follow up. For ease of presentation, their baseline responses are not included in Table 3.8 but were similar to the ones who did participate in the follow-up.

Almost all of those who completed both interviews said they intended to change their behavior. The most frequent response for girls was to be faithful to one partner or to be faithful and use condoms. One of the women who gave this latter response said at baseline:

*“I will be very faithful to one partner who will also have tested, but I will also not stop using condoms while having sex.”*

- Female VCT client, general clinic

The intended behaviors of the boys were equally divided between abstinence and being faithful. Six of the girls and seven of the boys who mentioned being faithful in some way, also mentioned either asking one's partner to get tested, or being faithful to a tested partner, although a partner's refusal to be tested would not necessarily end the sexual relationship. A young man explained:

<sup>2</sup> 53% of those who had never had sex said they were most likely to abstain, 32% would be faithful, and 11% would use condoms.

*“If I had a partner who hadn’t tested I would advise her to also go and test because we would be doing a safe thing. If she refuses then I would leave her or [have] sex with protection.”*

- Male VCT client, youth-only site

**Table 3.8. Intended behavior change of youth clients after the VCT visit and reported actual change six months later\***

<b>Behavior</b>	<b>Girls</b>		<b>Boys</b>	
	<b>Baseline</b>	<b>At 6 Months</b>	<b>Baseline</b>	<b>At 6 Months</b>
Abstain	2	7	5	7
Be Faithful	5	6	5	4
Use condoms	3	0	3	0
Abstain <i>or</i> use condoms	0	0	2	1
Abstain <i>or</i> be faithful	0	0	1	0
Be faithful <i>and</i> use condoms	5	5	2	10
Abstain, be faithful <i>or</i> use condoms	2	0	0	0
Other (no mention of A, B, or C)	2	1	4	0
<b>Total</b>	<b>19</b>	<b>19</b>	<b>22</b>	<b>22</b>

\*Four individuals with missing data are not included here

Finally, nine girls and eight boys provided other answers, such as avoiding situations that would make sex tempting, avoiding groups with a negative influence, getting involved in other activities like sports, earning more money, eating better, studying more, exercising, and reducing their alcohol intake. One woman said:

*“I shall avoid groups which are fond of those things, practicing sex. I shall refrain from these things by doing exercises, reading or being busy with work so that I may be able to avoid those issues.”*

- Female VCT client, general clinic

#### **Actual behavior changes**

Of the 79 youth VCT clients who were administered semi-structured interviews, 47 (22 girls and 25 boys) returned to the clinic six months later for a follow-up interview. There do not seem to be any differences between those who were followed-up and those who were not, except that more females who mentioned non-abstinence/be faithful/use condoms (“ABC”) alternatives at baseline did not show up for the follow-up visit (data not shown).

During the follow-up visit, they were asked what behavior, if any, they had changed since their visit to the VCT clinic, particularly in relation to abstinence, faithfulness, and condom use. All but four said they had changed something in their sexual behavior. In Table 3.8 we only show the results of this question for those who responded at both the baseline and follow-up visits.

Seven girls and seven boys said they had been abstaining completely for the last six months. Most of them credited this change to the knowledge they gained during the VCT counseling session. Here are two illustrative quotes:

*“After realizing that my partners were not faithful, I decided to completely leave them and stay alone until I have finished my school and ready to get married. That is when I will choose one faithful partner for the purpose of living with her since love at a young age is cheating each other.”*

- Male VCT client, youth corner

*“The thing that I can be proud of after coming to this place is the education that I received from here, which has helped me very much in changing my sexual behavior during the last six months. Because I have received a very high level of knowledge.”*

- Male VCT client, general clinic

One girl admitted that she had tried to abstain completely, but within the last month or so, she had become sexually active with one partner.

