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Situational Analysis on Voluntary Counseling and Confidential Testing in HIV/AIDS Patients Referred to Behavioral Center in Imam Khomeini Hospital, Tehran, Iran

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Abstract

Background and aims: Behavioral counseling centers are the main health organizations which are responsible for providing treatment and care for the patients living with HIV (PLWH). HIV-positive patients receive services through a unique counseling process called voluntary counseling and confidential testing (VCCT). Although there are reports regarding VCCT evaluation from other countries, not such an evaluation was found in Iran until this study, to the best of our knowledge. The study was performed to fulfill this necessity.

Methods: Using consecutive method sampling, 314 subjects were sampled from the patients referred to Behavioral Counseling Center of Imam Khomeini hospital, Tehran, Iran. A combination of process and output evaluation of VCCT was performed in the biggest Behavioral Counseling Center of Iran at Imam Khomeini hospital, Tehran, Iran. Data were analyzed using descriptive statistics (percentages and averages).

Results: Participants' response rate was 95.54%. Two shortcomings were found in the counseling process. Cronbach alpha reliability coefficient for this scale was 0.899, which was a desirable reliability for the questionnaire. As the main finding of the study, 48.33% of patients were not using antiretroviral medications regularly. An average number of patients (2.88) had HIV related stigma and fear of disclosure. In a quantitative study before testing in the study, it has been found that HIV patients did not have adequate information about their disease.

Conclusion: Defects in the consultation process for the patients with HIV infection in the hospital were concluded. The quantity of consulting services for patients was in low level; therefore it is essential to improve consulting services for health promotion of the HIV patients.

Keywords: HIV/AIDS, Voluntary counseling, Confidential testing, VCT/VCCT

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Introduction

Voluntary counseling and confidential testing (VCCT) for HIV is known universally as an effective and important strategy for the prevention and treatment of AIDS.¹ VCCT is considered as the beginning of HIV treatment and also as an important element for every national program; thereby deserving attention and discussion.² VCCT along with quality assurance can lead to satisfaction and trust in patient and finally result in behavioral changes during treatment.³-5

During the VCCT process, individuals improve skills to cope with the occurred stress and are tested, while they are fully aware of the disease and future risks.⁶ VCCT is also crucial for providing available settings, emotional and psychological support, and increasing motivation to

prevent high risk behaviors.8

Stigma and discrimination associated with HIV occurs due to misunderstanding caused by infection or fear of clinical manifestation or death and this may lead to discourage from following the treatment.^{4,5} Moreover, the stigma associated with HIV is a serious barrier for VCCT, and effectiveness of prevention and care services.⁷ Provided services in VCCT centers can lead to early diagnosis and timely referral of patients to receive clinical care and psychological support.⁶

Despite the potential benefits of VCCT, there are some other contributing factors that could play an effective role in the uptake of VCCT, including: sociodemographic characteristics, access to clinic, 9,10 knowledge and awareness of HIV/AIDS matters,

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awareness of being at high risk for infection, perceived services of VCCT,^{11,12} and psychological factors such as stigma and discrimination related to HIV/AIDS.^{9,13-15}

Fear for test result leads to concern and fear of death in this group, and this is a more important obstacle for access to VCCT services.⁷ The aim of this study was to evaluate the quality of provided services for the patients living with HIV (PLWH) infection who had referred to VCCT center in Imam Khomeini hospital. Data of this research can result in proper understanding of counseling process in such a way that we could identify barriers, provide more suitable care, reduce fear of HIV testing, and increase uptake of services.

Methods

Three hundred fourteen patients of behavioral counseling referred to Imam Khomeini hospital participated in this study and their samples were used sequentially. Tools for collecting data included: part 1: demographic characteristic, part 2: questionnaire related to survey on the process and quality of patients' counseling. In other words, the process of counseling HIV positive patients about previous stages of consultation and the process of consultation was assessed. The objective of this questionnaire for seeking the first consultation included:

- 1) Characteristic of patient consulting
- 2) Characteristic of consultant
- 3) Methods of consulting
- 4) Assessment of process of consulting (before, after, follow up)
- 5) Assessment of environment of consulting

After collecting data, to describe the characteristics of research unit, the frequency table, graph, and average was used. In the current study, the scale reliability coefficient was calculated as 0.889 using Cronbach α which represented a suitable reliability.

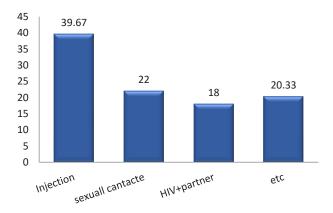
Results

A number of 314 questionnaires was distributed, from which 300 were completed and analyzed. Most participants were in the group age of 25-44 years, 67 (64%) were male, and 129 were high school graduates and about 50% of participants were married (Table 1). Figure 1 shows the distribution of risky behaviors have lead to HIV. Injection was the most common reason of obtaining HIV/AIDS.

