

ORIGINAL RESEARCH ARTICLE

Knowledge, Attitudes and Practices about HIV Testing and Counselling Among Adolescent Girls in Some Selected Secondary Schools in Malawi

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Abstract

The major objective of this study was to determine knowledge, attitudes and practices about HIV testing services and the uptake of this service amongst girls aged 15-19 in selected secondary schools in Malawi. A questionnaire was administered to 457 students and 18 focus group discussions and 45 in-depth interviews were conducted. The study found that almost every student knew about HTC but uptake was low as only about a third of the students reported having been tested. The uptake of this service also increased with age. Most of those tested wanted to know their sero-status. Others were tested because it was a requirement. Sixty nine per cent of the girls who did not go for the HIV test was mainly because either they were not sexually active or they felt they were not at risk. During FGDs some students did not test because they feared their parents would think they were sexually promiscuous. This study demonstrates the need for intensive campaigns among adolescent girls and their parents to create awareness about the importance of HIV testing as this is an entry point for all HIV and AIDS services. *Afr J Reprod Health 2013 (Special Edition); 17[4]: 60-68*.

Keywords: Malawi, Adolescents, HIV testing and counselling

Résumé

L'objectif principal de cette étude était de déterminer la connaissance, attitudes et pratiques concernant les services de dépistage du VIH et l'absorption de ce service chez les filles de 15-19 ans dans les écoles secondaires choisies au Malawi. Un questionnaire a été administré à 457 étudiants et 18 groupes de discussion cibles et 45 entretiens approfondis ont été menés. L'étude a révélé que presque toutes les étudiantes connaissaient le DCV mais l'absorption est faible puisque seulement environ un tiers des étudiantes ont déclaré avoir déjà subi l'analyse. L'acceptation de ce service a également augmenté avec l'âge. La plupart des personnes qui ont subi l'analyse ont voulu connaître leur état sérologique. D'autres ont subi l'analyse parce que c'était une exigence. Soixante-neuf pour cent des filles n'avaient pas subi l'analyse de dépistage du VIH soit parce qu'elles n'étaient pas sexuellement actives soit parce qu'elles ne se sentaient pas en danger. Pendant les DGC certaines étudiantes n'ont pas subi l'analyse parce qu'elles craignaient que leurs parents pensent qu'elles s'engagent dans la promiscuité sexuelle. Cette étude démontre la nécessité de campagnes intensives chez les adolescentes et leurs parents à fin de leur sensibiliser sur l'importance du dépistage du VIH, car c'est un point d'entrée pour tous les services liés au VIH et au sida. *Afr J Reprod Health 2013 (Special Edition); 17[4]: 60-68*.

Mots-clés : Malawi, adolescents, dépistage et le conseil relatif au VIH

Introduction

AIDS is a major social and public health problem that has generated a major humanitarian crisis especially in sub-Saharan Africa including Malawi. In 2010 a total of 34 million people worldwide were living with HIV. Sixty eight percent of all people living with HIV resided in sub-Saharan Africa, a region with only 12% of the

global population¹. Within Sub-Saharan Africa, it is Southern Africa which has been heavily affected by the HIV and AIDS epidemic and, based on the 2011 Global progress report, South Africa has the highest number of people living with HIV and AIDS worldwide at 5.6 million. HIV prevalence in Sub-Saharan Africa is estimated at 5%. Among young people aged 15-24 HIV prevalence is estimated at 1.4% and 3.3% among males and

females, respectively¹. Young people aged 15–24 years are 20% of the population of Sub-Saharan Africa; their state of health therefore has significant implications on the future of these nations.

Malawi is one of the countries with a high HIV prevalence. The country has a population of 15.3 million people. Females constitute 51% of the population. The 2010 Malawi Demographic and Health Survey (MDHS) which was the second countrywide survey to include HIV testing, estimated HIV prevalence among persons aged 15–49 at 10.6%, a drop from 11.8% in 2004. In 2010, the overall HIV prevalence among young people decreased to 3.6% from 6% in 2004. HIV prevalence was higher among young women (5.2%) compared to men (1.9%) in 2010^{2–3}. These surveys generally demonstrate that HIV prevalence is on the decline in Malawi.

