Jurnal Ilmiah Kesehatan Sandi Husada

Volume 13 Number 2 Desember 2024
DOI 10.35816/jiskh.v13i2.1223

ORIGINAL ARTICLES OPEN ACCESS

Factors that influence the use of voluntary counseling and testing (VCT) clinics by people living with HIV/AIDS in MSM group

Ernawati[1*], Hairuddin K[1], Umar Dg Palallo[1]
Master of Public Health Study Program, Universitas Megarezky Makassar, South Sulawesi, Indonesia

*Correspondence: Ernawati, Master of Public Health Study Program, Universitas Megarezky Makassar, South Sulawesi, Indonesia. Email: ernawatiskm1979@gmail.com
Received: 12 September 2024 ○ Revised: 04 November 2024 ○ Accepted: 01 December 2024

ABSTRACT

Introduction: The VCT Clinic service program is one of the early detection efforts to find out whether someone has been infected with HIV or not through Voluntary Counseling and Testing (VCT). Risky sexual behavior with HIV/AIDS is the MSM group. This study aimed to determine the factors that influence the utilization of VCT services in the MSM group.
Research Methodology: This study is a type of quantitative research with an approach using a cross-sectional study design. The population in this study were all HIV/AIDS sufferers who were undergoing ARV treatment at the Kendari City Hospital in 2023, totaling 349 people. Data were analyzed using SPSS to determine the frequency distribution and the chi-square statistical test to determine the variables' relationship.
Result: The results showed a relationship between knowledge and the utilization of VCT clinics by the MSM group with a closeness level of 0.517, which indicated a moderate closeness of the relationship. There was a relationship between actions and the utilization of VCT clinics by the MSM group with a closeness level of 0.343, which indicated a weak closeness of the relationship. There is a relationship between family support and the use of VCT clinics by the MSM group, with a closeness level of 0.262, indicating a weak closeness of the relationship. There is a relationship between social support and the use of VCT clinics by the MSM group, with a closeness level of 0.300, indicating a weak closeness of the relationship.
Conclusion: The analysis results show a significance value of <0.05, meaning there is a relationship between knowledge, attitudes, actions, social support, and family support with the use of VCT clinic services. Suggestions: It is hoped that the Kendari City Health Office will make policies in carrying out HIV/AIDS prevention activities, especially for the MSM group, by maximizing socialization about HIV/AIDS in hotspots where the group carries out activities. In addition, it is coordinating with the Education Office to provide education and socialization to students and the community to limit and avoid factors that cause risky sexual behavior.

Keywords*:* family support, social support, risky sexual behavior.

INTRODUCTION

HIV/AIDS is one of the global health issues that receives serious attention, particularly among key populations at high risk, such as MSM (Men who have sex with men). According to the latest data from UNAIDS, the HIV/AIDS epidemic in Southeast Asia continues to show significant numbers of new infections, with a substantial proportion of cases occurring within the MSM group. In Indonesia, this group is one of the main contributors to new HIV/AIDS cases each year. Early detection efforts are a crucial step in the prevention and management of HIV/AIDS (Wang *et al.*, 2022). One of the primary services provided is Voluntary Counseling and Testing (VCT), a voluntary service that offers counseling and HIV testing to enable early detection of HIV infection. Utilizing VCT allows individuals to know their HIV status earlier, access antiretroviral (ARV) treatment more quickly, and prevent further transmission. However, the utilization of VCT services by the MSM population still faces various challenges, both individual and social. Several factors influencing the utilization of VCT services among MSM include knowledge, attitudes, actions, family support, and social support. Low awareness of the benefits and importance of VCT often serves as a significant barrier (Fuge et al., 2022). Additionally, stigma and discrimination against MSM and people living with HIV/AIDS (PLWHA) reduce their motivation to access healthcare services. Family and social support play a crucial role in building confidence and comfort for this group to use VCT services (Huang *et al.*, 2024).

