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DETERMINANTS PERCEPTION OF MALE SEX WITH MAN (MSM) CONCERNING THE UTILIZATION OF VCT (VOLUNTARY COUNSELLING AND TESTING) HIV / AIDS IN DILI MUNICIPALITY, TIMOR-LESTE

Maria Margareth San Sao^{1*}, Ade Irma Suryani²

¹Ministry of Health, Timor-Leste

²Faculty of Health, Polytechnic Piksi Ganesha, Bandung

*E-mail : adeirmasuryani20@gmail.com / xan_xao@yahoo.co.id

ABSTRACT

The spread of HIV / AIDS is still a major worrying problem at this time, not a single country in the world is free from HIV / AIDS. WHO has set a target of 90-90-90 which is expected that by 2020, 90% of people living with HIV will know their status, 90% of all people diagnosed with HIV will receive continuous antiretroviral treatment and 90% of all people who receive antiretroviral treatment obtains HIV viral suppression. The Government of Timor-Leste in its efforts to tackle HIV / AIDS in the future by improving coordination between related sectors in the context of implementing AIDS prevention programs with the hope of achieving targets, namely zero new infection, zero AIDS related death and zero discrimination. This study aims to determine the determinants of the perception of MSM in the use of VCT. This study used a cross-sectional analytic survey design with men having sex with men (MSM) aged ≥ 18 years as respondents. The study was conducted in Dili Municipality, Timor-Leste. The sample was selected using the convenient sampling method with a total of 150 respondents. Data collected by interview method. Data analysis was performed using logistic regression to determine the Adjusted Odd Ratio of each variable. The results showed that respondents who had tested in the last 1 year were 64.7% and respondents who had never tested in the last 1 year were 35.3%. The results of multivariate analysis with logistic regression showed that the variables associated with VCT utilization were perceived vulnerability (AOR = 14.761; 95% CI = 1.976-110.242; p = 0.009) and information sources (AOR = 0.038; 95% CI = 0.005-0.284; p = 0.001). Perceptions of vulnerability and sources of information are related to the use of VCT in MSM. So it is hoped that health workers will collaborate with NGO administrators to be more active in educating MSM regarding the importance of using VCT through VCT mobile services, using approaches through online media and direct counseling.

Keywords: Stigma, Discrimination, Perception, MSM, VCT

INTRODUCTION

The spread of HIV / AIDS is still a major worrying problem at this time, not a single country in the world is free from HIV / AIDS. WHO has set a target of 90-90-90 which is expected that by 2020, 90% of people living with HIV will know their status, 90% of all people diagnosed with HIV will receive continuous antiretroviral treatment and 90% of all people who receive antiretroviral treatment obtains HIV viral suppression.¹ The Government of Timor-Leste in its efforts to tackle HIV / AIDS in the future by improving coordination between related sectors in the context of implementing AIDS prevention programs with the hope of achieving targets, namely zero new infection, zero AIDS related death and zero discrimination.²

The Integrated Biological and Behavioral Monitoring Agency (IBBS) Timor-Leste in 2015 reported that the HIV prevalence in Timor-Leste was below 1%. However, this prevalence is expected to be higher among key populations at risk of HIV exposure, including FSW, men who have sex with men (MSM) and waria. Although the 2011 survey conducted in Dili, Ainaro, Baucau, Bobonaro, Covalima, and Oecusse found an HIV prevalence below 5% (1.6% of whom were MSM and 1.3% of FSW) there are still concerns that HIV is shifting from levels low to the concentration of outbreaks. There are an estimated 1,688 FSW aged 15 - 49 years, MSM and 8,703 transgender people living in Timor-Leste. The majority of MSM did not have sex exclusively with men, reportedly 78% of respondents indicating that they had had sex with women in the past year. Unfortunately 55% reported that they never used a condom when having sex with a female partner. 30% of MSM respondents indicated that they had never used a condom with a sexual partner. However, two-thirds of MSM respondents reported using a condom the last time they had sex with another man. The percentage of injecting drug use among MSM in these five municipalities was only 2% in the last 12 months. When adjusted for type of MSM and transgender, MSM had a higher ratio of drug use, namely 4%. Of these 5 municipalities the higher risk of using drugs is occupied by transgender people, 19% of MSM based in Dili Municipality reported using drugs in the past year so that the spread of HIV / AIDS in Timor-Leste can also be categorized as a frightening iceberg phenomenon.³

