Original Article

PUBLIC PERCEPTION ON IMPORTANCE OF SCREENING FOR HIV IN VOLUNTARY COUNSELLING AND TESTING (VCT)

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Abstract

The aim of this study was to obtain public perception on importance of screening in VCT and possible barriers. A validated questionnaire was utilized for this study whereby three variables of the study (patient perception, importance of screening and voluntary counseling and testing) were measured using a 5-point Likert scale. 500 questionnaires were distributed to target respondents of registered clinics in Malaysia. The data were analyzed utilizing SPSS software version 21.0. There were 402 completed and usable responses received, which represented an 80.4% response rate. This study showed both patient attitudes and importance of screening a direct relationship with voluntary counseling. Health information utilizing simple language and attractive diagrams were important. Similarly, patient attitudes played a major role in generating interest in health information in private clinics. Perceived Barriers towards HIV screening in VCT canters (PBV) and the Intention to screen at VCT canters (ITSV) are important among patients in private general practitioner clinics as well as general public.

Keywords: Screening of HIV in VCT, patient attitudes, general public, Malaysia.

Introduction

Chronic diseases such as AIDS / HIV infection constantly require screening for early detection (1). HIV infection is one of the most common mortality factors globally. HIV continues to be a major global public health issue. In 2016, an estimated 36.7 million people were living with HIV (including 1.8 million children) – with a global HIV prevalence of 0.8% among adults Around 30% of these same people do not know that they have the virus (2).

The vast majority of people living with HIV are located in low- and middle- income countries, with an estimated 25.5 million living in sub-Saharan Africa (2). Among this group 19.4 million are living in East and Southern Africa which saw 44% of new HIV infections globally in 2016 (4). The United Kingdom (UK) has a relatively small HIV epidemic, with an estimated 89,400 people living with HIV in 2016. This translates into an HIV prevalence of 1.6 per 1,000 people (3).

In the same year, 5,164 people were newly diagnosed with HIV, an 18% decline from 2015. This is due to a sharp decrease in diagnoses among men who have sex with men in London, as well as a continued gradual decline in

diagnoses in heterosexual men and women who were born abroad. HIV has turned into a significant general health challenge worldwide in the previous couple of decades. To counter the spread and improve prognosis, screening practices have been advocated by many public health experts over the decade (4).

HIV continues to pose a major public health problem in Western Europe (3). More than half a million people are living with an infection that remains incurable and requires costly lifelong treatment; many people remain unaware of their infection, and thousands of new infections continue to occur every year. Migrants from countries with a high prevalence of HIV/AIDS, notably sub-Saharan Africa, bear a disproportionate and increasing share of HIV throughout Western Europe and in most countries, account for the majority of heterosexually acquired HIV infections diagnosed in recent years (5).

VCT stands for voluntary counselling and testing (6). VCT is when a person chooses to undergo HIV/AIDS counselling so that they can make an informed decision about whether to be tested for HIV. VCT has created a platform for people to seek counselling for their concerns and problems relating to the virus and other issues. "it provide pre- and post-counselling as well as anonymous testing (7). VCT has similarly been recognized as an essential HIV counteractive action methodology in serodiscordant couples, similarly goes about as a passage point to the avoidance of mother-to-kid transmission of HIV program. It was shown in an assessment on gold excavators in South Africa in 2003 that dread of testing positive for HIV and the potential outcomes, especially slander, and illness and passing, were significant boundaries to VCT.

In Malaysia, established in 1987, PT foundation is a community-based organisation that aims to help minimise the rate of AIDS / HIV infection, provide care and support for people living with HIV/AIDS, as well as to reduce discrimination (7). The government is encouraging all to come forward to be tested for HIV. It believes that if many get tested, even though may not be sick, this will help to lessen the amount of stigma associated with the HIV test (8). Also, if find out as an earlier stage, that we are infected with HIV. Counselling is a private conversation with a specially trained person aimed at helping you to help yourself (9), but still the attendance for screening is very low.

Thus to address the low attendance in VCT, this study was undertaken to obtain public perception on importance of screening in VCT and possible barriers (8).

Methodology

Study Design & Context

This study was conducted via a cross-sectional survey design. It was carried out among the patients from private clinics and general public in central region of Peninsular Malaysia. Out of them, surveys were conducted among 40 clinics in this region and a total of 500 questionnaires were distributed.