There is a significant relationship between the knowledge level and attitudes toward using VCT services. However, this relationship is often influenced by external factors such as service availability, health policies, and outreach efforts (Li *et al.*, 2024). In the context of Kendari City, the number of registered HIV/AIDS cases in healthcare facilities continues to rise, highlighting the need for more effective interventions to increase VCT utilization, particularly among the MSM population (Onovo *et al.*, 2023). One of the factors exacerbating the spread of HIV/AIDS is risky sexual behavior, which often occurs in certain groups, including Men who have Sex with Men (MSM). This group frequently faces social stigma and discrimination, which can hinder them from seeking healthcare services, including HIV testing (Mahmud *et al.*, 2023). This issue warrants serious attention as HIV/AIDS is an infectious disease that can have severe impacts on individual and public health. Prevention, treatment, and education efforts may be necessary to reduce the spread of HIV and improve understanding of how to avoid transmission risks among various vital populations, particularly Men who have Sex with Men (MSM). While some key populations (people who inject drugs, sex workers, and transgender individuals) have shown a consistent decline in new HIV infections among individuals aged 15 and older over time, this is not the case for Men who have Sex with Men (MSM) and low-risk women (partners of critical populations). In these two groups, the rate of new HIV infections has instead increased (Zhou *et al.*, 2023).

One effort to reduce HIV/AIDS infection rates among Men who have Sex with Men (MSM) is the early detection of HIV status through voluntary counseling and testing (VCT) clinic services. VCT clinics are the primary entry point for HIV prevention, care, support, and treatment services (Costa *et al.*, 2022). VCT services combine counseling and HIV testing processes. The uniqueness of VCT services lies in the counseling process and the testing and post-testing stages. These services aim not only to facilitate behavioral change but also to prevent HIV/AIDS transmission within the MSM group, improve the quality of life for people living with HIV/AIDS (PLWHA), and promote awareness and the utilization of these vital services. Future efforts in HIV/AIDS prevention and management should focus on empowering at-risk groups, reducing social stigma, and strengthening comprehensive education and outreach on HIV/AIDS. By doing so, interventions can be more targeted and effective in reducing new infections and improving the quality of life for people living with HIV/AIDS (PLWHA). This study aims to analyze the factors influencing the utilization of VCT services by the MSM group in Kendari City. Using a quantitative approach with a cross-sectional study design, the research

examines the relationship between variables such as knowledge, attitudes, actions, family support, and social support with VCT utilization. The findings are expected to provide a comprehensive overview that can serve as a foundation for policymaking to improve access to and utilization of VCT services, especially among high-risk critical populations for HIV/AIDS.

RESEARCH METHODOLOGY

This study is a quantitative research type with a cross-sectional study design approach. The population in this study consists of all HIV/AIDS patients undergoing ARV treatment at Kendari City Regional General Hospital in 2023, totaling 349 individuals. Data were analyzed using SPSS to determine frequency distribution and the chi-square statistical test to examine relationships between variables.

RESULT

Table 1. The influence of knowledge, action, family support, and peer support on the utilization of VCT clinics among men who have sex with men (MSM) living with HIV/AIDS

Characteristics	Utilization of VCT Clinics				Amount		Statistical Values
	Not good		good				
	n	%	n	%	n	%	
Knowledge							
Less	14	60,9	9	39,1	23	100,0	α = 0,000
Enough	6	11,3	47	88,7	53	100,0	ρ = 0,517
Action							
Negatif	11	50,0	11	50,0	22	100,0	α = 0,003
Positif	9	16,7	45	83,3	45	100,0	ρ = 0,343
Family support							
Less	11	42,3	15	57,7	26	100,0	α = 0,022
Enough	9	18,0	41	82,0	50	100,0	ρ = 0,262
Peer support							
Not good	9	50,0	9	50,0	18	100,0	α=0,009
Good	11	19,0	47	81,0	58	100,0	ρ=0,300