Another large group of respondents (10) said they were being faithful to one partner. For one young man, this meant a big change in his relationships:

*“I am happy that after receiving the counseling from here, I decided to leave the three partners that I had and remain with one.”*

- Male VCT client, youth hours clinic

Other youth related similar stories. Many focused on the trust that exists between them and their partners and both partners being tested. For example:

*“I have decided to remain with just one partner, I trust her, she trusts me and we both trust each other.”*

- Male VCT client, youth hours clinic

Fifteen youth (five girls and 10 boys) said that in addition to being faithful, they were using condoms more frequently since their visit to the VCT center, the majority saying they used condoms every time they had sex. One young woman explained how the counseling she received helped her to make this decision:

*“I am now using condoms all the time when having sex. At first I thought a condom was to be used only when I was in danger of getting pregnant but it has now been explained to me and I understood more.”*

- Female VCT client, youth-only clinic

However, there was another group of respondents who believed that being faithful to one trusted partner meant that they did not need to also use condoms. Some in this group only

use condoms when there is a danger that the girl will get pregnant. One young man stated that he did not use condoms with his “faithful partner,” but:

*“There are times when I have practiced sex outside, but in these circumstances I have to use condoms.”*

- Male VCT client, youth-only clinic

#### ***The hardest and easiest behavior changes***

Respondents were also asked which change they thought would be the hardest to implement. Thirty said that nothing would be difficult for them to change. For those who said a change would be difficult, the majority (30 of 37) said abstaining would be difficult (data not shown). Most felt that it would be against human nature to abstain completely because wanting sex is a natural urge. A young woman explained,

*“I cannot say I will abstain completely because this is human nature, and it will be very difficult to stop if you are used [to having sex]. But what I will do is to practice safe sex. I think this will be the easiest thing for me, that is, to use condoms.”*

- Female VCT client, general clinic

Others said they were already in relationships, so abstaining was not an option.

Other changes that were described as difficult included: being faithful, having fewer partners, trusting their partners, and working more to keep busy and thus avoiding sex.

Respondents were also asked which change would be the easiest to implement. Of the 79 respondents, the most popular answer, given by 30 young people, was being faithful to one partner. An additional ten said it would be easiest to reduce their number of partners, although it is not clear how many partners they would have. Twenty-four thought it would be easiest to use condoms. While many had reported that abstaining would be the hardest change to make, there were 17 who said that abstaining would be the easiest change to make.

Other changes described as being the easiest included: asking partners to be tested, reducing the frequency of sex, avoiding temptations, working harder, and not drinking.

#### **4. Quality of Care**

Quality of care was assessed through client-exit interviews and interviews with providers. The client exit interview provides client perceptions of quality as it relates to the information they receive and to the accessibility and availability of services. Certain aspects of quality were assessed for the clinic as a whole while others were particular to the type of clinic visit, i.e. RH visit or VCT visit. The provider interviews provide information on knowledge and practices for VCT providers only.

### *Client exit interviews*

Most clients in three of the clinics reported that for the most part they did not have difficulty obtaining information important to accessing the clinics (Table 3.9). The exception was the Youth Corner clinic where the majority of clients reported that they had difficulty in getting information on the hours of operation of the clinic, the type of services offered and payment. Nonetheless, even the other three clinics had many clients reporting similar difficulties.

Conversely, all clinics were rated very well in terms of adequacy of services received, with clients feeling that their visit was conducted in private, that they were comfortable talking to the provider and that they believed their information would be kept confidential. While nearly all clients said they would recommend the clinic to a friend, fewer clients at the Youth Only VCT and the Youth clinic reported being very satisfied with services compared to the other two sites where nearly all the clients reported they were very satisfied.

**Table 3.9: Quality of facility**

	<b>General VCT (N=99)</b>	<b>Youth Only (N=164)</b>	<b>Youth Hours (N=180)</b>	<b>Youth Corner (N=182)</b>
<b>Information</b>				
<b>Had difficulty getting info on (%):</b>				
Location of clinic	17	17	12	37
Hours of operation	14	21	25	79
Type of services offered	7	6	22	80
If hard to pay for services	8	17	19	78
<b>Service Adequacy</b>				
<b>Rated very adequate (%):</b>				
Privacy during consultation	98	82	87	99
Comfort while talking to provider	94	85	90	96
Believe information will be kept confidential	100	99	96	98
Very satisfied with services	96	73	67	97
Would recommend clinic to a friend	100	99	99	100

The content of counseling during the RH and VCT visits was assessed separately (Table 3.10). There are certain information and questions that would be expected to be delivered in an RH visit, such as about fertility desires, preventing pregnancy, using condoms, and using other family planning methods. Another type of information would be expected in a VCT visit, such as how to prevent HIV and using condoms to prevent HIV. Information about STIs, however, could potentially be delivered in both visit types. Similarly, since condoms can be used to prevent both pregnancy and STIs/HIV, one would expect that they would be offered in both visit types. We assessed each client type to see if they received the particular information relevant for their visit. But because many of the clients had both RH and VCT needs, we also determined if VCT clients

received RH information and vice-versa to find out whether all the clients' needs were being met. Three of the clinics had both VCT and RH clients but the General VCT site had only VCT clients.

