

# The Role of Religious Leader Support on Voluntary Counseling and Testing (VCT) Behavior of Individuals at Risk of HIV/AIDS in Kupang City, Indonesia

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## Abstract

Voluntary counseling testing (VCT) coverage has not reached yet the target. Some communities in East Nusa Tenggara (NTT) Province trust to religious leaders in treating illness. The purpose of this study was to analyze the association between perceived social support of religious leaders to VCT behavior of individuals at risk of HIV/AIDS. This study was an analytical observational study with cross sectional design. Fifty-one individuals at risk of HIV was selected by consecutive sampling. Data were collected using questionnaires and observations. The techniques of data analysis were linear regression. The religious leaders had a positive influence on the attitudes ( $b=0.59$ ;  $p < 0.001$ ), subjective norms ( $b = 0.49$ ;  $p < 0.001$ ) and beliefs ( $b=0.61$ ;  $p < 0.001$ ) of individuals at risk of HIV/AIDS related to VCT. Intentions had a positive influence on the individuals at risk of HIV/AIDS to do VCT ( $b = 0.42$ ;  $p = 0.004$ ). The total of Individual at risk HIV and AIDS/AIDS who perform VCT was 46 people (86%). Religious leaders are potential to provide support for individuals at risk of HIV to do VCT. Religious leader can be used for providing support to access VCT services.

**Keywords:** HIV/AIDS, Voluntary counseling and testing, Religious leader

## Introduction

The number of HIV cases in 2014 has reached 36.7 million people. WHO reported that there were 24.7 million cases in Africa and 3.4 million cases in South-East Asia.<sup>(1)</sup> Indonesia is one of the countries in Asia where the epidemic is growing rapidly, along with Pakistan and the Philippines.<sup>(2)</sup> The number of HIV/AIDS cases in Indonesia in 2014 reached 214.127, it increased from 179.775 cases in 2013.

The number of HIV/AIDS cases in East Nusa Tenggara also increased from 2.264 cases in 2013 into 3.757 cases in 2014.<sup>(3)</sup> HIV/AIDS cases have been found throughout the districts in NTT. 86% percent of people living HIV/AIDS were heterosexuals.

There is great concern that the HIV/AIDS epidemic is moving from sex workers to family members, especially housewives who are unaware that they are at risk of being exposed to HIV. The highest percentage of HIV infection was found in housewives as many as 1.282 cases.<sup>(4)</sup>

Awareness for HIV testing is one of the efforts to prevent HIV transmission.<sup>(5)</sup> Based on data KPAD NTT 2015, of 22 VCT services, only 3 VCT services meeting the target of 750 visits in a year. VCT is intended to help people, especially those who are at-risk of HIV, vulnerable, and whose family members are HIV positive, to determine the health status related to HIV. The result of VCT can be used as a motivation to prevent transmission and to immediately get appropriate help.<sup>(6)</sup>

The lack of information about HIV and evaluable support to use VCT services are factors that can be associated with the practice of VCT to carry out

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examination to individuals at risk of HIV in order to determine their status.<sup>(7),(8)</sup> The condition indicates that social support can affect individual at risk of HIV to prevent and get VCT.<sup>(9),(10)</sup>

Social support can be in the form of information or emotional and material supports that make individual more confident and have a positive attitude.<sup>(11)</sup> Support in the form of information includes information on risk factors of HIV transmission, HIV prevention, VCT and treatment.<sup>12</sup> Motivational support makes one strong.<sup>(13)</sup> Material support includes real help to relieve and to survive.<sup>(14)</sup> Inside as well as outside pressures will be reduced due to social support.<sup>(15)</sup> Social support is more effective in making one strong enough to face the pressures of HIV, compared to the individual's self efficacy.<sup>(16)</sup>

Social support can be provided by family members, friends or communities such as clergy, priests, pastors and others.<sup>(17)</sup> Clergy, pastors and congregations have such powers in form of doctrine, affection, and mental recovery through belief/faith.<sup>(18),(19)</sup> Supports from the clergy light up the life spirit of people with HIV/AIDS.<sup>(20)</sup> The communities are willing to prevent HIV/AIDS transmission as suggested by the religious leaders.<sup>(21)</sup>

NTT is unique as the people have high appreciation of the role of religious leaders in their lives. Religious leader is someone who has the gift and power to cure illness. Besides being treated at health facilities, people also go to religious leader. This study aimed to investigate the influence of support from religious leaders, family members and communities on the subjective norms, attitudes, beliefs and intentions related to VCT among individuals at risk of HIV in the urban area.

## Materials and Method

The research was conducted in October 2015 until April 2016 in Kupang city, NTT, Indonesia. The highest percentage of HIV infection was found in housewives. It indicates that NTT already in general epidemic. Kupang city has 811 cases of HIV/AIDS was found highest among housewives compared with other districts in NTT. Religious leaders were trusted by most people in Kupang who mainly came from Timor Evangelical Christian Churches (GMIT). Religious leader serves in the diakonian commission in the GMIT church.

A cross-sectional study was conducted to analyze religious leaders' support on attitude, beliefs, subjective norm and intention on individual at risk HIV/AIDS to take VCT at a defined time.

The population was individuals at risk of HIV/AIDS coming to religious leaders from January-February 2016. List of 34 religious leader was obtained from GMIT church. The researcher met the religious leader to identify people at risk of HIV/AIDS who visited them from January-February 2016. The sample size was determined by using the Hypothesis of Test sample Based on Proportion.<sup>(22)</sup> by considering the value of  $\pi$  in previous related studies ( $\pi_1 = 0.51$  and  $\pi_2 = 0.05$ ),<sup>(23),(24)</sup>  $n=51$ , selected by consecutive sampling. The criteria was individual at risk of HIV/AIDS who had more than one sexual partner, had a spouse (husband or wife who had a habit of changing sexual partners) and were drug users with injection.

Variables were perceived support of religious leader, family members and community, attitudes, beliefs, subjective norms, intentions and VCT behavior. Data were collected using questionnaires. To avoid bias, data regarding the influence of family and community on the decision of individuals at risk of HIV/AIDS to do VCT were also collected. Questionnaire was used to collect data of support of the religious leader, family, community, attitudes, subjective norms, beliefs and intentions. Data collection was performed by enumerators.

Descriptive analysis was used to interpret the characteristics of respondents (support of religious leaders, attitudes, subjective norms, beliefs, intentions and VCT behavior). Inferential analysis was used to examine influence of religious leader support's on the attitudes, subjective norms and beliefs of individuals at risk of HIV/AIDS, using linear regression. The influence of attitude, subjective norm and belief to intentions was analyzed by linear regression, while the effect of intention of individuals at risk of HIV/AIDS on VCT was analyzed by logistic regression.

## Findings

The majority of respondents was male (53%). The youngest age was 17 years old and the oldest was 68 years old. Professions were servants, housewives and students (table 1).

**Table 1. Support of Religious Leader, Community and Family Members toward the Attitudes, Beliefs, Subjective Norms, and Intentions of Individual at Risk of HIV/AIDS to do VCT**

Variable	Descriptive			Inferential	
	n=51	%	Mean (min-max)	b	p
Characteristic:					
Gender -Male -Female	27	53.1			
Age <25 years ≥25 years	23 28	45.1 54.9	22.4(17-24) 40.2(27-68)		
Occupation					
-Employee -Housewife -Student	20 18 13	39.2 35.3 25.5			
Marital Status					
-Married -Single	27 24	53.0 47.0			
Education <junior high school ≥senior high school	19 32	37.3 62.7			
Religious Leader support:					
Information -Good -Poor	38 13	74.5 25.5	78.9(74-90) 60.5(54-68)		
Motivation -Good -Poor	42 9	82.4 17.6	80.1(76-88) 64.6(55-69)		
Appraisal -Good -Poor	40 11	78.4 21.6	78.4(70-87) 60.2(56-66)		
Instrumental -Good -Poor	40 11	78.4 21.6	80.4(74-86) 62.0(54-69)		
Attitude	47	92.2	76(68-88)	0.59	0.001
Subjective Norm	43	84.3	79(67-83)	0.50	0.001
Belief	45	88.2	81(68-86)	0.61	0.001
<b>Intention (Good categories)</b>	45	88.2	86.5(58-88)	0.42	0.04
<b>VCT Behavior</b>	44				

Attitude, subjective norm and belief on support of religious leader were categorized good with the lowest score of 67 on the subjective norm variable and the highest of 88 on attitude. Intention to do VCT was good in average.

Table 1 shows the correlation between the support of religious leader and the attitudes, subjective norms, beliefs, and intentions of individuals at risk of HIV/AIDS to take VCT (p-value <0.05). The significant correlation meant that the support of religious leader could improve attitudes, subjective norm and beliefs of individual at risk HIV/AIDS. The correlation coefficient between the support of God's servants and the attitudes, subjective norms, beliefs, and intentions to do VCT (>0.5). It indicated a quite strong correlation between these variables. The results also showed that attitudes and subjective norms had an influence on the intentions of individuals at risk of HIV to do VCT. The results of the statistical analysis provided support to the explanation that the support from religious leaders were more likely to contribute to attitudes, subjective norms, beliefs and intention of individuals at risk of HIV/AIDS to do VCT than family and community support.

### Discussions

According to the Theory of Planned Behavior; attitudes, subjective norms and beliefs affect the intentions and behavior.<sup>(28)</sup> This study proved that the support of religious leaders had a stronger correlation compared to the support of family members and community. Religious leaders, to some communities in NTT, has the charm and is believed to be able to offer solution to any problems both psychological and physical. This is possible because there is a belief that Religious leaders has a special gift from God. Religious leaders is not a priest, pastor or necessarily a well-educated person. Religious leaders is believed by the communities NTT to have the gift of the Faith in the Lord Jesus and is able to offer solutions to various problems of life such as illness, job, household and others. Someone with spiritual influence can be used as a medium to convey health messages.<sup>(29)</sup> Clergy is loving and caring in giving advice to individuals at risk of HIV/AIDS.<sup>(30)</sup> The communities are willing to follow the message on HIV prevention delivered by servants of the church. Public follows the message from the minister as to the community, they are highly trusted and accepted by the local community. They are accepted

and trusted by the community due to their high integrity and their beliefs.<sup>(31)</sup>

The recognition from the community to the religious leaders enabled them to find and give social support for individuals at risk of HIV/AIDS. Social support in the form of information raised the awareness on HIV issue.<sup>(32)</sup> Social motivation and real help encouraged individuals at risk of HIV to do VCT.<sup>(33)</sup> Social support that had influence on individuals at risk of HIV was the support of trusted ones such as clergy, friends or family.<sup>(17)</sup> In this study, religious leaders motivated and offered assistance to individuals at risk of HIV/AIDS to do VCT. Related studies showed that a low willingness to do VCT was due to low social support for individuals at risk of HIV.<sup>(34)</sup> With social support, individuals at risk of HIV/AIDS felt more confident and had a positive attitude to willing to do VCT.<sup>(35)</sup> One needs social support when they realize they are at risk of HIV transmission.<sup>(36)</sup> Social support may reduce depression of individuals at risk of HIV/AIDS as they take HIV test.<sup>(37),(38)</sup> This study showed that individuals at risk of HIV would do VCT after they received information, motivation and support of the religious leaders. The support of religious leaders correlated to the beliefs, attitudes, subjective norms and intentions of individuals at risk of HIV to do VCT.

### Conclusion

Religious leaders is part of the community that can support individuals at risk of HIV/AIDS to do VCT. The support can be realized by providing information about transmission and prevention HIV, appraisal, motivation and helping to access VCT.

#### Additional Information

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### References

1. UNAIDS. Facts Sheet, AIDS Epidemic Update, Regional Summary. Geneva: UNAIDS; 2013.
2. UNAIDS. Report on the Global AIDS Epidemic, The Global HIV Challenge. Geneva: UNAIDS; 2013.