Participant identification and recruitment

Self-administrated questionnaire was distributed to participants fulfilling inclusion criteria in Selangor, Wilayah Perseketuan Kuala Lumpur and Negeri Sembilan. The inclusion criteria were, local citizens of Malaysia, those who gave consent to take part in the study, mentally stable and patients that has been to any general practitioner (GP) clinics for at least three times in the past 1 year. Those excluded were patients suffering from certain mental illnesses, did not consent to take part in the study and Non-Malaysian respondents. A sample size of 380 participants was deemed adequate to obtain significant findings based on Krejzie and Morgan population table. To account for a good response rate, study population was targeted at 600 respondents

Instrumentation and data collection

The questionnaire consisted of 34 items and was divided into separate sections. The first part consisted of demographic details, whereas the second part of 7 items explored the possible reasons that impede screening for

HIV in VCT centers. The third section contained 12 items is multi-dimensional scale of social support the fourth section contained 5 items determining perceived barriers towards HIV screening and final section consist of 4 items, seeks intention to screen for HIV study used a 5-point Likert scale. Content validity was assessed by a panel of general practitioners and academics in public health to select the best questions in terms of clarity, accuracy of the items used for public perception on importance of screening for HIV in VCT. Seven items were excluded following content validity assessment. The finalized version was used for data collection in the general sample.

Out of the 500 questionnaires distributed to the patients in 40 private clinics and general public, 402 questionnaires were returned completed, yielding a response rate of 80%.

Statistical analysis

Data analysis was done using SPSS Version 22.0. Descriptive and inferential analytical tests were computed using this software. Statistical significance level was taken at the p value < 0.05. For bivariants analysis, the data were analyzed by using Pearson Chi-Square test for statistical difference of the categorical variables. Finally, for multivariate analysis the simple logistic regressions were used to predict the final model.

Ethical consideration

Written consent was obtained from participants prior to participating in this study. Further approval was also obtained from the relevant ethics committee.

Results

Demographics

Table 1: the profile of respondents (n = 400). This table details the demographic profile of the respondents and the number of each response (frequency) and the percentage of respondents

Categories	Frequency	Percentage (%)
Gender		
Male	193	47.4
Female	208	51.1
Ethnicity		
Malays	80	19.7
Chinese	159	39.1
Indians	125	30.7
Others	37	9.1
Marital Status		
Single	249	61.2

Married	144	35.4
Divorced	8	2.0
Age		
21-30	218	53.6
31-40	74	18.2
41-50	49	12.0
Above 50	60	14.7
Education Level		
Without formal education	3	.7
Primary schooling	41	10.1
Secondary Schooling	6	1.5
University/College	351	86.5

Based on the social demographic analysis in the table above, it can be concluded that there was an almost equal participation between both the genders. Male respondents comprised of 47.4% while female respondents were slightly higher at 51.1% bridging a gap of 4% in comparison to one another. Looking into races, the Chinese ethnicity had the highest level of involvement in this survey of 39.1% followed by Indians 30.7%, Malay 19.7% and the least whom took part in this survey were other races 9.1%. Marital status was also taken into account in this study whereby the highest prevalence of patients coming to the clinic were single at 61.2% followed by married 35.4% and finally the least numbered were divorced accounting to 2.0%. Additionally, there were four age groups that took part in this survey ranging from 21-year-old up till above 50. The highest participation belonged to the 21-30-year-old age group which were 53.6% followed by the rest which declines as the age group increases. Finally, education level was also valued in this survey. Based on the analysed data, it can be presumed that the majority of patients that visits clinics have at least completed secondary school education and more.

Table 2: Reliability, validity, normality status of perceived barriers towards HIV screening in VCT centers (PBV), Social Support Variable (SSV), Intention to screen at VCT centers (ITSV)

	Reliability	**Validity** **Kmo**	**Bartlett's specificity**	**normality**
PBV	0.825	**0.867**	1825.52	normally distributed
SSV	**0.922**	**0.866**	3675.52	normally distributed
ITSV	**0629**	**0.605**	0103.9	normally distributed

The normality, reliability and validity analysis was conducted on the collected data from the participating samples. The table shows that the collected data has passed the normality, reliability and validity test. The KMO statistic for all three variables is greater than 0.50 which are 0.867, 0.866 and 0.605. Based on the outcome for normality it shows that there is no skewness and kurtosis because its normally distributed.