**Table 3.10. Client reports of specifics of VCT and RH visits**

	General	Youth Only	Youth Hours	Youth Corner			
	VCT (n=99)	VCT (n=97)	RH (n=67)	VCT (n=89)	RH (n=91)	VCT (n=85)	RH (n=97)
<b>VCT Questions</b>							
Provider discussed how to prevent HIV	100	100	96	67	34	100	98
Provider said condoms prevent HIV	97	100	96	70	39	100	97
<b>RH Questions</b>							
Provider discussed whether or not to have children soon	21	37	93	9	12	98	93
Provider explained how to prevent an unintended pregnancy	44	90	97	39	23	97	100
Provider said condoms prevent pregnancy	63	90	97	48	33	98	99
Provider discussed family planning methods	31	90	97	32	19	91	100
<b>RH &amp; VCT Questions</b>							
Provider explained how to prevent other STIs	83	100	96	63	45	99	100
Provider said condoms prevent other STIs	88	100	96	66	48	99	97
Provider offered condoms	17	28	15	9	8	24	21

With the exception of the Youth Hours clinic, client reports of VCT information received were very good regardless of whether it was a VCT or a RH client. The Youth Hours clinic did only moderately well in providing VCT information to VCT clients, and less well in providing it to their RH clients. For the most part, clients at both the Youth only VCT site and Youth Corner site reported that they received the RH information expected, regardless of client type. The Youth Hours site did not provide a lot of RH information to either RH or VCT clients, nor did the general VCT site to their VCT clients. Surprisingly, most clients did not report being offered condoms, regardless of clinic or client type.

A summary of client-assessed quality is presented in Table 3.11. For ease of comparison, an overall score is calculated only for the VCT clients since one of the clinics did not have RH clients. The youth only clinic had the highest overall score (17.4 out of 21) followed by the youth corner (16.4). The youth hours site had the lowest score (13.1). While the RH clients are not included in the composite score, their scores are shown alongside. Essentially clinics that did well at providing VCT information also did well at

providing RH information, and they did well for both client types regardless of the reason for their visit.

**Table 3.11: Summary quality scores**

	<b>General VCT (N=99)</b>	<b>Youth Only (N=164)</b>	<b>Youth Hours (N=180)</b>	<b>Youth Corner (N=182)</b>			
	<b>VCT clients</b>	<b>RH clients</b>	<b>VCT clients</b>	<b>RH clients</b>	<b>VCT clients</b>	<b>RH clients</b>	<b>VCT clients</b>
Information (out of 4 possible) <sup>1</sup>	3.5		3.4		3.2		1.3
Service adequacy (out of 5 possible) <sup>1</sup>	4.9		4.4		4.4		4.9
RH score (out of 7 possible) <sup>2</sup>	3.5	5.9	5.3	1.9	2.7	6.1	6.0
VCT score (out of 5 possible) <sup>3</sup>	3.8	4.0	4.3	1.7	2.8	4.1	4.2
	7.3	9.9	9.6	3.6	5.5	10.2	10.2
<b>Total VCT score (out of 21)</b>	<b>15.7</b>		<b>17.4</b>		<b>13.1</b>		<b>16.4</b>

<sup>1</sup>Individual items listed in Table 3.9  
<sup>2</sup>RH score includes 4 RH questions and 3 RH & VCT questions from Table 3.10  
<sup>3</sup>VCT score includes 2 VCT questions and 3 RH & VCT questions from Table 3.10

**Provider interviews**

The interviews with providers from VCT clinics offer information on the quality of VCT services as measured against the standard training in good quality VCT counseling procedures. Another aspect of VCT service provision examined was if they deliver Abstinence, Be Faithful and Condom (A, B and C) messages to their clients. We also looked at whether they make referrals for their clients who need other services that they cannot provide. While VCT providers are not necessarily expected to provide RH information to their VCT clients, we explored their capacity and desire to do so since many VCT clients also have RH needs. Given the small number of providers interviewed, data on quality obtained from the provider are not presented separately for each of the four sites but instead are aggregated to provide an overall picture of the providers from all sites.