Based on the table above, it is known that from a total of 23 groups of MSM who have less knowledge regarding the use of VCT clinics, 14 (60.9%) did not make use of VCT clinics, and nine respondents (39.1%) made good use of VCT clinics. Meanwhile, from 53 groups of MSM with good knowledge, 6 (11.3%) respondents made good use of VCT clinics, and 47 (88.7%) others used VCT clinics. The analysis results showed a significance value of 0.000 <0.05, meaning there is a relationship between knowledge and the use of VCT clinics by the MSM group with a closeness level of 0.517, indicating a moderate relationship. Based on the table above, it is known that from 22 MSM groups with negative actions regarding the utilization of VCT clinics, 11 (50%) were found to have made less use of VCT clinics, and 11 respondents (50%) utilized VCT clinics well. Meanwhile, from a total of 45 MSM groups with positive actions, 9 (16.7%) respondents made less use of VCT clinics, and 45 (83.3%) others utilized VCT clinics well. The analysis results showed a significance value of 0.003 <0.05, meaning there was a relationship between actions and the utilization of VCT clinics by the MSM group, with a closeness level of 0.343, indicating a moderate relationship.

Based on the table above, it is known that from a total of 26 groups of MSM who have less family support regarding the use of VCT clinics, 11 (42.3%) did not make use of VCT clinics and 15 respondents (57.7%) made good use of VCT clinics. Meanwhile, from 50 groups of MSM who received good family support, 9 (18%) respondents made good use of VCT clinics, and 41 (82%) others used VCT clinics. The analysis results showed a significance value of 0.022 <0.05, meaning there is a relationship between family support and the use of VCT clinics by the MSM group, with a closeness level of 0.262, indicating a weak relationship. Based on the table above, it is known that from a total of 18 groups of MSM who received

insufficient social support regarding the use of VCT clinics, 9 (50%) were found to have made less use of VCT clinics, and nine respondents (50%) made good use of VCT clinics. Meanwhile, from 58 groups of MSM with good social support, 11 (19%) respondents made less use of VCT clinics, and 47 (81%) others made good use of VCT clinics. The analysis results showed a significance value of 0.009 <0.05, meaning there is a relationship between social support and the use of VCT clinics by the MSM group with a closeness level of 0.300, indicating a weak relationship.

DISCUSSION

In conclusion, the study shows that knowledge, actions, family support, and social support all play crucial roles in the utilization of VCT clinics among MSM living with HIV/AIDS. There is a significant relationship between these factors and VCT utilization, with varying degrees of closeness. Interventions aimed at increasing awareness, improving support systems, and encouraging positive actions could help enhance the utilization of VCT services and contribute to better HIV/AIDS prevention and management in this group.

The results of the study based on respondents' answers showed that most respondents were well aware of the usefulness of VCT services, namely to find out a person's HIV status, positive or negative, respondents were well aware of the usefulness of VCT services to providing knowledge/education about transmission and prevention methods, and the material provided by VCT counselors before the test was not only information on preventive behavior but more on behavioral changes for people living with HIV/AIDS. It is expected that with the services at the VCT Clinic, the most crucial factor expected by officers is a change in the behavior of people living with HIV/AIDS. The behavioral changes referred to in this case are avoiding free sex and using protection (condoms) to prevent transmission (Bekolo *et al.*, 2023). The researcher's assumption regarding the relationship between knowledge and the use of the VCT Clinic for the Men and Women group is that the excellent level of knowledge of people living with HIV/AIDS is due to the level of understanding related to people living with HIV/AIDS given by service officers, in this case, counselors and companions are pretty good, where counselors assisted by companion officers from NGOs routinely communicate with sufferers and receive all the information given quite well. However, there are still some sufferers who still engage in these risky behaviors (Suprapto *et al.*, 2024). Counselors and accompanying officers communicate not only in services (VCT clinics) but communication can be done through social media or by telephone (Jones *et al.*, 2024). This is to listen to complaints from sufferers regarding the problems they have experienced so far. Given that VCT is voluntary, there needs to be a willingness from within the respondents themselves to be willing to do VCT. With good knowledge, respondents' understanding of HIV/AIDS and the importance of VCT can encourage them to be willing to do VCT voluntarily and without coercion from various parties (Shasho et al., 2024).

