

PSYCHOEDUCATION TO PREVENT THE SPREAD OF HIV AMONG MEN WHO HAVE SEX WITH MEN IN SURABAYA CITY

Christina Albertina Ludwinia Parung, & I Gusti Ayu Maya Vratasti
Faculty of Psychology, University of Surabaya (Indonesia)

Abstract

Sexual transmission of HIV among Men who have Sex with Men (MSM) is believed to be one of the sources of the AIDS epidemic. Nowadays, governments, communities, and NGOs are taking action to prevent its spread by assisting and educating groups of MSM in their countries. This assistance involves experts in many fields of study, including psychology. In the field of psychology, psychoeducation is believed to be one of the ways to assist the MSM groups. In September to December 2019, the authors conducted a mentoring effort to the MSM community at the MSM community gathering location called Gang Pattaya, in the city of Surabaya, the second largest and densely populated city in Indonesia. The existence of this community is disguised by the general public, but is well known by NGOs. Community members do MSM out of their liking, although some do it in exchange for money. However, safety factors, such as using condoms for MSM, are not a priority for this community. They do MSM whether they receive a reward or not, just out of a boost of pleasure. There is no attempt to find out the health of the partner once they are attracted to each other. In general, they do not know whether they are infected with HIV. Most of them feel healthy and since they do not show any symptoms, they think it is not necessary to get tested. In the mentoring process, we conduct psychoeducation, which begins with an approach to certain individuals so that they are comfortable with our presence, then increasing awareness of safer sex behavior for HIV prevention for groups in the form of counseling using the Theory of Reasoned Action (TRA) approach. Counseling is carried out in various forms including roleplay, games, and seminars. The number of participants was 11 people as agents of changes of the community, varying from 19 - 47 years old. Pretest related to knowledge of safer sex was carried out before conducting the intervention and post-test after the intervention. The normality test used is the Shapiro-Wilk analysis. Different tests on the data obtained were carried out using the non-parametric Wilcoxon Signed Ranks Test. None of the participants had lower post-test knowledge scores than the pre-test. Pretest and post test for safer sex behavior showed 2 participants with safer sex behavior did not change. Both belong to the senior group, while other participants have an improvement in their safer sex behavior. These findings suggest that intervention programs for MSM as an effort to reduce HIV transmission should pay attention to affective and cognitive coping strategies.

Keywords: *HIV, men who have sex with men, psychoeducation, psychology health, safer sex behavior, theory of reasoned action.*

1. Introduction

Nowadays, the HIV epidemic has grown globally. It affects anyone regardless of race, or gender, or sexual orientation. However, according to preliminary researches, this epidemic has spread rapidly among men who have sex with men (MSM). UNAIDS Report (2016) stated that there was a significant increase in HIV infection incidence all around the world between 2010 - 2014 -, about 17% increase in Western and Central Europe, 8% in Latin America. These numbers do not stop here. UNAIDS Report (2018) stated that the numbers of HIV infected-MSM contributed approximately 57% of HIV infections in Western Europe and North America, 41% in Latin America, and 25% in Asia, Pacific, and Caribbean, 20% in Eastern Europe, Central Asia, North Africa, and 12% in Western and Central Africa. According to Riono and Challacombe (2020), there were 640.000 people living with HIV in Indonesia and 400.000 among them are men, which makes the HIV prevalence of MSM in Indonesia reach to 25.8 % (UNAIDS, 2020).

Sexual contact between men is not acceptable among Indonesian citizens, however in real media is all over the issue. Consequently, many big cities in Indonesia like Jakarta, Bandung, and Surabaya have their own MSM community. Unfortunately this communities are closed communities that limit links from outside their group because the stigma and discrimination the communities are frequently facing among the

societies. This social phenomenon is one of the factors that cause difficulties in increasing awareness of the risks of having unhealthy sexual relationships.

Surabaya is one of the big cities in Indonesia with big numbers of MSM. According to Purcell et al. (2012), MSM group of all races and ethnicities is the group most severely affected by HIV/AIDS. USAIDS (2020) stated that in the world, the risk of HIV infection among gay men and MSM is 26 higher than others. Other findings also proved that the risk of HIV among MSM in the USA is higher than men, about 44 times higher (Johnson et al, 2014). Meanwhile, in developing countries, the possibility of infection is 19,3 times higher than the general population (Barat et. al, 2007).

