

## **Factors affecting accessibility and acceptability of Voluntary Counselling and Testing among High Risk Group (HRG) for Human Immunodeficiency Virus (HIV) in NWFP Pakistan**

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### **Abstract**

**Objective:** To identify the factors that affect the accessibility and acceptability of Voluntary Counselling and Testing (VCT) services among High Risk Groups for HIV in NWFP.

**Methods:** A cross sectional study was conducted in two districts of N.W.F.P. namely Peshawar and Abbotabad from August 2007 up till January 2008. A total of 153 participants were interviewed from high risk group by convenient sampling. The high risk group included commercial sex workers and injection drug users. Information was also gathered from in-charges of VCT centers. The data were collected in two phases, in the first phase data were collected in Peshawar while in the second phase data were collected in Abbotabad. Out of 153 respondents 102 (67%) were interviewed in Peshawar while 51 (33%) respondents were interviewed in Abbotabad.

**Results:** A total of 153 respondents were interviewed, that included commercial sex workers (123) and injection drug users (30). Mostly the participants were young with a mean age of  $24 \pm 8.8$  years. As far as transmission of HIV was concerned 57% reported that HIV was transmitted through sexual contact, 09% said it was transmitted by contaminated instruments and syringes and around 11% reported its transmission by eating with persons having HIV/AIDS while 04% said it was transmitted by hugging/kissing.

The level of knowledge about VCT was very low and about 27% of the participants had heard about VCT center. Only a small number i.e. 16 out of 153 participants visited VCT centres.

**Conclusions:** The study concluded that there is lack of awareness among high risk group regarding VCT and those who have heard about VCT (27%) only a few had visited the VCT center. The awareness campaign about VCT should target communities in general and high risk group in particular (JPMA 60:265; 2010).

### **Introduction**

Voluntary Counseling and Testing (VCT) is a key entry point to prevention, treatment, support and care for HIV/AIDS. Voluntary counselling and testing are essential components of HIV prevention and care programmes. The World Health Organization defines voluntary HIV counseling and testing as a confidential dialogue between a client and a care provider aimed at enabling the client to cope with stress and take personal decisions related to HIV/AIDS.<sup>1</sup> The UNAIDS also explains that VCT is the process of providing counseling to an individual to enable him or her to make an informed choice about being tested for HIV. This decision must be entirely the choice of the individual, and he or she must be assured that the process will be confidential.

According to UNAIDS estimates, about 85,000 people, or 0.1 percent of the adult population in Pakistan, are infected with HIV.<sup>2</sup> As of September 2004, only some 300 cases AIDS and 2,300 cases of HIV infection were reported to the National AIDS Control Program (NACP).<sup>3</sup> Uptil now Pakistan is considered a low prevalence but high-risk country now because at least one of the high risk group i.e., intravenous drug

users, has gone beyond a 5% prevalence rate, Pakistan is at the next level of having a concentrated epidemic.<sup>4</sup>

VCT is now acknowledged within the international arena as an effective and pivotal strategy for both HIV/AIDS prevention and care, and is also a principal entry point to care and support for people living with HIV/AIDS (PLWHA).

There is a strong evidence that voluntary HIV counseling and testing can affect sexual behaviours<sup>5,6</sup> and a multi-country trial suggested that VCT is cost-effective and efficacious in promoting behaviour change, particularly in high HIV prevalence settings<sup>7</sup> and VCT can even lower HIV incidence rates.<sup>8</sup>

Knowledge of HIV status alone is not adequate. Early diagnosis has many potential benefits to the individual and society, and the formation of appropriate linkages between VCT and prevention, psychosocial support, and medical care is a major challenge in terms of maximizing benefits.<sup>9</sup> Linking of VCT with care, and emphasising the positive consequences of VCT as well as providing high quality VCT services may increase the number of people seeking VCT.<sup>10</sup>