Based on the results of the study through respondents' answers through questionnaires, most respondents disagreed if the activities carried out at the VCT Clinic were limited to HIV/AIDS Counseling; respondents wanted the VCT Clinic service information that would not only be limited to counseling but also reinforcement and motivation given by officers so that they do not feel discriminated against or stigmatized by the community. However, sufferers usually stigmatize themselves, even though the people around them do not do that. In addition, respondents strongly agree that people who are at high risk of contracting AIDS should check themselves at the VCT clinic (Hikmawati et al., 2023). This is to carry out the examination as early as possible, which can prevent sufferers from various comorbidities caused by it (Mohammed and Puteh, 2022). The researcher's assumption regarding the relationship between actions and the use of the VCT Clinic is that HIV/AIDS patients who visit the VCT clinic every month are taken for ARV as well as consultation or counseling on treatment compliance and understanding to patients for the behavioral change stage (Saad *et al.*, 2024). However, some

respondents still do not utilize the VCT Clinic services because sufferers are still close to other sufferers, and when they are at the VCT Clinic, they assume that there will be other sufferers who come at that time. The concerns of these sufferers result in them not utilizing the VCT Clinic but only coming for a moment to take ARVs (Bukhori et al., 2022). The behavior or actions of HIV/AIDS sufferers in utilizing the VCT Clinic have a significant effect on the routine and compliance of sufferers in undergoing counseling. The behavior of utilizing health services is an effort or action of a person when suffering. Counseling and testing in VCT are voluntary counseling activities, learning discussions between counselors and clients to understand HIV/AIDS along with the risks and consequences for themselves, their partners, families, and those around them with the primary goal of changing behavior to be healthier and safer (Sunji *et al.*, 2024).

Most respondents are immigrants from outside Kendari City and live in Kendari to work. They are far from their families, and some even have problems with their families—some respondents who use the VCT clinic work as private or private employees. Respondents who are private employees generally work in massage parlors, nightclubs, karaoke places, or salons (Idrus *et al.*, 2024). Therefore, these respondents need more family support in the form of information and instrumental support in utilizing the VCT clinic. Based on observations in the field, NGOs appear to be more active in providing emotional support and assessment to respondents in utilizing the VCT clinic. Family support has no significant relationship with using VCT clinics (Degu, 2023). Several factors can cause this phenomenon, such as family support, because family support is not the only factor influencing respondents to utilize health services such as VCT clinics. The study's results showed that all female respondents said they received family support, while some male respondents said they did not receive support from their families. Researchers also saw that men trusted their groups more than their families. Support provided by the family can help reduce feelings of pressure or stress in patients due to specific causes, mainly due to stigma in the social environment (Amoah et al., 2024).

Positive social support can increase an individual's motivation and courage to get tested for HIV and get the necessary health services. Good social support can include acceptance, understanding, and encouragement from those closest to them, which in turn can reduce fear and stigma related to HIV/AIDS. HIV/AIDS education programs should include the importance of family and social support for MSM in coping with stigma and seeking appropriate health services. In addition to family support, community organizations and peer support groups can play an essential role in increasing the use of VCT services by providing emotional support and needed information (Bakri *et al.*, 2024). To support the use of VCT clinics, it is essential to ensure that friendly, non-discriminatory, and inclusive counseling services are available to MSM in all regions so that they feel safe and accepted when accessing services. While social support significantly influences the use of VCT clinics, other factors also need to be considered to create a more conducive environment for MSM to make the most of these health services (Shaluhiyah et al., 2023).