Hence, the use of health services, including psychology is needed to accompany gay and MSM group to reduce the spread of HIV virus among population. This research aims to collect and analyze data to improve the local companion program for the MSM group that is located in Gang Pattaya, Surabaya. Generally, members from the MSM community have sexual intercourses based on attractiveness, but there are some members who do it for money. However, not many of them practice safer sex like using condoms. Also, there are no preventive services participations that make it even worse, mostly because stigma and discriminatory attitudes towards the community and the disease. Therefore, to increase awareness and to educate the MSM community, counseling needs to be done, so in order to make them understand the risk of sexual activity and they can prevent themselves from getting affected with HIV.

2. Method

2.1. Recruitment

Counseling and companionship process in the MSM community in Surabaya is started by doing personal approaches to individuals that are inside the organization / community. These key individuals are the agents of change inside the MSM. They will inform their friends in organization and they will pick some to be the leaders and the agents of change. This step is needed to be done because the MSM community is usually closed from the public, therefore to do the accompaniment, the researcher needed people from inside the community.

These participants are selected as agents of changes because they are open to new information, flexible, and approachable to be given information. After the counseling and companionship, they can give the information to their friends in the MSM community regarding preventive actions towards HIV. The author also made sure that each participant is willing to be interviewed and take pre and post tests.

Before the counseling and companionship process, the participants are asked to take pre-test regarding their prior knowledge about safer sex. The author has chosen 11 people to be the agents of change. The age group of participants are varied from 19 - 47 years old. The counseling and companionship process begins in September 2019 and ends in December 2019. After the counseling and companionship process are carried on, the author evaluates the results.

2.2. Needs analysis

Even though it is a closed community, the MSM community in the Gang Pattaya has become the attention of NGOs and the Surabaya City Health Office through health centers to be provided with an initial HIV screening test facility. The government and the Global Fund also provide assistance in the form of free drugs for positive HIV sufferers as a form of support for the prevention of HIV transmission. However, the awareness to check personal health and apply protection for safer sex behavior is still lacking in certain individuals. Unsafe sexual behavior is sexual intercourse with individuals whose health status is not known without the use of protection such as condoms (Slaymaker, et al., 2004).

In order to understand the various conditions that occur in the MSM community, an urgent needs analysis was carried out for the MSM community. The needs analysis process begins with interviews with community representatives. Initial interviews were conducted in order to see the ideal expectations that occur in all members of the community, to understand the realities that occur in the field, to determine the gap between ideal expectations and reality, to identify why there is a gap between expectations and reality so that action steps can be taken to fill the gap. The ideal hope for all community members is that they carry out routine health checks, especially those related to HIV, and they will use protection (condoms) when having sex. However, the reality shows that some members in "Gang Pattaya" are infected with HIV and are in the AIDS phase. Another reality is that many community members do not carry out routine health checks, do not use protection during sex because they feel more comfortable if they do not use protection. Another reason is community members who work as sex workers, who serve customers not to use protection in exchange for higher payments.

Through interviews, it was found that gaps occurred because of the fear of social judgment from the health center officers who carried out the scrutiny. In addition, there are concerns that HIV positive results from screening will make it difficult to find partners or customers. Based on these findings, an intervention was carried out. Psychoeducation is an intervention choice that needs to be taken in this MSM community.

2.3. Intervention approach

To increase awareness of safer sex behavior for HIV / AIDS prevention in the Pattaya Gang community, informal sharing and counseling was carried out using the Theory of Reasoned Action (TRA) approach in the form of psychoeducation. The concept of psychoeducation is doing therapy by providing information, systematically conveying integrated knowledge from emotional and motivational aspects (Ekhtiari, Rezapour, et al., 2017). Psychoeducation has been used as a form of treatment for various mental health disorders (Atri and Sharma, 2007) including bipolar disorder (Stafford and Colom, 2013), schizophrenia (Bauml et al., 2006), depression prevention (Cerón, et al., 2020), even for the prevention of HIV / AIDS (Fullilove et al., 1989; Brawner et al., 2021).