HIV testing and counselling (HTC) is beneficial as it is an entry point for HIV and AIDS services such as anti-retroviral therapy and Prevention of Mother to Child Transmission⁴. Over the years the Government of Malawi, in conjunction with non-governmental organizations (NGO) and development partners has been promoting HTC services to ensure that most Malawians are tested. These services are being provided by the Ministry of Health (MoH), the Christian Health Association in Malawi (CHAM) and other NGOs such as Malawi AIDS Counselling and Resource Organisation (MACRO). CHAM is a private not for profit organisation and is a network of religious health facilities and it is the second largest provider of health services after the MoH. MACRO is an NGO which was solely established to provide HTC services. Earlier studies show that some people were reluctant to go for HTC because even after being tested and found HIV positive, they would not be able to access ART as it was very expensive at the time costing MK2,500 per month per person⁵.

Overall, the proportion of Malawi's adult population aged 15–49 who have been tested for HIV has been increasing: it was only 8% in 2000, 15% in 2004, and almost 30% by 2006^{2,6,7}. In 2010 seventy three percent (73.1%) of the female respondents said that they had ever been tested for

HIV. The proportion of men who reported having ever been tested for HIV was at 52.2%. Among young people aged 15–24, 81.3% of the females and 52.9% of the males reported having ever been tested for HIV and receiving results³. It is evident that reported HIV testing among males is much lower compared to women even among young people. Programme data from the MoH shows that while just over 40,000 people were tested in 2003, over a million people were tested in 2008 alone⁸. The total number of people tested and counselled in the fiscal year (July 2010–June 2011) was 1,773,267 which represents 28% of the sexually active population⁹. HTC services are offered in static and outreach clinics, through a door to door approach and using a moonlighting approach in which services are offered at night⁸. It is not MoH policy to test all the people in Malawi but that every person in Malawi should be able to access HIV testing services when they want to. The National HIV and AIDS Policy actually recommends the universal provision of HTC services in Malawi¹⁰. With the adoption of Option B+, all pregnant women in Malawi are offered HTC services but they also have a choice of opting out of the HIV test¹¹.

This paper is based on a study among adolescent girls aged 15–19 commissioned by UNICEF in 2009 whose overall objective was to assess and examine knowledge, attitudes and sexual behavior and the risk of HIV infection. The study also aimed at determining factors that put adolescent females at risk of contracting HIV and other sexually transmitted infections (STIs). Over and above the main objective, the study also explored the knowledge, attitudes and practices of adolescents aged 15–19 years regarding HTC which is the focus of this paper. For purposes of program design it is important to determine the knowledge of adolescent girls regarding where they can go for HTC services, the uptake of HTC services among these girls and factors affecting it. HIV risk behaviour and prevalence remain critical concerns in Malawi especially among adolescent girls. There is urgency to address adolescent girls' sexual and reproductive health needs as this would contribute towards reduction in HIV infection. This is why this study looked at girls aged 15–19 years and who were in school at the time. It is

believed that an understanding of these issues would help in designing appropriate interventions that would help to increase uptake of HTC services amongst adolescent girls, especially those in school.

Methods

This study was conducted in 3 districts in Malawi which, according to the 2004 MDHS², had very high HIV prevalence namely Lilongwe in the central region, Thyolo and Zomba in the southern region. At the beginning of the study a reference group, comprised of persons knowledgeable on adolescent sexual and reproductive health issues including HIV and AIDS, was established to give advice on the implementation of the study including choice of districts. Discussions were held with the reference group and a consensus was reached to collect data in Lilongwe, Thyolo and Zomba Districts. The 3 districts were chosen because they had HIV prevalence higher than the national average. In each of these districts three secondary schools were also purposively chosen with the help of the District Education Managers. One school was located near the district headquarters while the other two were located in rural areas. One school was for girls only while the rest of the selected schools were co-education schools. A total of 457 questionnaires were administered in the 9 schools that participated in this survey but 5 were dropped because they were aged below 15 years of age. These students were selected randomly in class with the help of teachers and class registers. The proportion of students sampled from Forms I, II, III and IV were 14%, 29%, 28% and 29%, respectively. While an almost equal number of students was supposed to be drawn from each class, the least proportion of respondents came from Form 1 while there were no differences in the proportion of respondents from Forms 2-4. This was mainly because a significant proportion of students from Form I were aged below 15 years; hence they were exempted from the study. Only 5.9% of the respondents were aged 19 years old. This explains why it was difficult to find girls who were aged 18-19 years old in some schools as the majority were below 18 years old. More students were

selected to respond to the questionnaire than the required number in order to ensure that the remaining students take part in FGDs and in-depth interviews. The questionnaire covered, among other issues, socio-economic and demographic characteristics; reproductive health experience; sex education; contraceptive knowledge; sexual experiences; use of condoms; and whether respondents had gone for HTC or not.