CONCLUSION

It can be concluded that knowledge, practice, family support, and social support all play essential roles in the utilization of VCT clinics among MSM living with HIV/AIDS. There is a significant relationship between these factors and VCT utilization, with varying degrees of closeness. Interventions aimed at increasing awareness, improving support systems, and encouraging positive actions may help increase the utilization of VCT services and contribute to better prevention and management of HIV/AIDS in this group. More intensive and community-based education programs are needed to increase knowledge about the benefits and importance of VCT, especially among MSM. These programs can be implemented in places frequently visited by MSM, such as fitness centers, community centers, or social gathering places. Government and non-governmental organizations (NGOs) can work together to provide easily

accessible educational materials, such as brochures, videos, and social media campaigns relevant to the conditions and needs of MSM groups.

Conflict of Interest

The authors declare that they have no competing interests.

REFERENCES

Amoah Adongo, A., Mensah Dapaah, J. and Addo, B. (2024). 'HIV/AIDS-related knowledge, attitudes and perceptions of urban Ghanaian pregnant women: Results of a qualitative study,' *International Journal of Africa Nursing Sciences*, 21, p. 100785. Available at: https://doi.org/https://doi.org/10.1016/j.ijans.2024.100785.

Bakri, F.G. *et al.* (2024). 'Clinical, molecular, and drug resistance epidemiology of HIV in Jordan, 2019-2021: A national study', *International Journal of Infectious Diseases*, 145, p. 107079. Available at: https://doi.org/https://doi.org/10.1016/j.ijid.2024.107079.

Bekolo, C.E. *et al.* (2023). 'The effect of the Universal Test and Treat policy uptake on CD4 count testing and incidence of opportunistic infections among people living with HIV infection in Cameroon: a retrospective analysis of routine data', *Dialogues in Health*, 2, p. 100120. Available at: https://doi.org/https://doi.org/10.1016/j.dialog.2023.100120.

Bukhori, B., Hidayanti, E. and Situmorang, D.D.B. (2022). 'Religious coping strategies for people with HIV/AIDS (PLWHA) Muslims in Indonesia: A qualitative study with a telling-the-stories,' *Heliyon*, 8(12), p. e12208. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2022.e12208.

Costa, A.B. *et al.* (2022). 'HIV Voluntary Counseling and Testing (VCT-HIV) effectiveness for sexual risk-reduction among key populations: A systematic review and meta-analysis,' *eClinicalMedicine*, 52, p. 101612. Available at: https://doi.org/https://doi.org/10.1016/j.eclinm.2022.101612.

Degu, F.S. (2023). 'Anxiety and Depression Disorder among Adult People Living with HIV/AIDS on Follow-up at Dessie Public Health Facilities Antiretroviral Therapy Clinics, Northeast Ethiopia: A Multicenter Cross-sectional Study,' *The Open AIDS Journal*, 17. Available at: https://doi.org/https://doi.org/10.2174/0118746136250239231025074541.

Fuge, T.G., Tsourtos, G. and Miller, E.R. (2022). 'Risk factors for late linkage to care and delayed antiretroviral therapy initiation among adults with HIV in sub-Saharan Africa: a systematic review and meta-analyses,' *International Journal of Infectious Diseases*, 122, pp. 885–904. Available at: https://doi.org/https://doi.org/10.1016/j.ijid.2022.07.037.

Hikmawati, H., Muhsina, S. and Amandaty, S. (2023) 'Knowledge and Perceptions of Coastal Adolescents on TB and HIV/AIDS', *Jurnal Ilmiah Kesehatan Sandi Husada*, 12(2 SE-Book Review). Available at: https://doi.org/https://doi.org/10.35816/jiskh.v12i2.1170.

Huang, S.-H. *et al.* (2024) 'Forty years of HIV infection and AIDS in Taiwan: Reflection on the past and looking toward the future,' *Journal of Microbiology, Immunology, and Infection* [Preprint]. Available at: https://doi.org/https://doi.org/10.1016/j.jmii.2024.11.003.