In Sub-Saharan Africa, treatment options are for most

HIV-infected persons still restricted to opportunistic infections, but efforts are being made to make effective therapy to reduce vertical transmission more widely available to pregnant women.<sup>11</sup>

Majority of countries where HIV is highly prevalent are also the poorest, VCT is often not widely available due to a lack of resources. This scarcity of information about VCT is unfortunate because people affected by HIV/AIDS want HIV counseling and testing services for future planning (including planning for marriage and children), emotional support, medical services, and other referral services.<sup>12</sup> It is shown that VCT is instrumental in bringing about behavioural change, reducing unprotected sex and helping reduce the incidence of HIV.<sup>13</sup>

National VCT Guidelines for Pakistan were developed by National AIDS Control Programme.<sup>14</sup> The study aimed to identify the factors that affect the accessibility and acceptability of VCT services among High Risk Group in NWFP and to give recommendations based on findings.

## Methods

A cross sectional was conducted in 2007, in two cities of NWFP province, where VCT services were available, namely Abbotabad and Peshawar. The participants included subjects from high risk group as commercial sex workers (CSW) and injection drug users (IDU). The commercial sex workers comprised of male sex workers (MSW), female sex workers (FSW) and eunuch sex workers (ESW). ESW are called hijras in local language. The age of the participants ranged from 15 to 45 years. A brief interview was also conducted from the incharge/ head of VCT center in Peshawar (two centers) and Abbotabad (one center).

### Sampling technique:

A total of 102 interviews were conducted from the high risk group in Peshawar and the rest i.e. 53 interviews were conducted in Abbotabad. Among the 102 interviews from Peshawar 30 were conducted on MSW, 31 on FSW, 21 on ESW/Hijras and the remaining 20 on IDUs. Of the 51 interviews conducted in Abbotabad, 15 were on MSWs, 16 on FSWs, 10 on ESWs/Hijras and the remaining 10 on IDUs. Convenient sampling technique was adopted.

As high risk group population is mostly hidden, one person from the group was approached and inducted in the study as social mobilizer.

The data were collected in two phases, first from Peshawar and then from Abbotabad.

A brief interview was conducted from the incharge/ head of VCT center in the two districts.

A structured questionnaire was used to gather the information. Ten percent of the sample size were pre-tested.

Informed consent was obtained verbally from the participants before starting the interview.

The questionnaire was translated into Urdu language. The variables related to socio-demographic factors were age, residence, marital status, and educational level. Knowledge about HIV/AIDS included source of information, its transmission and prevention, place where HIV test was done, risk of contracting HIV, HIV test done, heard of VCT and visit to VCT center. Attitude towards acceptance of VCT, distance of VCT, stigma and discrimination, perceived benefits, perceived barriers, availability of medical care for HIV/AIDS patients, availability of ARV for HIV/AIDS patients, availability of trained health personnel, VCT provided for free of charge/or on charge, offering VCT at ante natal care, fear of the result of HIV test and any suggestions.

The variables related to VCT center incharge were number of staff members, availability of male/female counsellor, registered male/female HIV patients, ARV medicine provided at center, ARV medicine adequate and free of cost, HIV test done at center, name of test and whether provided free of cost, provision of counselling services and any suggestions.

Data were entered using computer software package Epi Info 6.04d.<sup>15</sup> and analyzed using computer software package SPSS 12.0 (Statistical Package for Social Sciences).<sup>16</sup> The association of high risk group with different variables were done using chi square test at  $p < 0.05$ .

## Results

A total of 153 high risk group persons were interviewed. Out of these 102 (67%) were interviewed in Peshawar while 51 (33%) respondents were interviewed in Abbotabad. The interview was not conducted further from those participants who replied that they neither heard of nor visited a VCT center. They were explained about the location and functions of VCT center before asking questions about VCT.

Mostly the participants were young with a mean age of  $24 \pm 8.8$  years. Sixty three percent of the respondents had never married. Fifty-four percent of the participants had no formal education while less than 1% were graduates. Among the high risk groups MSW were the youngest of all (18 years). Almost 90% of ESW/ Hijras had never married.