Mentoring and counseling are carried out in various forms, namely through informal meetings, seminars, workshops in the form of roleplay, games, watching short films, reflections, discussions on safer sex behavior, and lectures on safer sex. Pretest related to knowledge about safer sex was carried out before conducting the intervention and post-test after the intervention. TRA emphasizes the importance of social cognition which forms subjective norms (individual beliefs related to social norms). TRA also emphasizes the importance of beliefs and evaluations of individual beliefs to form attitudes to behavior in shaping individual behavior (Ogden, 2007). The TRA scheme is used to understand safer sex behavior as an effort to prevent HIV / AIDS transmission among the MSM community in Surabaya.

3. Results

The TRA approach used in this assistance program is expected to change the knowledge of community members about how HIV is transmitted, the impact of HIV, HIV prevention activities, and their behavior level. An evaluation of the pre-test and post-test results is carried out as follows:

3.1. Evaluation of knowledge

Based on data processing results, the participants' knowledge before and after joining the assistance program scores were obtained. The norms used in the evaluation of knowledge were ideal norms. Thus, the scores obtained by the participants were compared with the ideal scores. The participant's knowledge is categorized into five: namely Very Low, Low, Medium, High, and Very High.

The post-test was carried out after completing the assistance program, especially training. The data obtained were processed using the Shapiro-Wilk normality test because the sample size was less than 50 people. From the normality test, it is concluded that the distribution of pre-test knowledge data was normal. In comparison, the distribution of post-test knowledge data was not normal. Therefore, a t-test was carried out using the Wilcoxon non-parametric test. After being assisted and re-measured by post-test, it seems that almost all participants have improved, but 2 people had the same score. There were no participants who experienced a decrease in their knowledge score after joining the assistance program.

3.2. Evaluation of attitude

Based on data processing results, the participants' attitude implementing the safer sex behavior scores was obtained. The norms used in the evaluation of attitudes were ideal norms. The participants' attitudes are categorized into five: namely Very Low, Low, Medium, High, and Very High.

Based on the post-test results, it is found that 2 participants experienced an increase in the score category while the other 10 participants were in the same category. Even though more participants were in the same category, there was an increase in scores before and after the assistance program. The data normality test used Shapiro-Wilk. The results showed that the pre-test significance value of the attitude score was 0.889 (> 0.05), so that the distribution of the pre-test score data on the attitude scale of safer sex behavior was normal. In the post-test score, the significance value was 0.707 (> 0.05), so that the distribution of post-test data was normal. The pre-test and post-test data had normal data distribution, so a t-test was carried out using a parametric test.

There was a difference in the attitudes toward safer sex behavior before and after the program was carried out. It can be concluded that the program is capable of changing the participants' attitudes. This can be seen from the increased average score obtained by the participants after the program.

3.3. Evaluation of behavior level

Evaluation of behavior level was carried out to determine the participants' behavior change after the assistance program was done. This was done by conducting a return visit a month later to MSM in the Gang Pattaya area. The follow-up was conducted by interviewing 7 people who had previously attended safer sex counseling activity. Based on the interview results, in general, several findings were found, including participants who had started to act as agents of change. They share information, including knowledge gained during the assistance program with other MSM members. Participants share their knowledge by telling stories and discussing their HIV and safer sex experiences while doing social gatherings at hotspots. Some of the interviewed participants admitted to starting to use a condom when

having sexual intercourse and telling their partners their desire to use a condom when having sexual intercourse. However, sometimes participants admitted that their partners were hesitant to listen to the explanation. Yet, they have tried to be more aware of safer sex and make their partners do the same thing.

4. Discussion

The assistance program evaluation results show an increase in the participants' knowledge regarding safer sex behavior and HIV/AIDS. This change can be seen from the results of the t-test analysis, which shows a significance of 0.008 (<0.05) that indicates a difference in knowledge before and after the assistance program is carried out. This is reinforced by the change in the participants' average score from 73.64 to 84.09 after evaluating the workshop results. Participants gained new knowledge about the prevention of HIV/AIDS transmission through safer sex behavior; participants also understood new knowledge regarding the importance of implementing safer sex behavior as a form of self-protection.