Correlation

Table 3: Correlation relationship between reason for delay screening for HIV in VCT centers (Dsc vct), social support (ssp) and barriers towards HIV screening (BHiv)

		Pbv	ssv	itsv
pbv	Pearson Correlation	1	.352(**)	.402(**)
	Sig. (2-tailed)		.000	.000
	N	401	401	401
ssv	Pearson Correlation	.352(**)	1	.432(**)
	Sig. (2-tailed)	.000		.000
	N	401	401	401
itsv	Pearson Correlation	.402(**)	.432(**)	1
	Sig. (2-tailed)	.000	.000	
	N	401	401	401

** Correlation is significant at the 0.01 level (2-tailed).

The table above shows positive relationship between all three variables. PBV has a positive correlation of 0.402 with ITSV while SSV has a positive correlation of 0.432 with ITSV. Both are deemed strongly to influence ITSV.

Regression

Table 4: Relationship between PBV and ITSV (PBV = Independent variable, ITSV= Dependent variable)

Relationship between SSV and ITSV (SSV = Independent variable, ITSV= Dependent variable)

Variable	**R2**	**F**	**Sig**
PBV	0.162	76.865	0.000**
SSV	0.186	91.432	0.000**

This regression analysis shows both perceived barriers and intention to screen for HIV. The R^2 value of 0.162 indicates that PBV influence ITSV as much as 16.2% and similarly the R^2 value of 0.186 indicates that SSV influences ITSV as much as 18.6% in our model.

Discussions

The current study conducted provides an understanding of public perception on importance of screening for HIV in VCT.

Impact of perceived barriers towards VCT

Very important barriers and supports were identified that could encourage or discourage VCT for HIV. The most important of these were linked to access of VCT services through (reducing distance to VCT centers, providing free or subsidized services), increasing awareness, perceiving of personal risk and improving quality of care especially in providing confidentiality in VCT centers.

Another important issue that could improve VCT is to encourage VCT before any AIDS related symptoms appear. People need to understand that it takes a long time from infection with HIV to appearance of AIDS symptoms and that most of the benefits of VCT accrue from early rather than late testing. The results of this study may be used for identification of beliefs that are of possible importance in decisions about undertaking VCT.

The different barriers towards VCT emerging in this study, largely dependent on personal level of information, attitudes and beliefs, social group norms and other contextual factors, influenced to various degrees the decision process on whether or not to seek VCT. The potential HIV related stigmatization within the community is of greater concern than possible advantages of VCT.

Social support and intention to screen HIV in VCT centers

VCT being its definition is a self-awareness driven screening method that is encouraged and supported by governmental and non-governmental organizations around the world.

Individuals who fall in the risk group realize and understand the importance of VCT from multiple sources including social media, family and friends. Coming forward for a test is a task that is not easily done by anyone. The concept of VCT is for each and every individual who know their body and understand the risk possibilities of their personal actions from contracting HIV or any sexually transmitted infections. VCT is conducted in a few stages involving pre- counseling prior to testing. The pre-counseling is to prep the individual from a possible positive result and also the possibility of a negative result eventually becoming positive due to incubation period or poor responsibility in protecting themselves. The Post-test counseling is then given to the individual based on the results found from the test. Positive results are treated with lot of care and support as the news might be devastating to the individual. A negative result is then handled with emphasis and warning as such results with a known lifestyle might be negative due to a long incubation period. The awareness to screen them and undergo VCT are only made possible if the individual seek medical information regarding HIV or other sexually transmitted infections on their own or if informed of such services by Doctors, Health Care professionals, family members or friends. Much emphasis in awareness on VCT and HIV has to go on, this is to open possibilities and hope. Many centers have to be initiated to conduct VCT Programs in the country.

There are few main approaches have been used to decrease barriers in social support to improve screening:

1. Partnerships among government, technical experts and implementing NGOs, in which government, key stakeholders and PLWHA are actively involved in drafting guidelines.