Most (92%) of the providers said they had received training in the provision of VCT services yet knowledge of particulars for conducting a VCT counseling visit was only moderately good. The average number of correct responses was 6.5 out of nine (Table 3.12). The statement that had the most incorrect responses was that the counselor should develop a risk-reduction plan for clients. Only 36% knew that the statement is false since the plan is supposed to be developed in collaboration with the client, and not by the

counselor alone. There were three other statements that over 40% of providers answered incorrectly.

**Table 3.12: Percent of providers who responded correctly to statements about correct VCT counseling procedures**

Statement	VCT Providers (n = 36) %
When exploring options for reducing the client’s risk-taking behaviors, the counselor should develop a risk-reduction plan (FALSE)	36
The point of orienting the client at the beginning of the counseling session is to give a brief overview of the contents of the entire session (TRUE)	100
Before a client leaves the session, it is important to have helped the client identify a friend or relative to support him with the risk reduction steps (TRUE)	58
The VCT counseling session should be focused and structured (TRUE)	53
The counselor should talk more than the client (FALSE)	100
Most of the VCT session time should be spent on giving out information and completing the client data card (FALSE)	94
When exploring options for reducing risk the counselor works with the client to develop risk reduction skills through role play and problem solving techniques (TRUE)	44
When listening to the client the counselor should organize the client’s risk history, issues, and circumstances (TRUE)	94
Having a supervisor observe the provider’s meeting with the client helps to improve quality of care (TRUE)	69
<b>Average number correct</b>	<b>6.5</b>
<b>Range of correct responses</b>	<b>4.0 - 8.0</b>

Providers reported that they provide A, B, C messages most of the time. All providers reported that they tell youth clients that condoms prevent HIV transmission and nearly all (97%) reported that they tell youth clients that condoms are effective in preventing pregnancy, that abstaining is a way to prevent pregnancy and STIs/HIV, and that being faithful is a way to prevent STI/HIV transmission. Somewhat fewer reported (89%) that

they tell youth clients that condoms prevent the transmission of other STIs (data not shown).

Providers report that services to which they most commonly refer are STI clinics, curative/ treatment services and tuberculosis/chest clinics. Nearly all (94%) of the providers said they have a list of clinics that they can refer clients to and three-fourths were able to show the interviewer the list. Just under half of providers (47%) say they have ever referred their youth VCT clients to family planning services. Of the 19 providers who don't make family planning referrals, the main reasons why they don't are because providers don't feel that the clients need family planning services (7), there are no services to refer them to (6), or they can get family planning services at the same site (5).

Not surprisingly, far fewer VCT providers have received training for family planning counseling (56%) than for VCT service provision. Nonetheless, three-fourths of the providers felt that their knowledge and skills to provide family planning services to VCT clients are either very adequate to somewhat adequate. The majority (86%) felt that VCT providers in their facility should provide family planning information to youth VCT clients. Many of the providers report that they do try to assess the family planning needs of the VCT clients. The most common ways they do this is by asking the client about current relationships (78%), if they are using a method (44%), about desired family size (44%), and if the client wants a pregnancy or baby (39%). In some cases the client tells the provider about her family planning needs without prompting (56%).

For the most part, VCT providers had good knowledge of family planning method provision as it relates specifically to youth (Table 3.13). Out of seven statements, providers on average correctly answered 6.1. There were two statements that less than 70% of the providers correctly answered. Only about two-thirds said that the statement that a woman who has never been pregnant should not use injectables is wrong. Similarly, 61% said that the statement that they would provide contraceptives to all sexually active youth is correct.