3. KP-AIDS-Nas-RI. The Report of Health Ministry-RI: Fourth Quarter. Jakarta: KP-AIDS-Nas-RI; 2013.
4. KP-AIDS-NTT. Annual Report of HIV-AIDS Case in NTT. Kupang: KP-AIDS-NTT; 2015.
5. Ugisha E, Rensburg GH, Potgieter E. Factors Influencing Utilization of Voluntary Counseling and Testing Service in Kasenyi Fishing Community in Uganda. *JANAC*. 2010;21:107–109.
6. UNAIDS. The Impact of Voluntary Counseling and Testing: A Global Review of the Benefits and Challenges. Geneva: UNAIDS; 2001.
7. Leowalu, Manurung IFE. Factors Relating to the Utilization of HIV VCT by Sex Workers who Visit the Karang Dempel Localization, Kupang. *Jurnal.Bios.Epidemiologi*. 2013;5:78-84.
8. Kingori C, Haile TZ, Ngatia P. Depression Symptoms, Social Support and Overall Health among HIV-Positive Individuals in Kenya. *International Journal of STD&AIDS*. 2015;26(3):165–172.
9. Paulin NH, Blevins M, Koethe RJ, Hinton NME Vaz L, Vergara EA, Mukolo A, Ndatimana E, Moon DT, Vermund HS, Wester WC. HIV Testing Service Uptake among Female Heads of Household in Rural Mozambique: Results from a Province-wide Survey. *BMC Public Health*. 2015;15:132.
10. Kegeles SM, Rebhook G, Pollack L, Huebner D, Tebbetts S, Hamiga J, Sweeney D, Zovod B. An Intervention to Help Community-based Organizations Implement an Evidence-based HIV Prevention Intervention: The Empowerment Project Technology Exchange System. *Journal of Community Psychology*. 2012;49:182–198.
11. McDoom MM, Bokhour B, Sullivan M, Drainoni ML. How Older Black Women Perceive the Effects of Stigma and Social Support on Engagement in HIV Care. *AIDS Patient Care and Stds*. 2015;29(2):95-101.
12. Sarafian I. Process Assessment of a Peer Education Programme for HIV Prevention among Sex Workers in Dhaka, Bangladesh: a Social Support Framework. *Soc.Sci.Med*. 2012;75(4):668–675.
13. Daisy ID. Social Support Systems of HIV/AIDS Rural Women. *British Journal Publishing*. 2011;1(1):41-48.
14. Grosso A. Social Support as a Predictor of HIV Testing in at-risk Populations: A Research Note. *J Health Hum Serv Admin*. 2010;33(1):53–62.
15. Bowleg L, Burkholder GJ, Massie JS, Wahome R, Teti M, Malebranche DJ. Racial Discrimination, Social Support, and Sexual HIV Risk among Black Heterosexual Men. *AIDS Behav*. 2012;17(1):407–418.
16. Reilly T, Woo G. Social Support and Maintenance of Safer Sex Practices among People Living with HIV/AIDS. *Health Soc.Work*. 2004;29(2):97–105.
17. Okeke BO. Social Support Seeking and Self-efficacy-building Strategies in Enhancing the Emotional Well-being of Informal HIV/AIDS Caregivers in Ibadan, Oyo State, Nigeria: Original Article. *Journal of Social Aspects of HIV/AIDS Research Alliance*. 2016;13(1):35-40.
18. Folasire OF, Akinyemi O, Owoaje E. Perceived Social Support among HIV Positive and HIV Negative People in Ibadan, Nigeria. *World Journal of AIDS*. 2016;4:15-26.
19. Abara W, Coleman JD, Fairchild A, Gaddist B, White J. A Faith-based Community Partnership to Address HIV/AIDS in the Southern United States: Implementation, Challenges, and Lessons Learned. *Journal Religious Health*. 2013;07:898-879.
20. Asekun-Olarinmoye OI, Asekun-Olarinmoye OE, Fawole IO. Perceptions and Activities of Religious Leaders on the Prevention of HIV/AIDS and Care of People Living with the HIV Infection in Ibadan, Nigeria. *HIV/AIDS-Research and Palliative Care*. 2013;5:121–129.
21. Stewart MJ. Pastor and Lay Leader Perceptions of Barriers and Supports to HIV Ministry Maintenance in an African American Church. *Journal of Religious Health*. 2012;53:317–325.