Ninety-one percent of the participants reported that they had heard of HIV/AIDS, with 36% through the media and 33% from friends. Forty three percent reported that a healthy looking man could have HIV infection. As far as HIV transmission was concerned, 57% reported that HIV was transmitted through sexual contact, 09% said it was transmitted by contaminated instruments and syringes and around 11% reported its transmission by eating with persons having HIV/AIDS while 04% said it was transmitted by

**Table-1: Knowledge of High Risk Group regarding HIV/AIDS.**

Variables	IDU	MSW	ESW	FSW	Total	p-value
<b>Heard of HIV/AIDS</b>						
Yes	29	35	30	46	140	0.015
No	1	9	1	1	12	
Don't know	0	1	0	0	1	
<b>HIV in healthy looking man</b>						
Yes	12	11	12	21	56	0.110
No	7	7	9	6	29	
Don't know	8	20	9	9	46	
<b>Place where HIV test done</b>						
Hospital	15	13	15	18	61	0.019
Laboratory	8	1	1	1	11	
<b>Risk of contracting HIV</b>						
Yes	19	5	11	12	47	0.000
No	10	27	15	27	79	
Don't know	1	11	5	8	25	
<b>HIV test done</b>						
Yes	16	4	12	8	40	0.000
No	13	33	17	37	100	
Don't know	0	4	1	0	5	

IDU: Injection Drug User. MSW: Male Sex Worker. ESW: Eunch Sex Worker. FSW: Female Sex Worker.

hugging/kissing.

Thirty four percent of the participants replied that HIV could be prevented by abstinence from sex, 27 % by using condoms and 09 % said it could be prevented by not eating with persons having HIV/AIDS.

Almost 31% of the participants responded that they had risk of contracting HIV, Among the respondents 69 (46%) knew the place where HIV test was done and 61 (85%) responded that the place was hospital.

The variables regarding knowledge of high risk group i.e., place where HIV test is done, risk of contracting HIV and if HIV test was done were all significant at  $p < 0.05$  while the variable, healthy looking man having HIV was not statistically significant. The variables regarding transmission and prevention of HIV were also significant  $p = 0.001$ .

The total number of high risk group who had heard about the VCT center was 42 (27%) out of the total sample size of 153. Of these 42 only 16 had visited the VCT center. These variables were statistically not significant.

**Table-2: Knowledge of High Risk Group regarding VCT center.**

Variables	IDU	MSW	ESW	FSW	Total	p-value
<b>Heard of VCT center</b>						
Yes	11	6	13	12	42	0.060
No	19	36	18	32	105	
Don't know	0	3	0	3	6	
<b>Visited VCT center</b>						
Yes	4	1	4	7	16	0.313
No	7	5	9	5	26	

IDU: Injection Drug User. MSW: Male Sex Worker. ESW: Eunch Sex Worker. FSW: Female Sex Worker. VCT: Voluntary Counselling & Testing.

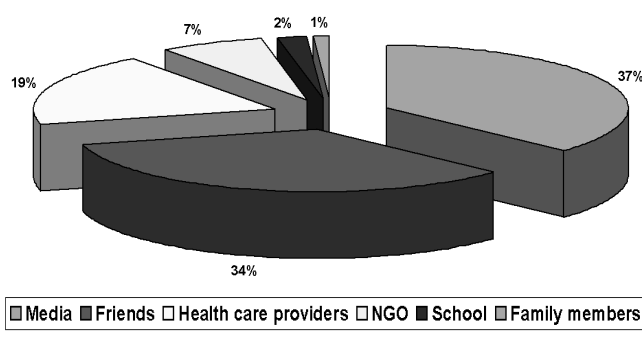


Figure 1: Sources of information regarding HIV/AIDS.