**Table 3.13. Percent of VCT providers demonstrating correct knowledge of family planning, specific to provision of contraceptives to youth**

Statement	VCT providers (n = 36) %
Under what conditions would you provide contraceptive to a sexually active youth? (I would provide it to all sexually active youth) (RIGHT)	61
Which women should not use injectables (Youth) (WRONG)	92
Which women should not use injectables (Women who have never been pregnant) (WRONG)	67
Who should not use condoms (male or female)? (Youth) (WRONG)	100
Who should not use condoms (male or female)? (Women who have never been pregnant) (WRONG)	94
Conditions when women can't take COCs? (Women who have never had children) (WRONG)	94
Conditions when women can't take COCs? (Unmarried women) (WRONG)	100
<b>Average number correct</b>	<b>6.1</b>
<b>Range of correct responses</b>	<b>3.0 - 7.0</b>

Attitudes toward provision of family planning methods to youth were reasonably good with providers displaying positive attitudes on an average of 6.5 statements out of eight (Table 3.14). There was only one statement that had less than half of the providers displaying a positive attitude; only 44% of providers disagreed with the statement that condoms when used correctly for every sex act, cannot be relied on to reduce the risks of some of the most common sexually transmitted infections to an acceptable level. There was only one other statement that less than 80% responded positively to; 78% disagreed with the statement that for most youth who come to this clinic, it is not worthwhile to try to convince them to use condoms.

**Table 3.14. Percent of VCT providers demonstrating favorable attitudes toward family planning provision to youth**

Statement	VCT providers (n = 36) %
Promoting condoms to youth encourages promiscuity (DISAGREE)	83
Asking married women about STD/HIV risk is insulting to them (DISAGREE)	94
If a young woman is HIV+ she should not have sex (DISAGREE)	81
It is worthwhile to talk with young men about FP (AGREE)	94
For most youth who come to this clinic, it is not worthwhile to try to convince them to use condoms (DISAGREE)	78
Unmarried youth should not be provided with contraceptives (DISAGREE)	89
Condoms, even when used correctly for every sex act, cannot be relied on to reduce the risks of some of the most common sexually transmitted infections to an acceptable level (DISAGREE)	44
Contraception encourages promiscuity among youth (DISAGREE)	86
<b>Average number favorable responses</b>	<b>6.5</b>
<b>Range of correct responses</b>	<b>4.0 – 8.0</b>

## IV. Discussion

Three main conclusions can be drawn from this study. First, there is a clear need for integrated services. Second, there is a need to better clarify ABC messages for youth and to help them more accurately assess their risk of HIV. Third, while the quality of care offered by the observed clinics was generally high, attention is still needed for some sites and providers. Below we discuss some of the implications of these findings, as well as offer some recommendations for policymakers.

Interviews with youth clients revealed the need for integrated services, regardless of the type of service that the client originally sought. On the one hand, youth clients attending RH services were more likely to have behaviors that put them at risk for HIV/AIDS and other STIs than VCT clients, and yet they were not generally offered VCT. These youth are clearly in need of VCT services and should be targeted, whether through the provision of such services on-site or through referral. On the other hand, STI and VCT clients are missing opportunities for family planning services. Single female VCT clients had the greatest risk of unintended pregnancy, partly because many who say they are contracepting are using traditional methods. Amongst those who are not using any methods, lack of knowledge is the primary reason. VCT may be the only clinical site where these clients could be reached with such information, and thus not providing it represents another missed opportunity.

Another major finding in this study is the fact that youth clients are leaving counseling sessions with unrealistic perceptions of their risk, and with ambiguous understandings of key prevention messages. It is probably not realistic to expect 100% of youth practicing risky sexual behaviors to perceive themselves as being at risk for HIV/AIDS after speaking with a counselor. First, the counselor may have done a poor job communicating risk to the client. In addition, some clients may not “hear” messages about risk because they do not wish to. Finally, there is some evidence that youth do not accurately perceive risk because they are likely to be involved in serial, rather than concurrent, relationships, which they do not perceive as being risky (and which providers do not always highlight as risky).<sup>(14)</sup> This is supported in the present study by the fact that the primary reason provided by clients for why they are not at risk for HIV/AIDS was that they are “being faithful,” despite the fact that they exhibited risky behaviors. However, in the absence of condom use, just “being faithful” is not completely protective against sexually transmitted infections unless one has a mutually monogamous relationship with a partner who has tested negative for HIV. In a generalized epidemic situation such as in Tanzania, condom use becomes even more critical for unmarried youth since there is an elevated probability of having an infected partner. The fact that these youth are leaving counseling sessions (whether for STIs, family planning, or VCT) without an adequately nuanced understanding of the “being faithful” message represents a grave missed opportunity.