Apart from the knowledge side, the participants' attitudes toward safer sex behavior also changed. T-tests indicate this on the attitudes toward safer sex behavior measurement scale that shows a significance value of 0.000 (<0.05), which indicates a difference in attitudes toward safer sex behavior before and after the assistance program is carried out. This result is also shown by a change in participants' mean score from 63.27 to 65.91, signifying an increase in knowledge. The increase implies a change in positive attitudes toward safer sex behavior. Previously, most participants only knew the meaning of safer sex behavior but did not understand the importance of safer sex and the steps to implement safer sex behavior. Based on the results of the evaluation on knowledge and short interviews that have been conducted, it is found that there is an increase in the participants' knowledge and insights regarding HIV/AIDS and prevention steps by implementing safer sex behavior.

The pre-test and post-test evaluation results also show participants' behavior change. In a more detailed discussion, for example, on the results of the pre-test and post-test attitude, 9 participants experienced an increase in the attitude scores, and only 2 participants had the same score. While related to the category, 2 people experienced an increase from medium to high and 9 people stayed in the same category. The pre-test and post-test attitude results did not show a decrease in either score or category, likewise with the pre-test and post-test knowledge. 9 participants experienced an increase in their score, and 2 participants had the same score. While related to the category, 6 participants experienced an increase: 1 participant from medium to very high and 5 participants from high to very high.

It is also supported by participant observation data, namely from the evaluation of reaction results; it was found that the average participant was interested in participating in the assistance program, as evidenced by the average score related to the material of 3.45 (interested) scale of 4. Moreover, related to the suitability of the material to their needs, participants gave 3.55 (appropriate), which means that the participants felt that the material presented suits their needs. The next assessment was related to the mentoring method; the participants gave 3.32 (good), which means that the participants felt the method was suitable and did not make them bored. This supports changes in the participants' knowledge and attitudes because the information conveyed during the mentoring can be received positively by the participants. Thus, data from the evaluation of reactions of the assistance program supports the findings of changes in knowledge and attitudes.

Participants' behavior changes after joining the mentoring can be due to new information received suit with the information they need. Abraham et al. (2016) stipulates that providing the information is critical to change individual motivation. Information can increase motivation and foster a desire to make changes in action if the delivery of information is accurate and on target. This proves that participants who participate in the assistance program can become a group that drives change in the community. This is called an agent of change. The follow-up interview data show that the participants are aware of being suitable agents of change, so that it is hoped that these agents of change will be able to encourage other (gay) MSMs to apply safer sex behavior.

When viewed from type, an agent of change in this study is categorized as the People-Change-Technology type. This type focuses on the individual. These agents of change pay attention to the morale and motivation of community members, including absence and the quality of the resulting behavior. The methods used here include activity enriching, goal setting, and behavior changes. Under this type, if individuals change their behavior, the community will also change, eventually driving people to change the community. Based on the results of the assistance program, it is hoped that behavior changes of participants who are part of the community members will be able to change other members of the MSM (gay) community. Participants of this program are agents who will bring about changes in their communities related to awareness of safer sex behavior.

5. Conclusion

Compared with the TRA analysis before the assistance program, the TRA analysis after the program showed a change in the attitude toward using condoms. The previous attitude of MSM (gay) individuals, namely the use of condoms, was considered something that is not mandatory to use, but after the program, this attitude changed, and MSM (gay) individuals began to realize the importance of using condoms. MSM also understands that using a condom is an obligation for self-protection when having sexual intercourse. MSM individuals have also shifted their understanding from initially being reluctant to carry out tests to become aware of the importance of knowing their health status and their partners by conducting VCT examinations as a form of protection and prevention of HIV transmission.

It can be concluded that this program successfully meets the initial objectives expected in the aspects of knowledge and attitude. In changing the participants' behavior, the motivation of each individual is needed.

This research is only a preliminary study, and to get better and long-term results, continuous assistance and involving many agents are needed so that the prevention of HIV transmission can be more effective.