The patients received treatment, care, voluntary counseling and confidential HIV testing from VCCT service, covering pre and post-counseling education (Table 2). that the results showed that 128 individuals (42.67%) stated their consent for provided precounseling education, though for post-counseling, the number of individuals increased to 241. Maintaining

Table 1. Demographic Characteristics of Participants

Variable	Number	Percent
Sex		
Male	106	35.33
Female	194	64.67
Age (y)		
15-24	15	5
25-34	114	38
35-44	117	39
>45	54	18
Marital status		
Single	104	34.67
Married	150	50
Divorced	29	9.67
Widowed	17	5.67
Education		
Illiterate	19	6.33
Elementary	105	35
Under diploma	129	43
Diploma and bachelor	39	13
Master and PhD	8	2.67



 $\textbf{Figure 1.} \ \textbf{Distribution of High-Risk Behaviors Leading to HIV Infection}.$

privacy by consultant was confirmed by 136 individuals (45.33%), and 140 individuals (46.67) stated concurrent privacy respect in our VCCT.

Table 3 has demonstrated the results of counseling using 1 5-point scale (1-5 score) for determining the satisfaction from counseling.

Discussion

In this study, we found that despite high level of knowledge about HIV transmission and the necessity of prevention, only 66% of participants had behavioral counseling. According to Programa Nacional de DST e AIDS, Ministério da Saúde 2004 report, and the study of Souza Junior et al, limited access of the health system to HIV diagnosis causes the individuals to refer to some places for HIV testing, which are not recommended by

Table 2. Process of Consultation for Behavioral Patients

Variable	No. (%)
1-Combination of anti-retroviral therapy and counselin	g
Use of medication	233 (77.67)
Not using medication	29 (9.67)
Recent discontinuation	11 (3.67)
Medication use in the future	27 (9)
2- Type of medication use among patients with HIV inf	ection
Regular	155 (51.67)
A little regular	62 (20.67)
Irregular	25 (8.33)
Not use	57 (19)
3- Referral of patients with HIV infection for primary co	onsultation
Physician	158 (52.67)
Friends and acquaintances	26 (8.67)
Laboratory technicians	17 (5.67)
Future consultation postponed	99 (33)
4- Consulting support for patients with HIV infection	
Counseling	198 (66)
Lack of consultation	73 (24.33)
Consultation begun with pharmaceutical treatment	27 (9)
Future consultation postponed	2 (7)
5- Rate of consultation for patients with HIV infection	
Adequacy of consulting for participants	118 (39.33
Lack of sufficient consulting for participants	63 (21)
Ignorance of consulting for participants	88 (29.33)
Lack of consultation for participants	31 (10.33)
6- The first place for counseling before testing	
Clinic	19 (6.33)
Laboratory	82 (27.33)
Hospital	181 (60.33
Counseling clinic	17 (5.67)
7- Counseling profile of the first person before testing	
Physician	142 (47.33
Nurse	19 (6.33)
Counselor	131 (43.67
Psychiatrist	5 (1.67)
8- Primary testing of applicant	
Client	144 (48)
Physician	188 (39.33
Counselor	28 (9.33)
Family members	8 (2.67)
9- Result profile of the primary testing	
Physician	113 (37.67)
Nurse	12 (4)
Counselor	119 (39.67)
Laboratory Technician	55 (18.33)

health services, and sometimes may cause violation from ethical principles. This may also cause the individuals to perform the test in blood banks at work places or during late pregnancy or childbirth.^{16,17}

The study of Lohn indicated that there were many negative consequences such as doubtful, risky counseling or even nonexistent counseling, ¹⁸ and the studies of Menezes Succi¹⁹ and Segurado et al²⁰ showed that the decrease in the efficacy of prophylactic measures between mother and child was another negative consequence of invalid places of testing.

Several studies demonstrated that initiation of antiretroviral (ARV) drugs in advanced stages of disease because of inappropriate testing situations increase the number of new infections and death from AIDS, increase the risk of probably transmission by blood transfusion, and result in positive HIV in testing by blood banks through blood donation from at-risk individuals in the window period.²¹⁻²⁴

Studies by Bassichetto et al and Pechansky et al indicated that one of the positive aspects of the VCCT services was their capability to help to promote the unprejudiced access to HIV diagnosis, as evidenced by great number of HIV-positive individuals, with an emphasis on implementation of epidemiological and socio-demographic studies on VCCT users' profiles.^{25,26}

Based on the study of de Almeida & Labronici, and World Health Organization/Joint United Nations Program on HIV/AIDS, primary care of most vulnerable individuals is related to the activity and organization provided by these services, to minimize stigma and discrimination and to facilitate decision making in individuals to demand the HIV testing.^{27,28}

Some different cross- sectional studies in various regions of Brazil demonstrated that 72.7% of homosexuals,²⁹ 34.2% of injecting drug users,³⁰ and 63.5% of sex workers³¹ have never had an HIV testing and relevant role of VCCT on most vulnerable groups.

