

The Analysis of Factors Related to Self Care of Men Who Have Sex with Men (MSM) with HIV/AIDS

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ABSTRACT

Introduction: Men who have sex with men (MSM) contain the highest risk factor and contribute significantly to HIV / AIDS transmission. As a chronic disease, MSM with HIV / AIDS needs treatment and care for the rest of their lives. The complexity of HIV disease and its treatment makes self-care essential for the optimal health of people living with HIV. The Health Belief Model (HBM) factors can explain and predict self-care behavior in MSM with HIV/AIDS. **Objectives:** This study aims to analyze the dominant factors associated with self-care of MSM with HIV / AIDS. **Methods:** This research uses quantitative methods with correlation analytic design. The sampling process employed a purposive sampling of 78 respondents. Primary data collection was processed by a self-care assessment questionnaire and HBM through google forms online survey. The data were analyzed using the Pearson product-moment correlation test and multiple linear regression. **Results:** The results showed that the highest mean HBM was in perceived self-efficacy (23.18) and self-care in the spiritual domain (24.94). The bivariate results showed that self-care had a significant relationship with perceived susceptibility ($r = 0.346$, $p < 0.05$), perceived benefits, ($r = 0.255$, $p < 0.05$), and perceived self-efficacy ($r = 0.406$, $p < 0.05$). The multivariate results found that perceived self-efficacy is the dominant factor ($\beta = 0.406$) which is related to the respondent's self-care ability. **Discussion:** Most respondents have the belief that they are capable of self-care, the higher the perceived self-efficacy the better the chance of having self-care. Services that respect and value MSM as humans by providing motivation through counseling during Voluntary Counseling and Testing (VCT) play a role in maintaining and increasing perceived self-efficacy. Nursing care that is carried out with the belief that everyone has the ability to care for themselves can help the individual meet the needs of life, maintain health and well-being.

Keywords: Health Belief Model, HIV/AIDS, MSM, Self-care

ABSTRAK

Pendahuluan: Lelaki Seks Lelaki (LSL) merupakan faktor risiko tertinggi dan memberikan kontribusi penularan HIV/AIDS yang signifikan. Sebagai penyakit kronis, LSL dengan HIV/AIDS perlu melakukan pengobatan dan perawatan seumur hidupnya. Kompleksitas penyakit HIV dan pengobatannya membuat perawatan mandiri (*self-care*) penting untuk kesehatan ODHA yang optimal. Melalui faktor-faktor *Health Belief Model* (HBM) dapat menjelaskan dan memprediksi perilaku *self-care* pada LSL dengan HIV/AIDS. **Tujuan:** Penelitian ini bertujuan untuk menganalisis faktor dominan yang berhubungan dengan *self-care* LSL dengan HIV/AIDS. **Metode:** Penelitian ini menggunakan metode kuantitatif dengan desain analitik korelasi. Penarikan sampel menggunakan *purposive sampling* sebanyak 78

responden. Pengumpulan data primer dengan kuesioner *self-care assessment* dan HBM melalui *online survey* menggunakan *google formulir*. Data di analisis menggunakan uji korelasi *pearson product moment* dan regresi linier ganda. **Hasil** : Hasil penelitian didapatkan rerata HBM tertinggi pada *perceived self efficacy* (23.18) dan *self-care* pada domain spiritual (24.94). Hasil bivariat menunjukkan bahwa *self-care* memiliki hubungan yang signifikan dengan *perceived susceptibility* ($r=0.346, p<0.05$), *perceived benefits*, ($r=0.255, p<0.05$), dan *perceived self-efficacy* ($r=0.406, p<0.05$). Hasil multivariat ditemukan bahwa *perceived self efficacy* merupakan faktor dominan ($\beta=0.406$) yang berhubungan dengan kemampuan *self-care* responden. **Diskusi**: Sebagian besar responden memiliki keyakinan bahwa dirinya mampu untuk melakukan perawatan mandiri, semakin tinggi *perceived self efficacy* maka berpeluang memiliki *self-care* yang semakin baik. Layanan kesehatan yang menghormati dan menghargai LSL sebagai manusia dengan pemberian motivasi melalui konseling saat *Voluntary Counseling and Testing* (VCT) berperan guna mempertahankan dan meningkatkan *perceived self efficacy*. Asuhan keperawatan yang dilakukan dengan keyakinan bahwa setiap orang mempunyai kemampuan untuk merawat diri sendiri dapat membantu individu tersebut memenuhi kebutuhan hidup, memelihara kesehatan dan kesejahteraan.