22. Singarimbun, Effendi. Survey Research Methodology. Jakarta: LP3ES; 1995.
23. Hulley, Cummings, Browner. Designing Clinical Research. Philadelphia: Lippincott Williams and Wilkins; 2013.
24. Sweat M. Community-based Intervention to Increase HIV Testing and Case Detection in People Aged 16-32 Years in Tanzania, Zimbabwe and Thailand (NIM Project Accept, HPTN 043): A Randomised Study. 2011:525-531.
25. Creswell WJ. Research Design: Qualitative, Quantitative and Mixed Methods Approach. USA; Sage Publications-Inc.
26. Azwar S. Human Attitude: Thoery and Its Measurement. Pustaka-Pelajar Publisher; 1995.
27. Kuntoro. The Phylosophic base of Research Methodology. Surabaya; Pustaka-Melati Publisher; 2011.
28. Abamecha F, Godesso A, Girma E. Intention to Voluntary HIV Counseling and Testing (VCT) among Health Professionals in Jimma Zone, Ethiopia: The Theory of Planned Behavior Perspective. BMC-Public-Health. 2013;13(140):1-7.
29. Mtenga MS, Exavery A, Deodatus, Kakoko, Geubbels E. Social Cognitive Determinants of HIV Voluntary Counselling and Testing Uptake among Married Individuals in Dar es Salaam Tanzania: Theory of Planned Behaviour. BMC-Public-Health. 2015;15(213):1-8
30. Ramirez-Johnson J, Diaz HL, Feldman JB, Ramirez-Jorge J. Empowering Latino Church Leaders to Deal with the HIV-AIDS Crisis: A Strengths-Oriented Service Model. Journal of Religious Health. 2013;52:570–588.
31. Campbell C, Skovdal M, Gibbs A. Creating Social Spaces to Tackle AIDS-related Stigma: Reviewing the Role of Church Groups in Sub-Saharan Africa. AIDS Behavior Journal. 2011;15:1204–1219.
32. Kanda K, Jayasinghe AK, Silva TK, Priyadarshani NGW, Delpitiya NY, Obayashi Y, Araid A, Chandika D. Gamaged DC, Tamashirod H. Religious Leaders as Potential Advocates for HIV/AIDS Prevention among the General Population in Sri Lanka. Global Public Health. 2013;8(2):159-173.
33. Puffer ES, Meade CS, Drabkin AS, Broverman SA, Ogwang-Odhiambo RA, Sikkema KJ. Individual and Family-level Psychosocial Correlates of HIV Risk Behavior among Youth in Rural Kenya. AIDS-Behav. 2011;15(6):1264–1274.
34. Chen J, Han M, Liao Z, Dai Z1, Liu L, Chen H. HIV-Related Behaviors, Social Support and Health-Related Quality of Life among Men Who Have Sex with Men and Women (MSMW): A Cross-Sectional Study in Chongqing, China. PloS-ONE. 2011;10(2).
35. Neblett RC, Davey-Rothwell M, Chander G, Latkin CA. Social Network Characteristics and HIV Sexual Risk Behavior among Urban African American Women. J.Urban-Health. 2011;88(1):54–65.
36. Li JM, Murray KJ, Suwanteerangkul J, Wiwatanadate P. Stigma, Social support, and Treatment Adherence ampng HIV-Positive Patients in Chiang Mai, Thailand. AIDS Education & Prevention. 2014;26(5):471–483.
37. Vyavaharkar M, Moneyham L, Corwin S, Tavakoli A, Saunders R, Annang L. HIV Disclosure, Social Support, and Depression among HIV-infected African American Women Living in the Rural Southeastern United States. AIDS Education and Prevention. 2011;23(1):78–90.
38. Reilly T, Woo G. Social Support and Maintenance of Safer Sex Practices among People Living with HIV/AIDS. Health.Soc.Work. 2004;29(2):97–105.