2. NGO and implementing agency leadership, which is how most available guidelines have come into existence. Some have been adapted from others in the region; others have been developed with support from technical agencies such as CDC, FHI, PSI or WHO and serve as de facto national guidelines. This has been happening in Kenya, Malawi, Uganda, Tanzania, Zambia and Zimbabwe.

The most common way to make VCT available is through existing public health systems, where VCT services are integrated into general health care:

1. Need to integrate into family planning (FP), PMTCT, sexually transmitted infection (STI) and TB services in public clinics or hospitals

2. Need to adopt different strategies to promote VCT, which focus on increasing access, availability and uptake. The quality of services and resources allocated vary significantly across the region.

The principal tasks in successfully implementing VCT are as follows:

1. Creating awareness and demand: Mobilizing communities to increase uptake of VCT, focusing on vulnerable groups, particularly young people.

2. Strengthening human resources and infrastructure: Increasing the number of trained VCT staff; providing training, support and supervision of counselors to avoid staff burnout; and increasing local ownership of VCT program.

3. Ensuring high-quality service: Standardizing guidelines and procedures for both counseling and testing; ensuring timely distribution of commodities; standardizing data collection and management to facilitate monitoring and evaluation of program.

VCT policies

In the national HIV/AIDS policy documents, all countries recognize that VCT is a major means of HIV/AIDS control. Key components of VCT policy include access to counselling, consent, confidentiality and overcoming discrimination against people who have undergone testing and are found HIV positive. Persons with a history of high-risk behavior, couples planning marriage and pregnant women are the main groups who should receive VCT services; the next most important group is the youth in general. Implementation is ahead of policy development, with standardized policies and guidelines in general lacking (10).

Guidelines for implementing

Current status of VCT guidelines

Most of the present guidelines were developed by NGOs to deal with different aspects of VCT, such as counselling or testing and therefore are not comprehensive.

Guideline development

As VCT expands, with multiple partners involved in implementing it, the need for guidelines has become more critical. Implementing organizations, ministries of health (MOHs), technical agencies and regional bodies such as CRHCS and SADC are working to establish minimum standards for delivering VCT (11).

Few approaches have been used to develop guidelines:

1. Partnerships among government, technical experts and implementing NGOs, in which government, key stakeholders and PLWHA are actively involved in drafting guidelines.

2. NGO and implementing agency leadership, which is how most available guidelines have come into existence. Some have been adapted from others in the region; others have been developed with support from technical agencies such as CDC, FHI, PSI or WHO and serve as de facto national guidelines. This has been happening in Kenya, Malawi, Uganda, Tanzania, Zambia and Zimbabwe.

VCT programs

The most common way to make VCT available is through existing public health systems, where VCT services are integrated into general health care. Although this should be the most sustainable model and one that can be replicated easily, this has not been the case because public institutions lack the capacity to take over

- integrated into family planning (FP), PMTCT, sexually transmitted infection (STI) and TB services in public clinics or hospitals
- NGO providers in their own facilities, alongside other community services – free-standing sites, strategically located and managed by an NGO
- private commercial enterprises such as mines, farms and factories

Strategies to promote VCT have focused on increasing access, availability and uptake. The quality of services and resources allocated vary significantly across the region.

The principal tasks in successfully implementing VCT are as follows:

- Creating awareness and demand: Mobilizing communities to increase uptake of VCT, focusing on vulnerable groups, particularly young people.
- Strengthening human resources and infrastructure: Increasing the number of trained VCT staff; providing training, support and supervision of counsellors to avoid staff burnout; and increasing local ownership of VCT programs.
- Ensuring high-quality service: Standardizing guidelines and procedures for both counselling and testing; ensuring timely distribution of commodities; standardizing data collection and management to facilitate monitoring and evaluation of programs (12).

Conclusion

The results of this study show that public was positive about screening and value of knowing about their status early. However, fear of social stigma, discrimination, lack of support system and lack of public understanding were identified as major concerns affecting their willingness to be screened. They were concerned about mandatory screening being implemented without improvement in support system and public health education.

Therefore, the study concludes that ‘reluctance to look for HIV screening is an important factor contributing to transmission in developing nations. In Malaysian setting, effort should be made to fortify screening techniques particularly in the most in at risk populations to screen the epidemic and target anticipation/prevention methodologies. Patient attitudes and the public perception on importance of screening for HIV in VCT are important among patients in private general practitioner clinics.

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