Kata kunci: *Health Belief Model*, HIV/AIDS, Lelaki Seks Lelaki, *Self-care*

INTRODUCTION

Human Immunodeficiency Virus (HIV) infection is a global health problem. One of the 17 goals of the SDGs is health and welfare issues, which states to end the AIDS epidemic as a public threat by 2030 (WHO, 2015). Several strategies and efforts to control and control HIV have been implemented in Indonesia, where Indonesia is one of the countries participating in the SDGs declaration. However, the number of people infected with HIV tends to increase from year to year (Komisi Penanggulangan HIV dan AIDS Nasional, 2015). The prevalence of HIV/AIDS continues to increase from year to year. DKI Jakarta is the province with the highest increase in new HIV cases in Indonesia, while West Java is the province that experienced a significant increase, with 1,725 new HIV cases in 2016 (Ditjen P2P, 2017a).

HIV transmission through sexual intercourse, one of which is sexual behavior in the high-risk group of the homosexual community or men who have sex with men (MSM), contributes significantly to the transmission of HIV and AIDS (Ditjen P2P, 2017b). The increasing number of social phenomena such as MSM causes high cases of HIV / AIDS, according to the Ministry of Health of the Republic of Indonesia Directorate General of Disease Prevention and Control in 2017, MSM is the highest risk factor for HIV with a percentage of 28%, followed by risky sex with heterosexuals with 24%, other 9%, and 2% use of non-sterile needles for IDU (Ditjen P2P, 2017b). Sexual

transmission through anal sex is reported to have 18 times higher risk of vaginal sex (Boily *et al.*, 2009) because mucosal tissue such as anal tissue is more permeable to the HIV virus than other tissues such as vaginal mucosa (Tebit, Ndemi, Weinberg, & Mateu, 2012).

Treatment of people living with HIV/AIDS (PLWHA), including MSM with HIV/AIDS by administering antiretroviral (ARV) drugs. Giving ARV drugs makes the rate of growth of the HIV virus controllable, therefore, to survive, people with HIV must consume ARV drugs for the rest of their lives regularly (Willard, 2005 in Ibrahim, Emiliyawati, Rahayu, & Nuraini, 2013). In supporting adherence to ARV treatment, PLWHA requires intense visits to health care providers, including MSM. In addition to supporting treatment adherence, regular check-ups with these health care providers can identify signs of side effects or treatment failure, manage complications arising from HIV, and treat comorbidities. The complexity of HIV disease and its treatment makes self-care essential for optimal health of PLWHA (Reyes, 2016). Because, like other chronic diseases, self-care is part of the symptom management of people living with HIV / AIDS (John & Akpan, Samson; Etowa, J B; Akpabio; John, 2016), and is one approach that can improve and enhance health namely by involving the patient himself in his care (WHO, 2009).

Self-care is the ability of individuals, families, and communities to promote health,

prevent disease, and maintain health, and overcome disease and disability with or without the support of health care providers (WHO, 2009). Self-care is also one of the nursing theories proposed by Dorothea Orem. According to Orem, nursing care is carried out with the belief that everyone learns the ability to care for themselves to help individuals meet the needs of life, maintain health and well-being (Tomey & Alligood, 2006). Self-care is one of the challenges faced by people living with HIV/AIDS in the long-term management of symptoms of the disease because delaying treatment will hinder the restoration of immune status and general HIV control (John et al, 2016).

The Ministry of Health's policy to assist self-care in PLWHA is carried out in several ways, namely by providing ARV treatment services, providing free sterile syringes at the Puskesmas, methadone, free HIV testing, and there is also one policy that can be used for MSM risk factors namely by giving free condoms in places where there is a risk of HIV/AIDS transmission. The provision of free condoms theoretically and according to epidemiological data can help reduce or break the chain of HIV transmission through risky sexual intercourse, however, the use of condoms, which should have been possible, did not run according to the target due to political and operational considerations (PMKK FK UGM, 2015). The challenge for this health intervention also lies in the inconsistent use of condoms among MSM according to research conducted by Yeo & Fung (2016). Self-care involves individuals in the decision-making process where the individual can evaluate and carry out health promotions in overcoming the symptoms of the disease they are suffering (Riegel et al, 2012 in Sukarna, 2017). Research conducted in the United States on MSM with HIV has the aim of analyzing individual resilience in HIV/AIDS care. The results of this study indicate that psychological resilience is resilience that has a high proportion of MSM compared to other resilience such as ecological resilience and economic resilience (Harrison & Li, 2018).

Health Belief Model (HBM) is a psychological model that tries to explain and predict health behavior that focuses on individual attitudes and beliefs (Glanz, Rimer, & Viswanath, 2008), health behavior in this case is self-care. The HBM states that individuals will take action to prevent damage to their health, as a monitor for disease or vulnerability, or to control disease, if they: (1) believe and consider themselves personally vulnerable to certain conditions, (2) believe that certain conditions have serious consequences, (3) believe that good actions will reduce their vulnerability or reduce the severity of the condition, and (4) believe that certain conditions can anticipate obstacles and (5) belief or perception of one's own ability to cope with certain conditions according to Rosenstock, Cullen, Brodtkin, & Redlich (1974) in Glanz et al., (2008).

Several studies on HBM have focused on a person's subjective perception of HIV/AIDS, such as a person's perception of the risk of contracting a disease (perceived susceptibility), in this case, HIV/AIDS (Sirait & Sarumpaet, 2013); a person's perception of the seriousness of HIV/AIDS (perceived severity), in this case, death (Mahmudah, 2018); positive perceptions of the benefits of preventive behavior (perceived benefits), in this case, Voluntary Counseling and Testing (VCT) (Prawesti, Purwaningsih, & Armini, 2018) and HIV testing (Jaelan, Prabandari, Hapsari, & Sanusi, 2018); perceived barriers to behavior to prevent HIV/AIDS transmission (perceived barriers) (Mandayani & Hidayat, 2019); and perceptions of one's own ability to carry out preventive behavior (perceived self-efficacy), such as condom use behaviour (Sirait & Sarumpaet, 2013).

Self-care in people with HIV / AIDS is self-care that is noninvasive, has no side effects, and can easily be applied as an adjunct to other forms of care (Eller et al., 2013). The inability to provide self-care can cause disease progression to become more severe because the immune system decreases and the patient is susceptible to opportunistic infections (Reyes, 2016). This study aimed to analyze the most dominant factors associated with self-care in MSM with HIV / AIDS.

METHODS

Research Design

This study used a quantitative method with a correlation analytic design. The dependent variable was the use of self-care. The independent variables included perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and perceived self-efficacy.

Population and Sample

The population in this study were men who have sex with men (MSM) with HIV / AIDS. Sampling using purposive sampling method with inclusion and exclusion criteria. The inclusion criteria were: (1) men who have sex with men (MSM) who are sexually active, and (2) patients with HIV / AIDS who are registered at the one public hospital in Sumedang at least one month after being diagnosed. The exclusion criteria were: (1) Patients experiencing severe physical discomfort so that it is not possible to continue the research, and (2) patients who don't continue filling in or not complete the questionnaire. The total used in this study by calculating the number of samples for multivariate analysis, using the rule of thumb with the sample size must be such that there are at least 5 to 10 observations per parameter estimated in factor analysis of independent variables (Dahlan, 2013). In this study, there are 5 independent variables therefore a minimum sample of 50 respondents. Then the researchers selected samples according to the inclusion and exclusion criteria and the samples of this study were MSM with HIV/AIDS, totaling 78 respondents.

Instrument

In this study, the instrument used to measure self-care was the assessment questionnaire from *Therapist Aid* (2019). The *Therapist Aid* (2019) self-care assessment questionnaire was adapted and modified. The content validity test was carried out by expert LL. The results of the construct validity test obtained the r-value of each item in the range 0.235-0.675 ($> r$ table 0.219), it can be

concluded that the instrument was declared valid. While a reliability value of 0.738, so the instrument was said to be reliable.

The instrument used to measure HBM was the Health Belief Model questionnaire from Orji et al (2012) and Scotland (2012), which has been adapted and modified using Indonesian by Sukarna (2017). This study used the HBM questionnaire was modified, and the results of the construct validity test have been carried out with results exceeding r tables (r table = > 0.219). The results are in the range of r values on the variables of perceived susceptibility (0.614-0.730), perceived severity (0.478-0.794), perceived benefits (0.487-0.682), perceived barriers (0.427-0.632), and perceived self-efficacy (0.569-0.714), so it can be concluded that the instrument is declared valid. The results of the HBM reliability test on perceived susceptibility were 0.764, perceived severity was 0.763, perceived benefits were 0.734, perceived barriers were 0.715, and perceived self-efficacy was 0.761, so the instrument was said to be reliable.

Research Procedure

Primary data collection by online survey using google form due to the COVID-19 pandemic. Data collection by providing an online questionnaire link through a Whatsapp group accompanied by a counselor. This research was conducted from March to April 2020.

Data Analysis

Data were analyzed using descriptive analysis (frequency, percentage, deviation standard, and mean), Pearson product-moment correlation test with a significance of <0.05 , and multiple linear regression.

Ethics Clearance

This study was reviewed and approved by the Health Research Ethics Commission of Padjadjaran University with the number 316/UN6.KEP/EC/2020. The researchers explained the purpose, benefits, and procedures of the study to HIV / AIDS patients who were willing

to become respondents. They also approve informed consent. Fair treatment rights were met by researchers after the completion of this study.

RESULT

The results (Table 1) showed that almost half of the respondents are in the early adult and adolescent groups, the average respondent is 28 years old with a minimum age of respondent 19 years and a maximum of 52 years, and most have entrepreneurial jobs. Respondents know their HIV status on average of 27 months 23 days with a minimum of respondents who have known their HIV status for 1 month and a maximum of 84 months. Almost all respondents are single, have a high school education, most of the respondents had sex actively and had multiple partners, also all respondents received line 1 ARV therapy.

The results of the analysis showed in Table 2 that the average result of the Health Belief Model factor is 97.37. Research respondents have the highest perception of perceived self-efficacy with an average of 23.18. Respondents have a smaller perception of perceived barriers, where the perception of this barrier has an average of 19.28. Table 3 shows that the self-care abilities of 78 respondents got an average value of 119.85, where respondents had less self-care in the psychological domain with an average score of 22.67.

The results of the correlation test in table 4 show a significant relationship between the Health Belief Model factor and self-care. Three factors have a p-value <0.05, namely perceived susceptibility, perceived benefits, and perceived self-efficacy.

The results of multivariate analysis shown in table 5 that 12% of the variables of perceived susceptibility and 16.5% of perceived self-efficacy can explain or relate to self-care variables and 71.5% are explained by other variables. It can be concluded from the β value that the most dominant factor associated with self-care in men who have sex with men (MSM) with HIV / AIDS has perceived self-efficacy.

Table 1. Demographics of Respondents (n=78)

Demographics	f (%)
Age categories in years	
18 – 25	31 (39.7)
26 – 35	36 (46.2)
36 – 45	9 (11.5)
46 – 55	1 (1.3)
56 – 65	1 (1.3)
Mean=28.18 (SD 6.820)	
Marriage	
Not married	72 (92.3)
Married	6 (7.7)
Education	
Elementary	2 (2.6)
Middle	16 (20.5)
High	55 (70.5)
University	5 (6.4)
Employment status	
Business employees	10 (12.8)
Private employees	4 (5.1)
Entrepreneurship	28 (35.9)
Colleges	8 (10.3)
Etc.	8 (10.3)
Unemployed	20 (25.6)
Sexual intercourse	
Active	51 (65.4)
Inactive	27 (34.6)
Relate type	
Faithful	38 (48.7)
Multiple partners	40 (51.3)
Long-suffering from HIV	
< 5 years	68 (87.2)
≥ 5 years	10 (12.8)
Mean=27.23 months (SD 2.01)	

Table 2. Descriptive Health Belief Model of respondents (n=78)

Variable	Mean	SD	Min-Max
<i>Health Belief Model</i>	97.37	8.666	77-114
<i>Perceived susceptibility</i>	15.59	2.376	11-20
<i>Perceived severity</i>	19.96	2.704	15-24
<i>Perceived benefits</i>	19.36	3.006	14-24
<i>Perceived barrier</i>	19.28	2.588	12-25
<i>Perceived self-efficacy</i>	23.18	2.944	18-28

Table 3. Descriptive Self-care of respondents (n=78)

Variable	Mean	SD	Min-Max
<i>Self-care</i>	119.85	13.507	85-142
Physical domain	24.74	3.293	14-30
Psychological domain	22.67	3.395	14-29
Social domain	23.19	3.878	14-30
Spiritual domain	24.94	3.439	15-30
Professional domain	24.31	3.443	13-30

Table 4. Correlation of HBM Factors with Self-care (n=78)

Variable	Self-care					
	Physical	Psychological	Social	Spiritual	Professional	Total Self-care
Perceived susceptibility	0.108	0.326**	0.367**	0.213	0.309**	0.346**
Perceived severity	0.140	0.161	0.236*	0.120	0.052	0.186
Perceived benefits	0.252*	0.171	0.250*	0.184	0.123	0.255*
Perceived barrier	0.114	0.040	0.114	0.095	0.153	0.134
Perceived self-efficacy	0.428**	0.291**	0.320**	0.242*	0.294**	0.406**
Total HBM	0.340**	0.310**	0.404**	0.271*	0.290*	0.419**

**Correlation is significant at the 0.01 level (2-tailed)

*correlation is significant at the 0.05 level (2-tailed)

Table 5. Multivariate analysis of the Health Belief Model (HBM) factor variables associated with self-care (n=78)

Variable	B	P	R ²
Perceived susceptibility	0.346	0.002	0.120
Perceived self-efficacy	0.406	0.000	0.165

DISCUSSION

This study proves that there was a significant relationship between perceived susceptibility and self-care. The results of this study are in line with research conducted in Thailand on 469 Men who have Sex with Men (MSM) respondents which showed a perception of vulnerability. It is the result of a rational decision-making process in which a person weighs the costs and benefits associated with certain behavioral practices in taking health actions. When individuals are faced with a potential threat to their health, they consider the perceived vulnerability to the severity and threat to health (Khumsaen & Stephenson, 2017). In this study, respondents had a vulnerability to getting worse if HIV disease was not treated. This is in line with the perceived susceptibility of the respondents who are susceptible to complications and comorbid diseases in the future. Respondents also have the vulnerability to suffering from HIV throughout their life but are not too susceptible to AIDS in the future. Individuals who believe that they have a high risk of disease are more likely to take action to prevent it and vice versa (Hayden, 2017).

The results showed that there was no significant relationship between perceived severity and self-care. Although it was not related to self-care, respondents had a perception severity about HIV / AIDS and considered HIV is a serious

disease compared to other diseases. This is in line with research in Padang (2012) which states that worrying about HIV disease is a positive response for homosexuals in their quest for sexual fulfillment. However, due to their lack of understanding of the concept of HIV/AIDS, these worries disappear and they continue to behave at risk or there is no behavioral change in sexual activity. Research respondents have the perception that the disease they suffer from is quite disturbing their daily activities. In the domain of physical self-care, respondents feel that they lack sufficient rest (sleep), exercise, and participate in other activities. In addition, in the psychological self-care domain, respondents feel less in doing their favorite hobbies, staying away from distractions (telephone and email), as well as traveling. In addition, although HIV can be treated to prevent complications, respondents have the perception that HIV can cause death. According to Bastian & Wawan (2003) in Pratama & Sulistyarini (2012) when someone is diagnosed with HIV / AIDS, it is almost always an unpleasant emotional experience. Despite being infected due to their behavior, a diagnosis of HIV is not easy to accept, causing the patient to fear death. Therefore, someone who perceives HIV/AIDS as a serious infection, can have consequences and implications on physical and social life, to adopt preventive and dissemination measures against HIV/AIDS infection (Tarkang & Zotor, 2015). This is related to the unpredictable immune system of PLWHA, so the perception of the seriousness of this individual will influence the individual to behave which will encourage preventive action (Mahmudah, 2018).

The results showed that there was a significant relationship between perceived benefits and self-care. Respondents have a perception about the benefits of preventive behavior such as coming for regular control to health services to help respondents maintain and improve health, the benefits of exercise, and eating healthy foods (low in fat and eating fruits/vegetables). Based on the results of previous studies conducted on HIV / AIDS patients shows that there is a relationship between perceived benefits and adherence to antiretroviral therapy (ARV). Where the higher the benefits are felt, the easier it is to increase adherence to ARV therapy (Sunaryo, Demartoto, & Adriyani, 2015). Becker dan Rosenstock (1986) in Glanz, Karen & Bishop (2010) state that in perceived benefits, individuals judge that they will benefit when they obtain certain health services, for example, being healthier and reducing the perceived risk. In this study, 94.9% of respondents agreed with the benefits felt by respondents when it came to routine control of health services. The same thing was felt when 73.1% of respondents felt the benefits of taking ARVs and controlling the respondents' CD4 values. Respondents in this study also had the benefit of using condoms in preventing risky sexual behavior. In the demographic characteristics, it was found that 65.4% of the respondents were actively having sex with 51.3% having multiple partners. Based on this, it is imperative to integrate behavior change counseling into HIV treatment programs and to gain recognition that the threat and seriousness of HIV / AIDS remains (Kelly, Hoffmann, Rompa, & Gray, 1998). Because there is a possibility that the respondent responds well to the recommendation to use a condom, but in practice, it is not as expected, this happens because he feels that he and his partner are healthy even though their health is not completely guaranteed (Herlani, Riyanti, & Widjanarko, 2016). The data shows that in the self-care spiritual domain, respondents have the highest mean value. The benefits of spirituality were carried out by respondents with 65.4% recognizing meaningful things in life and participating in things that were important to themselves, 71.8% taking

time to think, 65.4% by praying, and 62.8% behaving according to the morals and values held by the respondents. As for the qualitative research with the interview method on 63 people infected with HIV, the aim is to see the perceived benefits of religion and spiritual coping mechanisms. The results showed that respondents reported various benefits from their religious and spiritual beliefs and practices, including in evoking comforting emotions and feelings; give energy or strength; empowerment and control in action; relieve the emotional burden of illness; provide social support and a sense of belonging; offering spiritual support through a personal relationship with God; facilitate the meaning and acceptance of disease; help maintain health; relieve fear and uncertainty about death; facilitate self-acceptance and reduce self-blame. These perceived benefits suggest that there is potential for health behavior with religious beliefs or spirituality (Siegel & Schrimshaw, 2002). Almost all research respondents have a Sundanese culture where this Sundanese cultural value affects the moral behavior of the community which is greater than its religiosity (Jaenudin & Tahrir, 2019).

The results showed that there was no significant relationship between perceived barriers and self-care. Respondents had barriers related to the effects of symptoms of medical drugs that were consumed continuously, did not have sufficient time for self-care, and chose to combine complementary therapies (herbal) over exercise and other physical activities. Respondents have a barrier perception about motivation in self-care. People with HIV/AIDS have a vulnerability to psychological problems that can affect the patient's self-care. These psychological problems contribute to a decrease in physical and mental health that causes a person to be lazy to do daily self-care routinely and coupled with a reduced appetite, reluctance to exercise, difficulty sleeping to cause complications that can exacerbate other physical disorders (Holmes, Biker, Wang, Chapman, Gross, 2007 in Nurmalisa, 2017). Self-care in the social and psychosocial domains of respondents has a small mean value compared to other self-care

domains. Research conducted on 19 HIV adolescents and young adults (aged 15-29 years) showed that social self-care can take the form of social relationships including positive relationships (seeking social support and spending time with friends) and asking for help if emotions are unstable (John & Akpan, Samson; Etowa, J B; Akpabio; John, 2016). Several studies have shown that family support and motivation influence the maximum care for PLHIV (Fitri & Dewi, 2014; Mahardining, 2010; Pratama & Sulistyarini, 2012). Even though the respondents had perceptions of barriers, these perceptions were not related to the self-care carried out by the respondents.