Several studies show that respondents with high perceptions expressed their intention to do VCT than those with low perceptions. William, et al research (2017) states that stigma can result in non-disclosure of HIV status, internalized stigma and avoidance of things related to HIV.⁴ Abebe's research (2009) showed that 51.1% of respondents who had a high perception of vulnerability stated their intention to perform VCT than those who had a low perception (48.9%), respondents (52.6%) with a high perception of the severity of HIV/AIDS stated their intention to VCT, respondents who had a high perception of barriers expressed less willingness to do VCT than those who had a low perception, and respondents who felt there was a benefit in doing VCT would state their willingness to do VCT than those with a low perception of The low one.⁵

Research on the determinants of perceptions in the use of VCT with reference to the health belief model (HBM) has not been widely published in Indonesia and Timor-Leste. This study aims to determine the determinants of MSM perception in the use of VCT by MSM.

MATERIAL AND METHOD

The spread of HIV/AIDS is still a major worrying problem today, no country in the world is free from HIV/AIDS. Based on the report of the United Nations Program on HIV/AIDS (UNAIDS) in 2017, it was reported that the number of people living with HIV/AIDS in the world reached 36.7 million people, about 1.8 million people were newly infected with HIV and 1 million people were infected with HIV. died of AIDS.⁶ The design of this study was a cross-sectional analytic survey conducted in Dili Municipality, Timor-Leste. The research respondents were men with sex with men (MSM) aged ≥ 18 years. Data collection was carried out in September-October 2018. From the results of data collection, it was found that 8,703 MSM aged ≥ 18 years. Of these, 150 MSM were selected at the convenient sampling. Data collection was carried out by face-to-face interviews conducted by researchers at the place where each respondent lived in September-October 2018. Data collected included age, education, marital status, employment status, residence, sources of income, stigma, discrimination, perceptions of vulnerability,

perceptions of severity, perceived barriers, perceptions of benefits, knowledge, sources of information and sexual behavior.

The data that has been collected from each respondent is given a score according to the quality dimension variable (physical evidence, reliability, assurance, empathy and responsiveness) that is asked. The scoring for each question is the same for all questions on each sub variable, namely a score of 1 for the answer to receiving the VCT Utilization and a score of 0 for the answer not receiving the Use of VCT. While the scoring of the perception variable is using the Likert scale, that is, the positive statement is given a score of 5, 4, 3, 2, 1 and the negative statement is given a score of 1, 2, 3, 4, 5.

Data analysis was performed using SPSS univariate, bivariate and multivariate. Multivariate analysis was performed by logistic regression with the enter method. The association measure used was the adjusted odds ratio (AOR) with 95% CI. This research has obtained ethical feasibility from the National Institute (INS) Dili, Timor-Leste.

RESULTS AND DISCUSSION

In Table 1, the characteristics of the respondents are presented based on socio-demographic and socio-economic. In the age group, most respondents aged 26-36 were 85 people (56.7%). With the median age of the respondents is 26 years old with an IQR of 27-21. More people live in urban areas, namely 76 people (50.7%), most respondents choose to live with their families, namely 91 people (60.7%), more prefer not to marry, 125 people (83.3%), more Many of them have high school education, 91 people (60.7%), 100 people (66.7%) do not work, most of them are employee salaries of 39 people (26.0%) and monthly income in accordance with the minimum wage Timor-Leste was <\$ 115 more than 130 people (86.7%).

Table 1
Characteristics of Respondents Based on Social Demography and Socio-Economy

Characteristic	n	%
Age (th)		
Median, IQR=(Q₃-Q₁)	26	27-21
18-25 years	65	43,3
26-36 years	85	56,7
Residence		
Rural	74	49,3
Urban	76	50,7
Current residence status		
Alone	17	11,3
With friends	20	13,3
With family	91	60,7
With a regular male partner	8	5,3
With a regular female partner	10	6,7
Others	4	2,7
Married status		
Married	25	16,7
Not married	125	83,3
Last education		

Elementary school	3	2,0
Junior High	13	8,7
High school	91	60,7
College	43	28,7
Job status		
Work	50	33,3
Does not work	100	66,7
Source of income		
Selling sex	13	8,7
Employee salary	39	26,0
Free workers	31	20,7
Work in a salon	5	3,3
Student pocket money	38	25,3
Others	24	16,0
Income per month		
< \$ 115	130	86,7
> \$ 115	20	13,3
Amount	150	100,0

In Table 2, the relationship between stigma, discrimination, perception, knowledge, information and risky sexual behavior on the use of VCT is presented. When viewed from the p value, the stigma variable has no relationship with the use of VCT (0.463), but discrimination has a significant relationship with the use of VCT (0.015). Perceived vulnerability variables (0,000), perceived severity (0.016), perceived barriers (0,000), while the perceived benefits variable had no relationship with VCT utilization (0.475). Risk sex behavior had a significant relationship with VCT utilization (0.002). The knowledge variable has a significant relationship with VCT utilization (0,000). Information has a significant relationship with VCT utilization (0,000).