A total of 18 focus group discussions (FGDs) were conducted in the 9 schools. The number of FGDs was predetermined because of the limited period over which this data was supposed to be completed. After identifying respondents for the individual questionnaire, a maximum of 10 students from the remaining students in each age category were randomly selected to participate in the FGDs. A total of 2 FGDs were supposed to be conducted in each school: one with 15-17 year olds and the other with those aged 18-19. In some cases it was not possible to find girls aged 18-19 years old which demonstrated that girls are going to secondary school and finishing at a relatively younger age. If there were no girls aged 18-19 the two FGDs were conducted with girls aged 15-17 years old. Issues explored in the FGDs included adolescents' awareness about HIV and AIDS including misperceptions; reasons for having sex; who young women had sex with and why; risk perceptions including vulnerability to HIV infection; sources of information on HIV and AIDS and other STIs; and attitudes and perceptions about HIV testing and what can encourage young people to go for HIV testing and counselling. A guide for FGDs was used to collect this data.

In-depth interviews were also conducted with girls aged 15-19. A total of 45 individual in-depth interviews were conducted with adolescent females. These in-depth interviews aimed at collecting information on female adolescents' perceptions about HIV and AIDS and other STIs; sexual behaviour; sources of information including preferred sources of information on sexual and reproductive health issues; risk assessment and their perceptions about their vulnerability to HIV infection; sexual networks and how multiple relationships are managed; as well as young people's choice of sexual partners and reasons for

such choices. A guide for in-depth interviews was used to collect this data. Eight research assistants were recruited and trained to administer questionnaires, conduct FGDs and in-depth interviews. Data collection was done over a period of three weeks. The major limitation of the study was that it only covered girls aged 15-19 years old. It would have been better if younger adolescents aged 11-14 years were covered. Nevertheless the study brings out some important issues for purposes of improving access to HTC services among adolescent females in Malawi. In this paper only data from the survey and FGDs was used.

Data analysis

All the quantitative data was entered into SPSS and this software was also used for data analysis. Simple frequencies and cross tabulations were performed. All the transcripts from FGDs and in-depth interviews were typed in word. Content analysis was used to analyse the qualitative data. All the transcripts were read and re-read with the aim of getting familiar with the data and emerging themes were identified. For purposes of this paper the analysis focused on adolescent girls' knowledge, attitudes and practices regarding HIV testing and counselling. The analysis of the data was done by the authors of this paper.

Ethical considerations

The Ministry of Education, Science and Technology gave approval for this study to be conducted in their schools. Upon arrival in each district the research team met the District Education Manager who also approved that the study be done in the district and helped the study team choosing schools where this study was conducted. At each school the headmaster gave a go ahead for the team to collect data. Verbal consent was also obtained from each participant in the study after explaining to him or her about the purpose of the study. Participants in the study were also assured that the information they were sharing with the team was confidential and to be used only for the purpose of the study. They were further informed that their participation in the study was voluntary and that they were free to withdraw

from the study at any time they wished. Since this study was being done among girls in institutions it was not possible to get parental consent; hence this was obtained from head teachers instead who were their immediate guardians.

Results

Demographic Background characteristics of schools and respondents

Five of the nine schools where this study was done had boarding facilities: the remainder were day secondary schools with an option for self-boarding. The proportion of students who reported being self-boarders at these schools ranged from 5.9% to 78%. This shows that even though these secondary schools were day secondary schools, because of other reasons such as distance to their home villages, some students chose to rent houses close to schools. Just more than half of the respondents (53%) were members of the protestant churches and almost a quarter (27%) belonged to the Roman Catholic Church. Fifteen percent of the respondents belonged to the Revivalist or Pentecostal Churches while Muslims constituted 5% of the sampled students.

Knowledge about where girls can get HIV testing and counselling services

Knowledge about HIV testing is quite high among secondary school students as 98% of the respondents reported having ever heard about HTC and this was regardless of the class and age of respondents. Everyone knew where they could go for an HIV test: 91% of the respondents mentioned that girls can go to government health facilities while 51% mentioned private facilities as can be seen in Figure 1 below.

Figure 1 show that 29.2% of the respondents reported that they can also get HTC services from stand-alone testing centres, 26% from MACRO, 26% from NGO clinics and 16% from mobile clinics. BLM is a local NGO that specialises in the provision of sexual and reproductive health services and it also provides HTC services. Secondary school girls are aware of where they

can get HTC services as all these places offer HTC services.

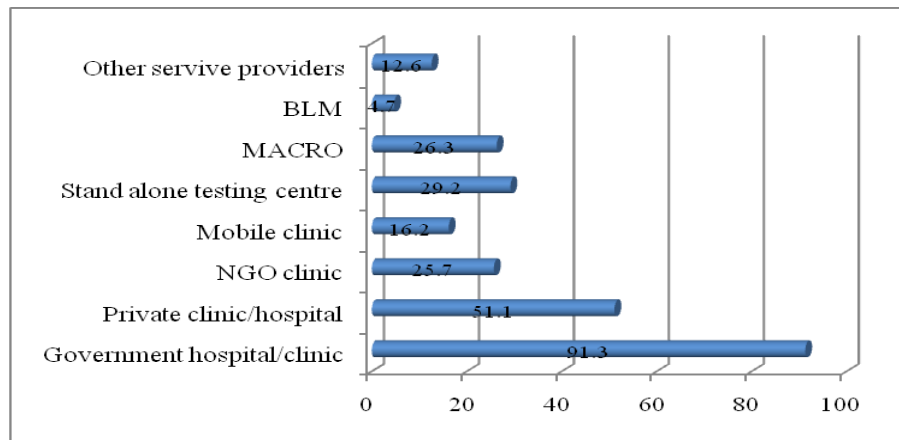


Figure 1: Knowledge about places where girls can get HIV testing and counselling services (n = 452)

Proportion of girls aged 15-19 who have gone for HTC

Respondents were asked if they had ever gone for an HIV test: 31% reported having ever been tested for HIV. There were more 18-19 year olds who reported having ever gone for an HIV test at 43% compared to those aged 15-17 years old at 27%. Nearly everyone in this study received the HTC results: only 2% of those tested did not get the results because they reported that they were scared to know their results. In the study, only about a tenth of the respondents reported that they had ever had penetrative sex. Further analysis of the data shows that 63% of those who had ever had penetrative sex went for an HIV test compared to 27% of those who had never had sex. It was also found that of those who had never been tested 36.7% had ever had sex while 72.8% reported never having had sex. The majority of the respondents who had never had sex (73%) did not go for the HIV test.

The majority of the respondents (84%) in the current study reported that they went for the HIV test because they themselves requested for it, 10.7% were offered and they accepted and 5.7% underwent the test because it was required. Those who went for the test because it was required did not explain who wanted them to do this. In a questionnaire it was difficult to ask for conditions under which the HIV test was required. Table 1

below shows the proportion of respondents who had gone for the HIV test by level of education and age.

Table 1: Proportion of respondents who had ever been tested for HIV by age and level of education

	Age/class	Frequency(Per cent)
Age	15	23 (18.9%)
	16	31 (26.7%)
	17	37 (37.4%)
	18	40 (44.9%)
	19	9 (34.6%)
Class	Form 1	17 (27.4%)
	Form 2	33 (25.2%)
	Form 3	54 (42.2%)
	Form 4	36 (27.5%)
Total		140 (31.0%)

It is evident from Table 1 that the older girl the more likely she is to have been tested for HIV. This is mostly because those who are older are more likely to have had sexual intercourse than the younger ones and that those who are older are more likely to be aware. The level of education though does not seem to have any impact on whether a girl goes for testing or not. This contrasts findings in the general population where for example the 2010 MDHS shows that the higher the educational level the more likely will a person have been tested for HIV.

Why do girls go for HTC?

Adolescent girls in this study were asked why they

went for HTC and Table 2 below shows the reasons that they gave. The major reason why the girls got tested for HIV was because they wanted to know their status. Very few girls were actually encouraged by their parents, peer educators and counsellors and these results were collaborated with results from FGDs. During the FGDs participants were also asked why some girls had gone for the HIV test. In almost all FGDs participants said that the girls who had gone for the HIV test did so because they wanted to know their HIV status.