VCT/ARV center at Hayatabad Medical Complex(HMC) Peshawar: The center was run by the government. The total number of the staff working was five. They had both male and female counsellors who were providing counseling services. The total number of registered HIV positive patients were 187 out of which 135 were males and 52 females. The ARV medicine were present and distributed to HIV/AIDS patients free of cost, the medicines were supplied by NACP. The HIV test done was rapid test and was free of cost. While for confirmation it was sent to Lady Reading hospital. The suggestion provided was that the confirmatory test should be made available at center.

Behtar Kal, DOST Foundation Peshawar: This VCT center was run by an NGO. The total number of staff working was seven. They had both male and female counsellors, who were providing counseling services. The total number of registered HIV positive patient was one. As the ARV medicines were not provided at the center, so the cases were referred to ARV/VCT center at HMC Peshawar. The HIV test

done was rapid test and was free of cost. The suggestion provided was that a medical doctor should be available at the center and sought active collaboration with public sector.

Behtar Kal, Abbotonian Medical Association Abbotabad: This VCT center was run by an NGO, with seven staff members with both male and female counsellors providing counseling services. The total number of registered HIV positive patients were 11 (7 male and 3 female). The ARV medicine were not provided at the center and the patients were referred to Pakistan Institute of Medical Sciences, Islamabad. Rapid HIV test was done without any charges. The suggestion provided was that the facility of confirmatory test should be made available at the center.

## Discussion

The study was aimed at finding factors associated with acceptability and accessibility to VCT services among high risk group. It depicted that the major factor that was associated with high risk group was lack of awareness regarding VCT. The findings of this study were in accordance to a study conducted in Lesotho.<sup>17</sup>

Studies conducted in African countries have shown that awareness campaigns increased the VCT utilization. A study conducted in Kenya revealed that VCT uptake increased from an average of 56 per month in the 8 months prior to the awareness campaign, to 165 per month in the 3 months after the initiation of the awareness campaign.<sup>18</sup> In another study conducted in Zambia the awareness of the confidential, free VCT services being offered at the health centers increased significantly among all community respondents, from 45 percent of all respondents at baseline to 79 percent at the end of the study.<sup>19</sup> As the main finding of the study was low utilization of VCT, mainly due to lack of awareness among high risk group, it is important that campaigns should be launched to signify the role of VCT in prevention and care of HIV among general public and specially in high risk group.

A Nigerian study showed that most respondents were aware of VCT through health workers, mass media and friends.<sup>20</sup> Our study participants acquired awareness about HIV/AIDS through mass media, friends and health care providers. This source can thus be used for both community and high risk groups.

The major concern is that the high risk group involved in risky behaviour is unaware about VCT and this is dangerous for them and their clients for contracting HIV infection. This study also revealed the misconceptions regarding HIV transmission and prevention. It showed that around 11% of the participants believed the HIV can be transmitted by eating with persons having HIV/AIDS. It is evident that misconceptions can prevent people from taking appropriate action. These should be eradicated to curb the spread of the

HIV/AIDS epidemic. A study conducted in Botswana revealed that respondents who believed that HIV infection could be transmitted through witchcraft or mosquito bite or sharing a meal<sup>21</sup> with people living with HIV/AIDS (PLWHA) were more likely to stigmatise and discriminate against them than other people. Our study also found that people having no formal education had higher misconceptions about HIV transmission than those having formal education.

Although VCT centers were established in N.W.F.P. in the year 2005 and are new to the programme, yet the significance of VCT cannot be underestimated. Although clinical trials with the antiretroviral medications zidovudine and nevirapine have created the possibility of offering an affordable and feasible intervention worldwide, yet the role of VCT services are important in preventing and controlling HIV/AIDS infection.

## Recommendations

The awareness campaign should target communities in general and high risk group in particular regular sessions on VCT should be held within the high risk group and HIV campaign programmes should include strategies aimed at arousing high risk group interest in VCT.

## Acknowledgement

The study team is highly grateful to the technical and financial support provided, by (SGS 07/79), Tropical Disease Research, EMRO, World Health Organization.

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