References

- Abraham, C., Conner, M., Jones, F., & O'Connor, D. (2016). *Health psychology*. Routledge.
- Atri, A., and Sharma, M., (2007), Psychoeducation: Implications for the Profession of Health Education Californian, *Journal of Health Promotion, Volume 5*, Issue 4, 32-39
- Baral, S., F. Sifakis, F. Cleghorn, and C. Beyrer, (2007), Elevated risk for HIV infection among men who have sex with men in low- and middle-income countries 2000–2006: a systematic review, *PLoS Medicine*, vol. 4, no. 12, pp. 1901–1911
- Bäumel J, Froböse T, Kraemer S, Rentrop M, Pitschel-Walz G. (2006), Psychoeducation: a basic psychotherapeutic intervention for patients with schizophrenia and their families. *Schizophr Bull*, 32 *Suppl 1(Suppl 1)*: S1-S9. doi:10.1093/schbul/sbl017
- Brawner, B.M., Jemmott L.S., Hanlon A.L., Lozano A.J., Abboud S., Ahmed C. & Gina Wingood, G. (2021) Results from Project GOLD: A pilot randomized controlled trial of a psychoeducational HIV/STI prevention intervention for black youth, *AIDS Care*, DOI: 10.1080/09540121.2021.1874273
- Cerón, S.C., Bellón, J.A., Motrico, E., Campos-Paíno, H., Gómez, C.M., Ebert, D.D., Buntrock, C., Gili, M., Peral, P.M., (2020), Moderators of psychological and psychoeducational interventions for the prevention of depression: A systematic review, *Clinical Psychology Review, Volume 79*, 101859, ISSN 0272-7358
- Ekhtiari, H., Rezapour, T., Aupperle, R. L., & Paulus, M. P. (2017). Neuroscience-informed psychoeducation for addiction medicine: A neurocognitive perspective. *Progress in brain research*, 235, 239-264.
- Fullilove, Mindy, M.D, Fullilove, Robert, III EdD & Edward Morales (1989) Psychoeducation, *Journal of Psychotherapy & The Family*, 6:1-2, 143-160, DOI: 10.1300/J287v06n01_08
- Johnson, A.S., Hall HI, Hu X., Lansky A, Holtgrave DR, Mermin J. (2014), Trends in diagnoses of HIV infection in the United States, 2002–2011. *JAMA*.312(4):432–434. doi: 10.1001/jama.2014.8534.
- Ogden, J. (2007). *Health Psychology: A Textbook: A textbook*. McGraw-Hill Education (UK).
- Palli, A., (2017), Psychoeducation: The way to Make Patients Manage their Illness and Fill their Future with Life, *Mental Health in Family Medicine 13*: 528-531
- Purcell, D.W., Johnson, C.H., Lansky, A., Prejean, J., Stein, R., Denning P, Crepaz N. (2012), Estimating the population size of men who have sex with men in the United States to obtain HIV and syphilis rates. *Open AIDS J*. 6:98–107. doi: 10.2174/1874613601206010098
- Rhodes S.D. and Wong F.Y. (2016), “HIV prevention among diverse young MSM: Research needs, priorities, and opportunities”, *AIDS Educ Prev. Jun*; 28(3): 191-201
- Slymaker E, Walker N, Zaba B, Collumbien M, editors. (2004), *Unsafe Sex, comparative quantification of health risks: Global and regional burden of diseases attributable to selected major risk factors. Ch. 14. Geneva: World Health Organization; p. 1177-254*. Available from: <http://www.who.int/publications/cra/chapters/volume2/1177-1254.pdf>. [Last accessed on 2021 march 13]
- Stafford, N. and Colom F. (2013), Purpose and effectiveness of psychoeducation in patients with bipolar disorder in a bipolar clinic setting, *Acta Psychiatr Scand 127 (Suppl. 442)*: 11–18, DOI: 10.1111/acps.12118
- UNAIDS (2016) ‘Global AIDS UPDATE (accessed Dec 2020)
- UNAIDS (2018) ‘Global HIV & AIDS statistics — 2018 fact sheet’ (accessed March 2021)
- UNAIDS (2020) “Global Report, AIDS data book (accessed February 2021)