Table 2: Main reason why girls were tested

Main reason for being tested	Frequency (%)
To know status	122 (87.1%)
Encouraged by counsellor	2 (1.4%)
Encouraged by peer educator	3 (2.1%)
Encouraged by parents/family	1 (0.7%)
Concern about partner	2 (1.4%)
Other	10 (7.1%)
Total	140 (100.0%)

In a number of FGDs participants mentioned that girls may also get an HIV test if they had unprotected sexual intercourse at one time with someone whose HIV status is unknown or they may have been raped and they want to clear their anxieties. In some cases girls were apprehensive about their past sexual behaviour hence they would want to have an HIV test. When girls want to get married or when they are very sick they can be advised by doctors to have an HIV test. It was very rare, as mentioned by the girls, that parents forced their daughters to go for an HIV test. It was only in two FGDs where participants mentioned the importance of pregnant women being tested for HIV for them to know their status so that when they are found HIV+ they can access PMTCT services that would enable them have an 'HIV-free' baby. In an FGD with 15-17 year old girls participants added that it is advantageous for one to know one's status so that if they are HIV-free they can be in position to donate blood. Participants in most FGDs mentioned the need for one who has been tested to go again for another test after three months. They indicated that sometimes a person can go for an HIV test during

the window period and he or she would be found HIV-negative; hence it is important that he or she goes again after this period. On the other hand, it was stated that some people go for a second test because they do not believe the results the first test.

Sources of the HIV test

In this study, respondents who reported having ever had an HIV test were asked about where they got the HIV test and the results are presented in Table 3 below.

Table 3: Where the girls got the HIV test

Source of HIV test	Frequency (%)
Government clinic/hospital	81 (57.9%)
Private clinic/hospital/doctor	6 (4.3%)
NGO clinic	2 (1.4%)
Mobile clinic	16 (11.4%)
Stand Alone testing centre	16 (11.4%)
MACRO	8 (5.7%)
Other	11 (7.9%)
TOTAL	140 (100.0%)

More than half of the girls who were tested for HIV did the test at a government clinic or hospital. These results are in line with what the respondents mentioned in Figure 1 that the most important source for an HIV test was a government health facility. Respondents were also asked if during the last HIV test they got any post test counselling about ways of protecting themselves or their partners from HIV and 98% of the girls said so. Overall 76% of the respondents said they preferred fellow females to provide HTC services with only 25% preferring male providers. Further analyses of the data showed that older respondents aged 18-19 were more likely to prefer female providers than younger respondents (15-17 years old). Respondents did not explain why they preferred male or female providers of HTC services.

Why some girls did not test for HIV

It is evident from the above discussion that a significant proportion of respondents (69%) had not been tested for HIV. There were two major reasons why girls had not been tested namely that they were not sexually active and that they

perceived themselves not at risk of HIV infection for other reasons. There were also others who did not go for the test because they did not want to know their status. For those who have never had sex they felt that there was really no need for them to go for the HIV test. In FGDs participants reported that some girls have multiple relationships and when such girls look at their past sexual behaviour they become apprehensive and decide not to go for an HIV test; preferring that it is better not to have the test than have the test and be told they are HIV+.

Fear of parents' reaction is one of the barriers to HIV testing among adolescents. In an FGD with girls aged 15-17 at one co-educational secondary school, participants mentioned that they may not go for the test because of the fears they have of their parents as some shout at their daughters when they are informed they want to go for an HIV test as demonstrated by the following quotes:

"This is because if we want to go for the test our parents shout at us, they say it means we involved ourselves in sexual activities, therefore it is a disgrace to them", [Participant, FGD with 15-17 year old girls].

"Sometime back I decided to go for VCT and when I told my mother about the idea she was surprised and she nearly shouted at me and asked me "mumadzikayikira?" [Participant, FGD with 18-19 year old, co-educational secondary school].

Mumadzikayikira? Literally meaning do you doubt yourself? Parents have influence on whether the daughter would go for an HIV test or not by the way they react if the daughter wants to go for an HIV test.