Table 2
Relationship of Stigma, Discrimination, Perception, Risk Sex Behavior, Knowledge and Information on the Use of VCT

Variable	Utilization of VCT		P
	No (%)	Yes (%)	
Stigma			
Get stigmatized	29 (38,2)	47 (61,8)	0,463
Not stigmatized	24 (32,4)	50 (67,6)	
Discrimination			
Received discrimination	29 (28,7)	72 (71,3)	0,015
Do not receive discrimination	24 (49,0)	25 (51,0)	
Perception of vulnerability			
Low	20 (64,5)	11 (35,5)	0,000
High	33 (27,7)	86 (72,3)	
Perception of severity			
Low	16 (24,6)	49 (75,4)	0,016
High	37 (43,5)	48 (56,5)	

Perception of Benefits			
Low	23 (32,4)	48 (67,6)	0,475
High	30 (38,0)	49 (62,0)	
Perception of Barriers			
High	39 (50,0)	39 (50,0)	0,000
Low	14 (19,4)	58 (80,6)	
Sexual Behavior			
No Risk	50 (41,3)	71 (58,7)	0,002
Risky	3 (10,3)	26 (89,7)	
Knowledge			
Less	34 (52,3)	31 (47,7)	0,000
Well	19 (22,4)	66 (77,6)	
Sources of Information			
Did not receive information	29 (93,5)	2 (6,5)	0,000
Receive information	24 (20,2)	95 (79,8)	

In Table 3, the results of multivariate analysis with logistic regression are presented. The variables associated with VCT utilization were perceived vulnerability to have a value (AOR: 14,761; 95% CI: 1,976-110,242) and information has a value (AOR: 0.038; 95% CI: 0.005-0.284).

Table 3.
Adjusted OR Factors Associated with VCT Utilization

Variable	AOR	95%CI		p
		Lower Limit	Upper Limit	
Perception of vulnerability				
Low	1(Ref)			
High	14,761	1,976	110,242	0,009
Perception of severity				
Low	1(Ref)			
High	1,224	0,120	12,472	0,864
Perception of Barriers				
High	1(Ref)			
Low	6,370	0,652	62,248	0,111
Knowledge				
Less	1(Ref)			
Well	1,770	0,411	7,625	0,443
Residence				
Rural	1(Ref)			
Urban	0,774	0,198	3,020	0,712
Discrimination				
Received discrimination	1(Ref)			

Do not receive discrimination	0,263	0,058	1,190	0,083
Education				
Low education	1(Ref)			
Higher education	0,722	0,119	4,390	0,723
Information				
Did not receive information	1(Ref)			
Receive information	0,038	0,005	0,284	0,001
Sexual behavior				
No Risk	1(Ref)			
Risky	0,520	0,057	4,712	0,338

The results of the study stated that the respondents who had used VCT in the last 1 year were (64.7%). This is different from the results of the 2016 IBBS Timor-Leste report which reported that only about 50% of respondents reported never having tested, respondents who claimed to have used VCT and knew their status were only around 29% of respondents in Dili Municipality and around 41% of respondents in Baucau Municipality. The use of VCT for respondents in the results of this study is different from the IBBS Timor-Leste report, 2016 because of the different method of selecting samples. In this study, the sample selection technique by the enumerator on respondents who were known and had come and had ever used VCT in VCT services. In contrast to the method of sample selection in the 2016 Timor-Leste IBBS data, namely by using the Respondent driven sampling (RDS) technique.³