The most dominant factor related to self-care respondents is perceived self-efficacy. 88.5% of respondents believe they can use condoms during sexual intercourse. This is in line with research conducted in India on MSM with HIV/AIDS, where there is a relationship between self-efficacy and sexual health behavior, where this tends to occur simultaneously with a high risk of HIV transmission (Mimiaga et al., 2018). As for another study that aims to examine how the relationship between the concept of the Health Belief Model (HBM) and the act of using condoms, the results showed that from 95 respondents, 22 people (23.2%) used condoms well, while the remaining 73 people (76.8 %) still not using condoms properly. Where the perception of confidence (perceived self-efficacy) has the most dominant relationship with the use of condoms during sexual intercourse (Sirait & Sarumpaet, 2013).

The results showed that 98.7% of respondents believed they could take ARV drugs regularly. In line with a study conducted in Chicago on MSM with HIV, it was stated that the level of individual self-efficacy was significantly associated with adherence to antiretroviral (ARV) treatment. The results of this study are also related to 55.1% of respondents having people they can rely on and 64.1% having family and friend support in the social self-care domain, where support from people around is related to medication adherence. Increased self-efficacy is needed to assist individuals in developing coping

mechanism skills and strengthen the individual's ability to regulate moods so as not to interfere with efforts towards medication adherence by feeling valued by others (Houston & Fominaya, 2015). This is in line with a study conducted in Chicago on 104 HIV-positive men, 96 of whom were homosexual and 8 were bisexual. The results showed that coping strategies and self-efficacy were related to the personal growth of MSM with HIV (Kraaij et al., 2008).

Research conducted in China on MSM with HIV shows that self-efficacy is an individual factor that is one of the prominent factors and influences sexual behavior. This can be a determinant in the use of condoms because high self-efficacy with people around will try to foster good communication, while low self-efficacy will imagine rejection even before the individual builds relationships or interacts socially with others (Xiao, Li, Lin, Jiang, & Liu, 2013). This research is supported by research conducted on MSM with HIV which is a grounded theory study with qualitative methods. This study aimed to examine the impact of stigma on self-care behavior in MSM with HIV. The results show how MSM struggle to do self-care, where disclosure of HIV status is used as social support, not stigma. This social support role emerged as an integral component of their self-care (Chenard, 2007).

The results of this study indicate that 67 respondents (n=78) were young and early adults. Self-efficacy in older MSM is lower than that of young MSM. Therefore, this self-efficacy is effective or more helpful if it is increased from a young age. So, it is hoped that this can be an effort to help support self-care in the future (Brown & Serovich, 2015). To increase self-efficacy, it can be done by increasing knowledge and experience of testing in MSM and bisexuals which can lead to a higher frequency of HIV testing, thereby increasing optimism about the effect of treatment on preventing HIV transmission among MSM and bisexuals (Jamil et al., 2017). Increased self-efficacy can help promote HIV testing behavior and can determine HIV status, which is a key strategy to achieve HIV control targets in countries

with concentrated HIV epidemics among populations (Pham et al., 2018). High self-efficacy, as well as social interactions that occur between individuals, can control HIV transmission and prevention.

Based on Tucker et al., (2014) there are several ways to increase perceived self-efficacy in MSM, namely by avoiding depression and stigma, social support (Xiao et al., 2013), and improving quality of life by being obedient in taking ARV drugs (Chen et al., 2013). Self-efficacy can be related to the development of interventions designed to assist patients in building self-confidence and coping mechanisms in HIV patients (Houston & Fominaya, 2015). On the other hand, counseling services such as Voluntary Counseling and Testing (VCT) make it possible to bring about positive changes to the HIV epidemic that have the potential to shape health promotion strategies (Buldeo & Gilbert, 2015).

CONCLUSION

In this study, variables that have a significant relationship with self-care respondents are perceived susceptibility, perceived benefits, and perceived self-efficacy. Meanwhile, perceived severity and perceived barriers do not have a significant relationship with self-care. Respondents have perceived self-efficacy that they are capable of self-care. Even though respondents have perceived barriers, but by having a perception of self-efficacy, the respondent's ability to do self-care is still good. That the higher the perceived self-efficacy, the better the chances of having self-care. Services that respect and value MSM as humans by counseling motivating during Voluntary Counseling and Testing (VCT) play a role in maintaining and increasing perceived self-efficacy. Nursing care is carried out with self-efficacy that everyone has the ability to care for themselves and can help the individual meet the needs of life, maintain health and well-being.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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