Idrus, L.R. *et al.* (2024). 'Analysis of Health-Related Quality of Life and Incurred Costs Among Human Immunodeficiency Virus, Tuberculosis, and Tuberculosis/HIV Coinfected Outpatients in Indonesia,' *Value in Health Regional Issues*, 41, pp. 32–40. Available at: https://doi.org/https://doi.org/10.1016/j.vhri.2023.10.010.

Jones, H.S. *et al.* (2024). 'HIV incidence among women engaging in sex work in sub-Saharan Africa: a systematic review and meta-analysis,' *The Lancet Global Health*, 12(8), pp. e1244–e1260. Available at: https://doi.org/https://doi.org/10.1016/S2214-109X(24)00227–4.

Li, S.S. *et al.* (2024). 'Evaluation of factors associated with high advanced HIV disease and mortality in Southwestern China: a retrospective cohort study, 2005–2020', *Public*

Health, 227, pp. 282–290. Available at: https://doi.org/https://doi.org/10.1016/j.puhe.2023.11.025.

Mahmud, S. *et al.* (2023). 'Prevalence of HIV and syphilis and their co-infection among men having sex with men in Asia: A systematic review and meta-analysis,' *Heliyon*, 9(3), p. e13947. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e13947.

Mohammed, M.F.N. & Puteh, S.E.W. (2022). 'HIV Treatment and Care Services in Yemen: Implications Of Internal Country Conflicts,' *The Open AIDS Journal*, 16. Available at: https://doi.org/https://doi.org/10.2174/18746136-v16-e221020-2022-9.

Onovo, A.A. *et al.* (2023). 'Estimation of HIV prevalence and burden in Nigeria: a Bayesian predictive modeling study,' *eClinicalMedicine*, 62, p. 102098. Available at: https://doi.org/https://doi.org/10.1016/j.eclinm.2023.102098.

Saad, R.K. *et al.* (2024). 'HIV- related knowledge, attitude, practices, and stigma among healthcare providers caring for HIV in Jordan: Identification of several organizational challenges,' *Heliyon*, 10(2), p. e24423. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e24423.

Shaluhiyah, Z., Suryoputro, A. & Septialti, D. (2023). 'Short-term Effect of Training in Increasing Midwives' Knowledge, Attitudes, and Practices Related to HIV and AIDS Prevention,' *The Open AIDS Journal*, 17. Available at: https://doi.org/https://doi.org/10.2174/18746136-v17-e230202-2022-18.

Shasho, F., Yilma, M. and Asfaw, Z.G. (2024). 'Factors associated with time to death among HIV/TB coinfected patients on ART in Dire Dawa, Ethiopia: A retrospective study,' *Heliyon*, 10(17), p. e37420. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e37420.

Sunji, N. *et al.* (2024). 'Impact of the COVID-19 pandemic on sexually transmitted infection testing and diagnosis in Lebanon: A retrospective chart review', *Heliyon*, 10(20), p. e39191. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e39191.

Suprapto *et al.* (2024). 'Building Nurse Competency Strategy at Public Health Center in Indonesia: A Descriptive Qualitative Approach,' *The Malaysian Journal of Nursing*, 15(03), pp. 62–70. Available at: https://doi.org/https://doi.org/10.31674/mjn.2024.v15i03.008.

Wang, Y. *et al.* (2022). 'Elimination of HIV transmission in Japanese MSM with combination interventions,' *The Lancet Regional Health - Western Pacific*, 23, p. 100467. Available at: https://doi.org/https://doi.org/10.1016/j.lanwpc.2022.100467.

Zhou, Y. *et al.* (2023). 'Characteristics of the different HIV-1 risk populations based on the genetic transmission network of the newly diagnosed HIV cases in Jiangsu, Eastern China', *Heliyon*, 9(12), p. e22927. Available at: https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e22927.

How to Cite: