Introduction

Human Immunodeficiency Virus (HIV) has been a worldwide health problem. Its prevalence increases year by year. This virus attacks white blood cells, especially CD4 which results in decreased human immune system.1 World Health Organization (WHO) data show that the number of HIV sufferers in 2018 reached 37.9 million, 770,000 died, and 1.7 million new cases.

It is reported that the cumulative number of HIV infections until December 2017 was 48,300 cases in all provinces in Indonesia. West Java Province has the third-highest number of HIV/AIDS sufferers nationally, where the number of HIV/AIDS sufferers increases year by year.2 In recent years, the increase occurs among young MSM (Men who have Sex with Men). Based on the estimation of the Ministry of Public Health, there were 866,640 MSM in 2016. The number of HIV positive MSM is 10,628 people.3 Based on the report of the Ministry of Public Health of the Republic of Indonesia, West Java Province has the highest number of MSM with HIV positive nationally, with 138,606 individuals. The increasing global HIV prevalence is currently dominated by key populations.3 Key populations, including MSM, are 22 times more likely to be infected by HIV / AIDS than other population. MSM or often known as men who have sex with men is a term used to describe the sexual behavior of 2 or more men who have sex without considering sexual orientation and gender identity.4

The social problem of MSM seems to have penetrated the Indonesian community. The national MSM population remains the biggest contributor and threat to HIV transmission.2 The main factor in the transmission of this virus is the low use of condoms as protection when engaging in risky sexual behavior such as anal sex.5 For this reason, the main focus of preventing HIV transmission is the use of condoms.6

The use of condoms as a medium for preventing HIV transmission is considered very important. However, this is often neglected and condoms are not used consistently.7 Knowing where to obtain condoms does not mean knowing how to use and how to introduce them to the sexual partner.8 This condition decreases the condom use behaviour. Several studies report that inconsistent condom use is related to several factors, such as self-efficacy.9 Self-efficacy is a person’s belief in his ability to remain consistent without feeling embarrassed or rejected from doing a behavior.

Condom self-efficacy refers to the belief in one’s own ability to buy condoms, negotiate condoms with partners, and use condoms during sexual intercourse.9 Despite the importance of self-efficacy in condom use, most previous studies focused on women and some populations in the African region.10 The lack of research that focuses on MSM results in a lack of understanding of the role of self-efficacy, which is one of important factors that can be used to predict a person’s consistency in using condoms.9,11 Another factor that affects the consistency of condom use among MSM is spirituality. Spirituality is an important factor in LGBT life. Spirituality is considered as one of the coping mechanisms in MSM by contributing to increased psychological adjustment and behavioral change. Several studies have found that spirituality is often associated with a decrease in condomless anal sex.12 Apart from the role of spirituality in life, until now, this factor is poorly understood and not utilized by some people so that spirituality has

Abstract

Background: The prevalence of HIV/AIDS, especially among Men Who Have Sex With Men (MSM), is increasing. Disease transmission occurs because of the low use of condoms. This study aimed to identify the relationship between condom self-efficacy and spirituality in condom use behavior.

Design and Methods: This study used a cross-sectional design with consecutive sampling techniques. It involved 251 people living with HIV & AIDS (PLWH) MSM. Chi-square test was used in bivariate analysis and then continued with the logistic regression analysis for multivariate analysis.

Results: The results show that there was a significant relationship between condom self-efficacy and condom use behavior with p value < 0.05 (OR = 11.298; 95% CI: 4.35-20.1, p value = 0.000) and spirituality towards condom use behavior p-value < 0.05 (OR = 3.405; 95% CI: 0.85-3.21, p value: 0.00). In multivariate analysis of multiple logistic regression, condom self-efficacy is the factor that predominantly influences condom use behaviour.

Conclusions: To improve the consistency of condom use, nurses need to prioritize interventions such as counselling activities that focus on increasing self-confidence (self-efficacy).
This questionnaire has been translated into various languages and is inconsistent. This measurement has been translated into Bahasa Indonesia and used by Gerans. This questionnaire has been categorized into low spirituality and high spirituality. C ondom use behavior questionnaire (2 questions)

Condom use behavior questionnaire (2 questions)

It is a questionnaire used to measure condom use behavior. It is structured based on a systematic review. It uses a Likert scale with a minimum score of 1: never, and a maximum score of 4: always. The measurement results were categorized into consistent and inconsistent. This measurement has been translated into Bahasa Indonesia and used by Gerans. This questionnaire has been tested in terms of validity and reliability with a Cronbach’s alpha value of 0.928. This research has been approved by the Ethics Committee of the Faculty of Nursing, Universitas Indonesia, Depok, Indonesia with number SK-134/U2.R.12.D1.2.1/ETIK 2020. The researcher explained the research objectives and procedures to all respondents and obtained informed consent from all of the respondents.

Statistical Analysis

Data analysis was conducted using SPSS version 20. Relationship analyses on self-efficacy, spirituality and condom use were carried out using the Chi Square tests. Logistic regression was also performed in this study.

Results

The results of univariate analysis show that most respondents are in their early adulthood, have a secondary to higher education, and have the same type of regular and casual partner. Most respondents who have inconsistent condom use, have low condom self-efficacy, mostly have inconsistent condom use behavior, have low condom self-efficacy, and mostly have low spirituality (Table 1).

Table 2 shows the results of the bivariate analysis. It is found that condom self-efficacy has a significant relationship with condom use behavior with p-value <0.05. Likewise, spirituality has a strong relationship with condom use behavior with p-value <0.05.

The results of this study indicate that the most dominant factor affecting condom use behavior is condom self-efficacy (OR = 9.352, 95% CI = 4.3520; 20.103). The final multivariate result shows that respondents with low condom self-efficacy have 9,352 times have inconsistent condom use behavior after being controlled by spirituality. Meanwhile, the OR value on the spirituality variable is 1.661, indicating that respondents who have 1.661 times low level of spirituality have inconsistent condom use behavior after being controlled by condom self-efficacy. The results of advanced statistical tests show that condom self-efficacy and spirituality can influence condom use behavior by 86%.

| Characteristics | (n) | (%) |
|-----------------|-----|-----|
| Age             |     |     |
| Early adulthood | 232 | 92.4|
| Late adulthood  | 19  | 7.6 |
| Education       |     |     |
| Primary education| 61  | 24.3|
| Secondary to higher education | 190 | 75.7|
| Type of partner |     |     |
| Regular partner | 42  | 16.7|
| Casual partner  | 29  | 11.6|
| Regular and casual partner | 180 | 71.7|
| Condom use behavior |     |     |
| Consistent      | 78  | 31.1|
| Inconsistent    | 173 | 68.9|
| Condom self-efficacy |     |     |
| High self-efficacy | 133 | 53.0|
| Low self-efficacy | 118 | 47.0|
| Spirituality    |     |     |
| High spirituality | 130 | 51.8|
| Low spirituality | 121 | 48.2|

Table 1. Characteristics of Respondents based on age, education, type of partner, condom use behavior, self-efficacy, and spirituality (n = 251).
**Table 2. Relationship between condom self-efficacy and spirituality on condom use behavior among MSM with HIV/AIDS (n = 251).**

| Variable                  | Condom use behaviour |       | Condom use behaviour |       | Total | OR     | 95%(CI) | P Value |
|---------------------------|----------------------|-------|----------------------|-------|-------|--------|---------|---------|
|                           | Consistent | N | %                  | Inconsistent | N | %                  | n | %                   |         |
| Condom self-efficacy      | High self-efficacy   | 68   | 51.1                 | 65      | 48.9              | 133 | 100             | 11.298  | 0.000   |
|                           | Low self-efficacy    | 10   | 8.5                  | 108     | 91.5              | 118 | 100             | (5.436-23.484) |         |
| Spirituality              | High spirituality    | 56   | 43.1                 | 74      | 56.9              | 130 | 100             | 3.405   |         |
|                           | Low spirituality     | 22   | 18.2                 | 99      | 81.8              | 121 | 100             | (1.911-6.069) | 0.000   |

**Discussion**

This research shows that the variables of condom self-efficacy and spirituality have a significant relationship with condom use behavior. Condom self-efficacy is one of the factors which can affect the role and use of condoms in same-sex relations among men. This result aligns with the research of Yu et al., which found that self-efficacy has a significant relationship with the consistency of condom use. Consistent condom use can influence the incidence of new HIV infections and, in the long run, can hold the pace of the HIV epidemic. This ability will affect how individuals will think and act to protect themselves by communicating and negotiating about condom use. Perceptions of good self-efficacy also play a role in the sexual assertiveness of partners. This assertiveness is manifested as the ability to open up and respect the partner, the desires and feelings about sexual acts, and everything involved, including the use of protection such as condoms. Thus, it is clear that individuals who have high self-efficacy tend to report consistent condom use. Meanwhile, those who have self-doubt about their ability to use condoms are less likely to be consistent in using condoms. Spirituality plays a role in influencing condom use behavior. The same thing was found in research conducted by Watkins et al., showing that there is a relationship between religion and spirituality with high-risk behavior for using condoms in MSM. Spirituality is defined as a multidimensional relationship, a transcendent relationship that is sacred and free from boundaries. Spirituality is an important factor in the life of LGBT life such as MSM. Spirituality in LGBT is related to their belief in a higher power. This belief plays a role in maximizing LGBT’s health and minimizing the damage caused by deviant behavior. Spirituality is considered as one of coping mechanism efforts in MSM contributing to increased psychological adjustment and behavioral change. Several studies have found that spirituality is often associated with a decrease in condomless anal sex.

The results show that the most dominant factor related to condom use behavior was condom self-efficacy. The final multivariate results show that condom self-efficacy was 9.3 times influencing condom use behavior. The results of advanced statistical tests show that condom self-efficacy and spirituality simultaneously contribute to increasing condom use behavior by 86%. The results of the multivariate test in this study are in line with research conducted by Sohn and Cho where the multivariate results show that self-efficacy is the most dominant factor influencing condom use. It aligns with research conducted by Ajayi which found that self-efficacy was positively related to the consistency of condom use. A study conducted by D’Anna showed that self-efficacy could be used as a predictor of the consistency of condom use in MSM.

Condom self-efficacy and spirituality have a significant relationship with condom use behavior. Condom self-efficacy is a dominant factor related to condom use behavior. This research can be used as a reference to reduce HIV transmission among MSM by focusing on giving counseling activities on increasing self-efficacy. Further research should focus on the way to maximize spirituality which may have an impact on better health for MSM PLWHA and increasing safe sex behavior such as consistency of condom use.
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