ORIGINAL ARTICLE

ASSESSMENT OF VOLUNTARY CONFIDENTIAL COUNSELLING AND HIV TESTING (VCCT) SERVICE UTILIZATION IN GURAGE ZONE, SNNPR, SOUTH ETHIOPIA.

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ABSTRACT

BACKGROUND: *Voluntary confidential counseling and testing (VCCT) is one of the available strategies for control and prevention of HIV infection. HIV-VCCT provides a critical entry point for both HIV/AIDS prevention and care and support of HIV infected and affected individuals. Gurage zone has decentralized the service to woreda level. However, reports show that there was low utilization of the service. The objective of the study was to assess utilization of VCCT services in Gurage zone south Ethiopia.*

METHODS: *A cross-sectional community based study was carried out among people aged 10 to 50 years in Gurage Zone South Nations and Nationalities Peoples Regions (SNNPR) from October 13-28, 2004. A total of 657 participants were involved in the study from 52 Kebele in 12 woredas involving both urban and rural communities.*

RESULTS: *Overall, 13.5% of the study participants used VCCT service. Most people used the service outside Gurage zone. Twenty three percent of the respondents do not want to use VCCT service near their residences. Married subjects and those in the age group from 15-34 years used VCCT services more than the other counter parts and this difference was statistically significant (P<0.05). Subjects who had a positive attitude towards VCCT and other preventive methods against HIV infection used VCCT service significantly (P<0.05) more than their counterparts. Other background characteristics like educational status, sex, place of residence, religion, occupation of subjects and their knowledge about HIV/AIDS and VCCT did not show association with VCCT service utilization (P>0.05).*

The reasons for not utilizing VCCT services among others included: thinking that they are free of the infection, belief that it was not usual for other people to get screened except people who are preparing for marriage, distance of the VCCT site from residence and /or problem of transportation to the VCCT site, not knowing the presence of VCCT service, postponing it and fear of positive result and stigma.

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CONCLUSION: ***The study revealed that the community has high level of knowledge on VCCT and also good attitude towards it. There was also an indication that stigma is prevailing in the study community and is one of the barriers for utilizing VCCT services in Gurage zone. Strong behavior change communication involving various sectors and the community at the grass root level should be designed to make the maximum use of VCCT services as a preventive strategy in Gurage zone.***

KEY WORDS: ***Voluntary confidential counseling and HIV testing, Utilization***

INTRODUCTION

Global summary of the HIV/AIDS epidemic as of December 2002 showed that 42 million people were living with HIV/AIDS in 2002. Out of this, 29.4 million adults and children are living with HIV/AIDS in sub- Saharan region and 58% of HIV adult patients are living in sub – Saharan Africa. Of the nearly 31 million adults living with HIV infection worldwide, 90% reside in developing countries (1-3). From sentinel surveillance carried out on pregnant women in Ethiopia, the prevalence ranged from 20.2% to 42.7% (4- 6). Reports of the Ministry of Health showed that it has a gradual increase in the rural areas (7). According to available evidences the major mode of transmission is unprotected sex with multiple heterosexual partners (5, 8-10).

Strategies for control and prevention of HIV infection include IEC including voluntary counseling and testing and other medical strategies are using anti retroviral drugs for prevention of vertical transmission. However, studies demonstrated that in spite of high level of knowledge about risk factors of HIV/AIDS and other STDS, greater proportion of subjects do have high-risk sexual practices (11-13).

Experiences from Uganda showed that sero-positivity rates declined across all of the VCCT sites suggesting that VCCT can be implemented on a national scale in developing countries as a method of decreasing the incidence of HIV infection (14). Studies in Ethiopia on different population groups indicated that attitude, participation on control programme including voluntary HIV test was high. However, when it comes to the practice, success depends on the extent to which VCCT helped to curb the course of HIV epidemic and provide quality care to those already affected (15-17).

HIV/AIDS policy of Ethiopia has given due emphasis to behavior change communication in order to bring about the adoption of positive protective behaviors by the general public (4,6). VCCT is one of the behavior change communication strategies at an individual level. The strategic plan based on multicultural approach and decentralization of the control and prevention activities including voluntary testing and counseling is being introduced in the country (4,18,19).

As part of this initiative, fourteen VCCT centers were established in Gurage zone. However, except for those people who are intending to get married, utilization of the VCCT service by the general community in the zone was very low. The objective of the study was to assess utilization of VCCT services in Gurage zone south Ethiopia

METHODS AND MATERIALS

The study was conducted in the urban and rural communities of Gurage zone, South Nations, Nationalities and People's Regions (SNNPR), South Ethiopia from October 13-28, 2004. Gurage zone has a total projected population of 1,530,422, which is distributed in 12 Woredas. For the purpose of this study all permanent residents (people who lived in Gurage zone

those who were within 5-10 kilometers radius of the VCCT centers (service area) in each woreda were included in the study. The population residing outside the service area of the VCT center was excluded to avoid the effect of distance as a factor limiting service utilization. Subjects in the age groups 10-14 were included to assess their VCCT service utilization as these groups of the population were reported to be indulged in sexual activities (22,25,26). The maximum age of 50 years was taken as the most sexually active people are below this age (27).

Towns having a total population greater than 5,000 were taken to be urban based on the current organizations of rural peasant associations. Gurage zone has about 14 Voluntary Counseling and Testing centers, which were established as a means of control of the spread of HIV/AIDS. The fourteen VCCT Centers are distributed in to the different Woredas of the study area as follows: Each woreda has at least one VCCT center and in the case of three districts (Butajera, Wolkite Town and Cheha) there are two voluntary counseling and testing centers.

A cross-sectional study design was employed. The sample size was calculated using Epinfo version 2000 using an expected prevalence of VCCT utilization of 50%, taking equal sample sizes for both urban and rural strata which gave a total sample size of 657 subjects to be selected from the urban and rural areas. This gives 99% power at a confidence level of 95%. A total of 328 study subjects were allocated each of the urban and rural strata. Within each stratum, probability proportional to size was used to allocate the number of respondents to be enrolled from each Kebele within the stratum. The sampling units were households selected from each kebele by using systematic sampling technique. In both rural and urban communities after identification of the sample household, one person per household of those 10-50 years was selected using a lottery method.

The study participants were distributed over 52 kebeles in the rural and the urban communities, which covered 12 woredas and the two city administrations (Wolkite town and Butajera) of the Gurage zone. An interviewer administered Amharic version structured questionnaire was used to assess variables related to VCCT services. The questionnaire was written in English, translated to Amharic and back translated into English by a third person and it was pre-tested and revised accordingly before the main study.

Before the initiation of the quantitative data collection, qualitative data were generated using a focus group discussion (FGD) in order to refine the questionnaire and determine the general outlook of the study subjects, and the questionnaire for the quantitative study was modified based on the findings. Data on socio-demographic characteristics, VCCT service and knowledge and attitudes were assessed. Detailed methods on assessment of knowledge and attitude were explained elsewhere (25).

Permission of the Kebele leaders was secured through an official letter from Gurage zonal HIV/AIDS Prevention and Control Office. Subjects were clearly told about the advantages and disadvantages of participating in the study. Verbal consent of subjects was secured before the initiation of data collection and subjects were assured about the confidentiality of the information they gave. To maintain confidentiality the names of subjects were not registered on the questionnaire. The study results were communicated to Gurage zone HIV/AIDS prevention and control Office.

RESULTS

All the sampled respondents were interviewed giving a response rate of 100%. Out of the 657 participants included in the study, 342(52.1%) were males and the rest 315(47.9%) females giving a sex ratio of 1.1:1. About half (49.9%) of the study population was from the urban areas and the rest from the rural kebeles. Over half of the respondents 336(51.1%) were single followed by those who were married 298(45.4%) and the majority 430(64.6%) of them had attended schools from grade 1-12, followed by those who attended more than 12 grade 60(9.1%). The most frequent occupation was student 251(38.2%) seconded by farmer 100(15.2%) and merchant 96(14.6%), respectively (Table 1.) The majority 550 (83.7) of the study subjects was Gurage by ethnicity followed by Amhara and Oromo. Most 372 (56.6%) were followers of Orthodox Christianity followed by Muslim 222(33.8%). Regarding their age distribution, 452(68.8%) were in the age range between 15-34 years *(Table1).*

Background Characteristics (n=657)	Number (%)
Sex	
Male	342(52.1)
Female	315(47.9)
Age group	
10-14	79(12.0)
15-19	173(26.3)
20-24	113(17.2)
25-29	95(14.5)
30-34	71(10.8)
35-39	57(8.7)
40-44	36(5.5)
45-50	33(5.0)
Residence	
Urban	328(49.9)
Rural	329(50.1)
Marital status	
Single	336(51.1)
Married	298(45.4)
Divorced	8(1.2)
Widowed	15(2.3)
Educational status	
Illiterate	112(17.0)
Read & Write	55(8.4)
Grade 1-6	172(26.2)
Grade 7-8	121(18.4)
Grade 9-12	137(20.9)
Grade 12 & above	60(9.1)
Occupation	
Student	251(38.2)
Farmer	100(15.2)
Merchant	96(14.6)
House wife	106(16.1)
House maid	13(2.0)
Government employee	52(7.9)
Private job	4(0.6)
Other**	37(4.8)
Ethnicity	
Gurage	550(83.7)
Amhara	45(6.8)
Oromo	22(3.3)
Kembata	14(2.1)
Hadiya	13(2.0)
Others*	6(0.8)
Religion	
Orthodox	372(56.6)
Muslim	222(33.8)
Protestant	42(6.4)
Catholic	21(3.2)

***Dependents, no specified job, * Silte, Sudka, Wesene*

In an attempt to figure out the preferred places for voluntary confidential counseling and testing, study participants who utilized the VCCT services were asked as to where they got the service. It was fob-served that over half (52.8%) of the study participants used VCCT service outside Gurage Zone in most cases in Addis Ababa accounting for 38.2% of the total cases who utilized the VCCT service (Table-2)

Table 2. Place where VCCT was done among the study participants, Gurage zone, October 2004.

Place where the VCCT Was Used	Frequency	Percent
Addis Ababa	34	38.2
Welkite	18	20.2
Butajira	14	15.7
Ziway Health Center	7	7.9
Weliso	4	4.5
Shakiso	3	3.4
Others*	9	9.9
Total	89	100.0

**Others include: Mizan hospital, Wello, Dalocha, Koshe HC, Kombolcha, Soddo, Metahara, Loke, Endibir.*

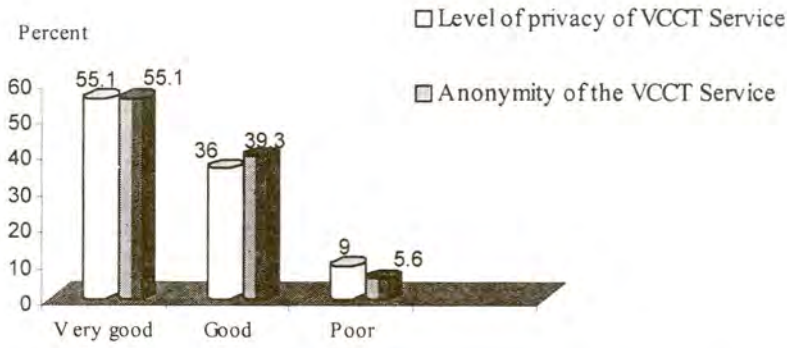

Figure 2. Level of privacy during counselling and testing and anonymity of result notification by VCCT services in Gurage zone, October, 2004(n=89).

Over half (55.1%) of study participants who used the VCCT services reported that both the level of privacy and degree of anonymity of the VCCT services they used were very good while the rest rate the service from good to poor (Fig.1.). The study showed that age of subjects, marital status and attitude of respondents towards VCT and HIV prevention methods were significantly associated with the service use ($P< 0.05$). Married subjects and those in the age group from 15-34 years used VCCT

service significantly (P<0.05) more than their counterparts. Other background characteristics like educational status, sex, place of residence, religion, occupation of subjects and their knowledge about HIV/AIDS and VCCT did not show association (P> 0.05) with VCCT service utilization (*Table 3 & 4*).

Table 3. VCCT utilization by the socio-demographic characteristics of study participants, Gurage Zone, October 2004.

Socio-Demographic Characteristics (n= 657)	VCCT service		P. Value
	Users No. (%)	Non-users No. (%)	
Sex			
Male	44(12.9)	298(87.1)	0.6
Female	45(14.3)	270(85.7)	
Age group			
10-14	1(1.3)	78(98.7)	
15-19	20(11.6)	153(88.4)	
20-24	18(15.9)	95984.1)	
25-29	19(20.0)	76(80.0)	0.001
30-34	16(22.5)	55(77.5)	
35-39	7(12.3)	50(87.7)	
40-44	7(19.4)	29(80.6)	
45-50	1(3.0)	32(97.0)	
Residence			
Urban	40(12.2)	288(87.80	0.3
Rural	49(14.9)	280(85.1)	
Marital Status			
Single	24(7.1)	312(92.9)	
Married	62(20.8)	236(79.2)	0.00
Divorced	1(12.5)	7(87.5)	
Widowed	2(13.3)	13(86.7)	
Educational status			
Illiterate	13(11.6)	99(88.4)	
Read & write	9(16.4)	46(83.6)	
Grade 1-6	25(14.5)	147(85.5)	0.9
Grade 7-8	15(12.4)	106(87.6)	
Grade 9-12	18(13.1)	119(86.9)	
> Grade 12	9(15.0)	51(85.0)	
Occupation			
Student	12(4.8)	239(95.2)	
Farmer	15(15.0)	85(85.0)	
Merchant	19(19.8)	77(80.2)	
House wife	22(20.8)	84(79.2)	0.4
House maid	2(15.5)	11(84.5)	
Government Employee	11(21.2)	41(78.8)	
Private employee	1(12.5)	7(87.5)	
**Other	7(22.6)	24(77.4)	
Ethnicity			
Gurage	75(13.3)	475(86.7)	
Hadiya	5(38.5)	8(61.5)	0.1
Amhara	5(11.5)	40(88.5)	
Kembata	2(14.3)	12(87.7)	
Oromo	1(4.5)	21(91.5)	
*Others	1(8.3)	11(91.7)	
Religion			
Orthodox	44(11.8)	328(88.2)	
Muslim	39(17.6)	183(82.4)	0.2
Catholic	2(9.5)	19(90.5)	
Protestant	4(9.5)	38(90.5)	

** *Dependents,* * *Silte, Sudka, Wesene.*

Table 4. VCCT utilization by the knowledge and attitude of study participants, Gurage Zone, October 2004.

Knowledge and attitude 0scores	Used VCCT service (n= 657)		P. Value
	Yes No. (%)	No No. (%)	
Knowledge*			
Good	81(14.5)	490(85.5)	0.6
Poor	8(9.3)	78(90.7)	
Attitude**			
Positive	84(14.6)	492(85.4)	0.038
Negative	5(6.2)	76(93.8)	

**Good Knowledge = Subjects who answered 60% or more of knowledge questions, **Positive attitude = subjects who responded positively to 60% or more of attitude questions 25.*

Though there was no significant association between educational level and VCCT service utilization, it is observed that subjects whose educational status was read and write utilized VCCT services the most compared to the rest categories of educational status (*Fig.2.*).

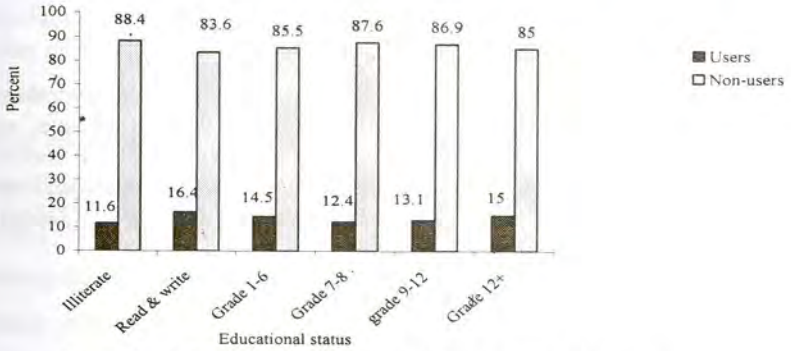

Figure 2. Trend of VCCT utilization by educational status in Gurage zone, 2004.

The most commonly reported reasons for utilizing VCCT services were to know ones status, being requested by fiancé and order of health professionals accounting for 51%, 40% and 35, respectively. The other minor reasons included for getting visa, aquarelle with spouse and being requested for a job each accounting for 2% (*Fig.3.*).

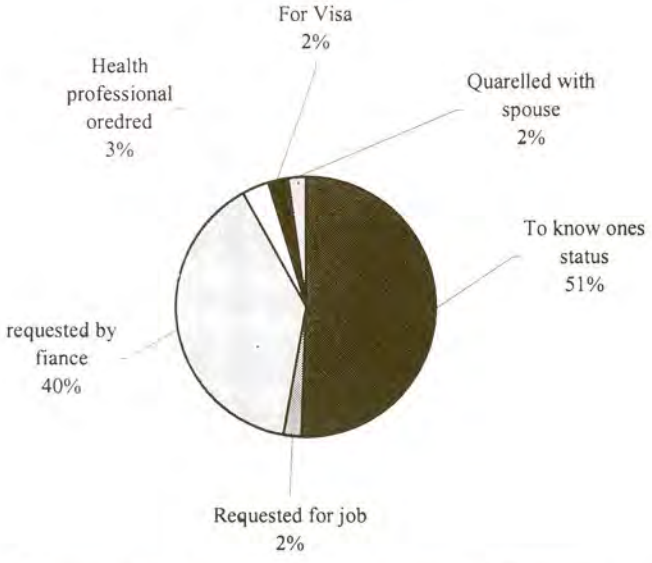

Figure 4. Reasons for using Volunatry confidential counselling and testing service utilization among study participants who had used the service in Gurage zone, october, 2004(n=89)

Reasons reported by the study participants for not utilizing VCCT services include: thinking that they are free of the infection, thinking that it was not usual for other people to get screened except people who are preparing for marriage, distance of the VCCT site from residence and /or problem of transportation to the VCCT site, not knowing the presence of VCCT service, postponing it, fear of positive result and stigma related to it (*Table5*).

Table 5. Reasons for not using VCCT service in Gurage zone, October 2004.

Reason (n=567)	Frequency	Percent
Thinking that I am free of the disease	269	47.4
I haven't thought of it	64	11.3
It is not usual to be screened except for people who are preparing for marriage	58	10.2
Distance of the VCCT site from my residence and /or problem of transportation to the VCCT site	37	6.5
Do not know the presence of VCCT service	30	5.3
Postponing it	28	4.9
Fear of a positive result	21	3.7
Fear of stigma and discrimination	16	2.8
Because I am already married	11	1.9
Thinking that it doesn't have any benefit	10	1.8
My family and friends discouraged me	8	1.4
Other factor related to the care provider (poor patient handling & leaking of secrets), service factors like long waiting time	8	1.4
Because I am still very young	7	1.2
Cost of the service	6	1.1
Lack of confidence in the skill of the counselors	5	0.9
No body reminded (notified) me	5	0.9
Thinking that the test is not reliable	5	0.9
Trusting ones partner	2	0.4
More than one reason	55	9.7

** More than one response is possible*

DISCUSSION

Voluntary confidential counseling and testing is an approach towards mitigating the consequences of HIV/AIDS through effective behavior change communication strategy. However, there are no accessible and acceptable facilities for carrying out VCCT services in most parts of the country. Even though VCCT services are universally available in Gurage zone, the prevalence of VCCT service utilization was 13.5%. Though this seems to be high figure compared to other places, given the situation that the service is universally available to every body free of charge, it is still lower than is expected.

Experiences of other countries had demonstrated that VCCT is the most effective strategy in bringing positive behavioral change on HIV/AIDS (14). The national HIV/AIDS policy focuses on intensification of IEC and expansion of VCCT services as part of the multi-sectoral

approach to HIV/AIDS prevention (4, 6, 18, 19).

Understanding of reasons underpinning this state of affairs is very critical in the implementation of VCCT service as an intervention strategy. This study assessed reasons determining the utilization of VCCT services in Gurage Zone by the general community. Utilization of health care facilities which is a health seeking behaviors is determined by myriads of factors broadly categorized as predisposing factors (underlying knowledge, attitude, values, beliefs, perceptions and culture), enabling factors (cost of the service, service waiting time, quality of the service, availability and accessibility) and re-enforcing factors (the opinions of important-others in the neighborhood and in the general community which includes; peers, sexual partners and family). The different factors associated with utilization of voluntary counseling and testing services were assessed in relation to the service delivery setup, the providers and the personal attributes of the study community from the aforementioned perspectives.

Similar to other studies (20-23), it was observed that there is a fertile ground for the implementation of VCCT as a preventive strategy as the majority of the study population has a positive attitude toward it. However, this study has also directly and indirectly indicated the existence of stigma as a barrier to the use of VCCT services as a preventive strategy. The findings of this study indicated that stigma related to HIV infection is becoming a barrier against the utilization of VCCT services. Some 23% of the study subjects preferred to utilize VCCT service, which is far from their places of residence, which is an indicator of the existence of stigma obliging people to hide themselves. Given the universal availability of VCCT services free of charge in every woreda of Gurage zone, moving to Addis Ababa and other places where probably there is a charge for the test indirectly indicates that there was a higher level of stigma that is becoming a barrier to the use of VCCT service in the local area and people had to move to other places for the test to keep their sero-status unrecognized around their residences.

Other reports from the study area indicated the presence of stigma in that 32.3% and 29.7% of the respondents believed in isolating the residential areas of people living with HIV/AIDS (PLWHA) and household food utensils of people living with PLWHA, respectively (25). A similar observation was made by a study in Gondar (24.) HIV/AIDS is a disease affecting everyone with high-risk practice. There needs to be openness, avoidance of stigma related to the disease and care and support of people living with HIV/AIDSHIV/AIDS. This will facilitate the success of efforts in using VCCT services as a preventive strategy.

Therefore, a more intensive and community based behavior change communication strategies needs to be in place to reduce and eliminate stigma and discrimination as a barrier to service utilization.

In this study, only about 55% of the study participants who used the VCT services reported that the level of anonymity and privacy of the VCT services they used were very good .The rest rated them to be good to poor. One of the most critical factors affecting health service utilization is the quality of the service, which can be assessed both at the central health facility level and at the peripheral health care facilities by different variables. For peripheral health facilities continuity of care, among others is highly important. In providing health care services like voluntary counseling and testing the level of privacy and anonymity rate top among the other variable which can be used to assess the quality of the service. Improvement of the quality of VCCT

service provisions including maintaining of anonymity and privacy during counseling and improvement of the skills of providers is another critical factor to be considered for promoting the utilization of services.

In conclusion, it was observed that 13.5% of the study participants had utilized voluntary counseling testing services, which is very high in the country's experience so far. In the light of universal availability of voluntary counseling and testing services in Gurage zone, a rather higher prevalence of VCCT utilization would have been expected. Even though the proportion of the population utilizing VCT services was higher compared to other areas, the majority of the population used VCT services outside Gurage zone. There is an indication that stigma and discrimination against people living with HIV/AIDS is a barrier to utilization of VCCT services in Gurage zone.

Strong Behavior Change Communication (BCC) based two-way communication strategies including: community enhanced community conversation, repeated discussions, individual counseling, dialogues, panel discussions, persuasions, community support group discussions with active involvement of the grass root community, religious leaders, people living with the virus, mass media, community based organizations, NGOs, and governmental organizations, is recommended to improve utilization of VCCT services in Gurage zone as prevèntive strategy against HIV/AIDS.

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