The fear of stigma and discrimination once one is found HIV positive is also a major barrier to accessing HIV testing services. In one FGD with 15-17 year olds participants even said that once they are found HIV+ their friends will not socialize with them or that people will be gossiping about them and the possibility of getting married will be diminished. One participant actually reported that she could not even go for an HIV test at the nearby health facility because her

brother was working there. The other problem is the perception that some people generally have for girls who go for HIV testing who are in some cases perceived as morally loose as narrated below by a participant in an FGD with 18-19 year old at one secondary school:

"People just have a feeling that when a girl is going for HTC it means she is a prostitute or has done something evil hence this makes them not to go"

One other reason that makes some young girls not to go for HIV testing is that whilst HIV testing is advantageous because people get to know their HIV status, there was a disadvantage to it especially if one was found HIV positive. What came out from the FGDs was that being found HIV+ increases anxiety which in turn affects one's physical wellbeing and consequently the level of concentration on studies. Since AIDS does not have a cure, some people would think they are already dead and this affects their future plans. In a number of FGDs girls mentioned that if a boy is found HIV+, they would not even continue dating him but if found negative they would continue dating. In an FGD with girls aged 15-17 at one secondary school and 18-19 year olds at another school participants mentioned that once found HIV positive some people do not abstain because they say they cannot die alone and would want as many people to die with them hence they have unprotected sex. Reports of people committing suicide after being found HIV positive were also mentioned in a number of FGDs. A lot of barriers to girls accessing HTC services exist which need to be addressed.

Discussion

This paper was aimed at determining the attitudes of adolescent girls towards HTC. In general, awareness about HTC is quite high as almost all respondents had heard about it. This demonstrates that HIV and AIDS awareness programmes being implemented by MoH and other stakeholders have been quite successful in creating awareness. All respondents were aware of the places where they could go for HTC services: just more than 90% mentioned government health facilities as where

they could go for HTC. These results are similar to the MDHS² and the National Survey of Adolescents (NSA)¹² which demonstrate that government health facilities are also the most frequently cited places where girls aged 15-19 and the general population could get an HIV test.

While adolescent girls are aware of where they could go for HTC, only a third reported having gone for HTC. This is much higher than the 14.8% among 15-19 year old girls reported by the 2004 MDHS²; the 7.9% reported in the NSA¹⁰ and the 21 percent reported in the 2006 MICS⁷. The decision to undertake HTC was primarily an individual's decision which is often backed by attitudinal beliefs that a positive outcome would encourage positive living. Being found HIV+ may not result into positive living as some participants in this study claimed that some boys if found HIV+ would not necessarily change behaviour but engage in unprotected sex so that *they do not die alone* but with others. The perceived risk of infection was another reason why girls went for testing. These findings are not different from studies done in East Africa¹³.

Just like in a study of high school students in Ethiopia¹⁴, this study has also shown that older students and students of a higher class or form are more likely to go for HTC. There are still barriers though to HTC uptake among adolescent girls: the feeling that they are not at risk, because they are not sexually active; not wanting to know their status because of the fear of stigma and discrimination; and the fear of their parents. Fear of being stigmatized and discriminated against were factors that featured highly in one study conducted in Ethiopia¹⁴ and among youth in Nigeria¹⁵. Other studies have also found that factors such as the fear of being found HIV+, inadequacy of VCT centres and stigmatization can hinder acceptance of VCT among youth in Nigeria¹⁵. Even though Yahaya et al¹⁵ also found that the cost of VCT was one of the major hindering factors for VCT, in Malawi and in this study this was not mentioned and this is most likely because VCT services are free of charge in public facilities just like other services.

Even though distance to health facilities as a barrier to accessing HTC services was not mentioned in this study, in other countries such as

Uganda, distance was mentioned as a major factor: some participants complained that the nearest HIV testing centre was located some 65 km away making it difficult for people to access services¹⁶. While this was the case the Government of Malawi acknowledges that distance is a major problem in terms of accessing HTC services. This is why it embarked on national HIV testing week during which HTC services are provided to Malawians through static, outreach and mobile services. An evaluation of the national HIV testing week campaigns showed that these campaigns have been very effective in terms of ensuring that the majority of people are reached are reached with HTC services¹⁷.

Munthali and Tippet¹⁷ also found that some people actually bypass the nearest health facilities and access HTC services a long distance from where they live. This is mainly because they do not want people to see them go for HTC services and they would like to be tested by counsellors who do not know them. Due to prevailing stigma and discrimination some people would want to be tested away from the nearest facility where HTC counsellors who do not know them will test them and they will be assured of confidentiality. It can be concluded that people who participated in this study were aware of HTC services, the different places where they could get HTC services and that barriers to accessing services do exist. HIV and AIDS programmes therefore need to take some of these factors into account if the uptake of HTC among adolescent girls is to improve.

Contribution of Authors

AM and DM designed the study including data collection. AM, PM and DM all analysed the data and wrote the manuscript and approved it.

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