Leta et al stated there was established association between reported risky sexual behaviors and VCCT utilization both in rural and urban strata, whereas being married and having comprehensive knowledge of HIV/AIDS were associated significantly with VCCT utilization in urban areas, and there was a negative association between being Muslim and VCCT utilization. Therefore, in Ethiopia, utilization of VCCT services among men was low, with a significant rural-urban difference. Despite socio-demographic variables, socio-economic position, residence, religion and age, HIV related stigma and risky sexual behavior were found as the most important determinants of VCCT utilization among the men of 15-59 year-old.³²

A possible explanation for lower rate of testing in Muslims, proposed by Tesfaye et al, could be higher adherence of religious rules, which may give protection against sexual transmission of HIV.³² Gray et al stated that even though polygamy was allowed for Muslim men and divorce was relatively easy, extramarital sex was prohibited and maybe was more important for the potential risks of both former and later marriages.³³ Bastani et al represented that alcohol consumption is forbidden in Islam and also engaging in risky sexual behavior related to alcohol is prohibited.³⁴ According to

Table 3. Average Surveys About the HIV Patients' Counseling Quality

Consultation Process and the HIV Patients' Counseling Quality	Average
10 - Satisfaction of client with counselor	3.28
11 - Counselor compelling reasons direction HIV doing experiments clients	3.43
12- Compatibility with the disease after talking with counselor	3.24
13 - Preferring to continue the counseling sessions with the previous counselor	3.36
14- Being confidant in client's private matters	4.24
15 - Impartial behavior of counselor towards client	3.92
16- Ability of consultant to interact with client	3.88
17 - Advise and counseling proposed in counseling session by a consultant	3.81
18 Good feel of client after counseling session	3.38
19 - Clients bring up their problems with counselor	3.36
20- Counselor provides logical solution for clients	3.45
21 - Knowing useful the counseling session	3.62
22 - Providing information and counseling education before testing	2.38
23 - Providing information and counseling education after testing	3.62
24 - Coordination of consultant with clients	3.53
25 - Compatibility of patients' problems with their disease after the counseling	3.27
26 – Usefulness of consulting content for client	3.43
27 - Finding purpose in life after counseling sessions	2.88
28 - Interest of client to continue counseling session	3.33
29- Satisfaction with the environment or the space of consultation	3.22
30 - Satisfaction with the behavior of hospital staff	4.06
31- Duration of waiting time for being visited	2.78
32 - Level of clients' satisfaction with counseling session	3.40
33- Clients' satisfaction with secrecy of counselors	4.13
34 –Counselors' services to be known as useful	3.61

Siegfried et al, all Muslims should be circumcised which decrease the HIV transmission.^{33,35} Therefore, Muslim men have a lower self-perceived HIV risk and hence are less motivated to be tested for HIV.

Some literature on sub-Saharan Africa represented that generally, routine HIV testing was more accepted in most Sub-Saharan African countries. However compared to women, it seemed that fewer number of men accepted the service and HIV tests were done in areas of this new model services. 36,37

A review study in South Africa by Skinner and Mfecane showed that HIV/AIDS- related stigma made the pandemic out of the view and reduced any efforts of society and individuals for behavioral changes.³⁸

According to the report of Ministry of Health from 2003, and an article by Voluntary HIV-1 Counseling and Testing Efficacy Study Group (VCTSG), high rates of new HIV infections in men in general population of Ethiopia were among the people aged 15-34 years. Thus the most cost-effective way of reducing the HIV/AIDS epidemic is assumed to be VCCT as it has the primary preventive effects, and is focused on motivation of this age group to use VCCT services.^{39,40}

In the study by Abamecha et al, there was a high intention to use VCCT services. Moreover, the blood test done by healthy workers themselves indicated the existence of fear of HIV status and high percent of risk for HIV infection.⁴¹

Some studies such as study of Anthony and colleagues on Ethiopian and Tanzanian people, implemented by Jimma zone health department, revealed that there was no substantial statistical association between socio-demographic factors and determination to use VCCT.⁴²⁻⁴⁴

The study of Sherr and colleagues in Zimbabwe revealed that conceived risk was not associated with behavioral attempt. Health care workers are expected to have higher knowledge about HIV/AIDS than the other population groups which may lead to insignificant association, because it might be influenced by education and knowledge of VCT more than risk perception of this group. ⁴⁵ The study of Abamecha et al presented strategies to empower health professionals to resist against social pressure and target programs to change negative attitude to VCCT use, which could increase determination of health professionals to use VCCT. ⁴¹

Conclusion

There is a substantial need to promote community's awareness on provided VCCT services. With special attention to health care providers, and to decrease HIV testing fears, more accessible voluntary counseling would improve the individuals' insight about HIV, compendious

consulting, and obviously confidential testing.

Ethical Approval

Human Subjects Review Board of Tehran University of Medical Sciences reviewed and approved the study protocol. In order to consider ethical principles, the study subjects were assured that all collected information will be confidential and anonymous.

Conflict of Interest Disclosures

None.

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