In this study most respondents had visited health facilities and tested 96 people (64.7%) and most respondents had never tested as many as 54 people (35.3%). The low utilization of VCT services in the last 6-12 months is due to various reasons, including the fact that respondents have received stigma and discrimination within the family and society. Respondents who did not use VCT because they had a low perception of vulnerability. This is in accordance with Anita's research (2016) in Banda Aceh, where the pre-test and post-test conducted VCT and the results obtained were 52.3% in the MSM group who used VCT.⁷ In line with research conducted by Niken Ariska (2018) in Surabaya, 77% of respondents tested HIV.⁸ According to research by Shrestha (2015) in Nepal, it shows that the utilization of VCT among MSM is 44.8%.⁹

In our study, the HBM components that were found to be associated with the completeness of VCT utilization were the perception of vulnerability and information. However, there was no relationship with other HBM components, namely socio-demography, perception of barriers, perception of benefits, perception of severity, knowledge, discrimination, stigma and sexual behavior. The existence of a relationship between the variable perception of vulnerability and the use of VCT in our study is inconsistent with the results of other research conducted by Teti (2016) which states that there is no relationship between perceptions of vulnerability to the use of VCT utilization services for MSM and transgender women.¹⁰ This is reinforced by the results of a study by Walker (2004) which states that if the perception of vulnerability to HIV and AIDS is low, then the behavior to protect oneself will also be low.¹¹

Our results indicate that the information is associated with VCT utilization. This is because most of the respondents live in urban areas, where the information obtained about VCT Utilization services is easily accessible, so that on average respondents can make use of VCT Utilization services. This is also due to the fact that the location of the VCT Utilization service is in the city center, namely in Dili Municipality, Timor-Leste.

In this study also showed that the perceived severity variable did not have a significant relationship with HIV testing. Respondents with a low perception of severity took an HIV test as many as 49 people (75.4%) and respondents with a high perception of severity took an HIV test as many as 48 people (56.5%). It is known that people who have a low perception of severity take more HIV tests than people who have a high perception of severity. This result is not in line with the research of Purwaningsih (2011) which states that people who have a high perception of severity take more HIV tests than people who have a low perception of severity.¹²

This study showed that the perceived barrier variable did not have a significant relationship with HIV testing. Respondents who have obstacles when taking an HIV test are due to the lack of support from people around them and their families, although from the results of the study, most of the respondents live with their families (60.7%). This is in line with Teti's research (2016) in Ciamis that the perception of barriers has no relationship with the use of VCT because respondents are afraid of positive test results and feel they are not at risk of HIV/AIDS and are afraid of being stigmatized.¹⁰ It is strengthened by research by Mujiati (2013) in Bandung that the perception of obstacles has no relationship with the use of VCT.¹³

The results showed that discrimination did not have a significant relationship with HIV testing. Respondents who received discrimination, tested for HIV as many as 72 people (71.3%) and respondents who did not receive discrimination, did HIV test as many as 25 people (51.0%). It is known that discriminated people test for HIV than non-discriminatory people test for HIV. This is not in line with the research conducted by Meigberg, et al (2008) which stated that the barriers to someone doing an HIV test were the fear of knowing their HIV positive status and the fear of stigma and discrimination.¹⁴

The results showed that knowledge did not have a significant relationship with HIV testing. This result is not in line with the research conducted by Heni (2016) in Madiun which states that good knowledge can affect a person's desire to do an HIV test in an HIV test.¹⁵ Reinforced by the results of research by Li, et al (2016) in China that the better knowledge about HIV and VCT will enable a person to have the intention to take the test.¹⁶

The results showed that sexual behavior did not have a significant relationship with HIV testing. Respondents who felt that they were not at risk took an HIV test as many as 71 people (58.7%) and respondents who felt they were at risk took an HIV test as many as 26 people (89.7%). The result of this study is that respondents who feel at risk have a higher probability of taking an HIV test. This is not in line with Zhang, et al (2014) study which states that risky behavior significantly increases HIV test acceptance.¹⁷

The possibility of bias in this study is Information bias, which is when the answer data collection is only based on the respondent's recognition, at the time of data collection the

researcher is accompanied by an enumerator, namely the MSM counselor because researchers cannot direct contact with respondents because they are a closed and unusual group open up to just anyone. Selection bias, namely errors in the selection of samples taken do not systematically cause some members of the population to be less likely to be included as unbalanced samples, so that sample variations are less and not fully representative of the population.

CONCLUSION

The determinants of the perception of MSM in VCT users were found to be related to perceptions of vulnerability and information. So it is hoped that health workers will work together with NGO administrators to be more active in educating MSM regarding the importance of using VCT through mobile VCT services, using approaches through online media and direct counseling.

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