On the other hand, some youth who were accessing VCT services did *not* exhibit risky behaviors (and in some cases are not even sexually active), which raises questions about their presence at a VCT clinic. There are several possible explanations for this. First,

youth may have had risky behaviors before the time period that we enquired about and later become nervous about it. Second, youth may not have been honest with our interviewers about their risk behavior but know themselves to be at risk. Third, some youth believe they are required to go through VCT in order to apply for jobs or school, or to get married (although this is not strictly legal in Tanzania). Finally, some youth (particularly those who have never had sex) may have come out of curiosity or just to get more information. Further studies are needed to determine why youth who are ostensibly not at risk decide to get tested for HIV.

The final area that was illuminated in this study concerns quality of care. It should be noted here that the clinics we studied were not government-sponsored clinics, and therefore have more access to resources, indicating that they probably represent the upper range of the quality of care that one could find in Tanzania. This is supported by the generally high level of quality that we saw in the studied clinics. However, even in these higher resource settings, improvements can be made. For example, condoms, when used correctly and consistently, can be relied on for pregnancy prevention and the reduction of risk of sexually transmitted diseases. Unfortunately, half of the providers we interviewed did not agree with this statement. It is possible that providers did not understand this statement, and unwittingly responded negatively. However, the fact that only 16% of youth clients said they received condoms from the provider suggests that providers' negative perceptions about the effectiveness of condoms could be affecting the services that they provide. Providers were also not likely to feel that it was necessary to refer youth clients for family planning, despite the fact that such referrals are included in their clinical protocols. Finally, not all clinics had equally high quality. The youth hours clinic consistently received lower quality scores on both patient-evaluated quality of care measures as well as provider knowledge and practices.

### ***Recommendations***

Based on our interpretations of the results of this study, we offer the following recommendations for improving VCT and RH services for youth:

- 1. VCT program designers should develop messages and modes of communication that will attract youth who are at high risk of contracting HIV. VCT programs should find ways to make their services known by, and attractive to, all at-risk youth, including those who are accessing other reproductive health services. This may include re-examining the messages and campaigns that promote VCT in Tanzania to tailor them to fit the needs of this underserved group.*
- 2. Counselors should ensure that all youth clients understand their risks for both HIV/AIDS and unintended pregnancy and help them to develop a personalized prevention plan to avoid the two outcomes. Counselors should help youth to both understand their risks and to examine which types of changes they can make that are both realistic and meaningful in terms of risk reduction.*

3. *Providers of VCT and RH services to youth should screen for family planning needs and should possess accurate knowledge about the effectiveness of condoms in reducing the risk of most STIs. VCT and STI clients' sexual and reproductive health needs should be viewed holistically. Female clients in particular should be provided with information about their contraceptive options, even if they are not able to procure their chosen method at that site. Providers should also be trained to communicate accurate information on condoms, which is that when used correctly and consistently, they can reduce the risk of sexually transmitted infections and unintended pregnancy.*
4. *Provider training must emphasize that it cannot be assumed that sexually active youth VCT clients will become secondarily abstinent after receiving their results. Rather, providers must be instructed to give sexually active youth the information they need to be responsible. Some youth are not intending to, nor do they actually, abstain after a VCT counseling session. Therefore, providers should give them all of the information they need in order to practice responsible sexual behavior. This includes information on disease and pregnancy prevention and the importance of one's partner getting tested.*
5. *Providers should be clear in delivering "B" messages to ensure that youth clients truly understand what "being faithful" means. Youth clients who are not planning on abstaining or using condoms 100% of the time must be made to understand that the only way to reduce their risk of HIV is to be faithful to one mutually monogamous, non-infected partner who knows his or her status. Therefore, providers should be careful to nuance being faithful messages by encouraging clients to bring in their partners for counseling and testing, and to continue to use condoms until this has been achieved.*

The results of this study were presented to a group of stakeholders in Dar es Salaam in June 2005, who discussed its implications for sexual and reproductive services to youth. We hope that by disseminating the results more widely in this report and through other forums we can contribute to the global technical knowledge on the needs and desires of young people who are at risk of HIV, other STIs, and unintended pregnancy.

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