



The relationship between stigma, family acceptance, peer support and stress level among HIV-positive men who have sex with men (MSM) in Medan, North Sumatera, Indonesia[☆]



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KEYWORDS

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Abstract

Objective: This present study investigates the level of stress and its relationship with stigma, family acceptance, and peer support among 176 HIV-positive MSM in Medan, Indonesia.

Method: This cross-sectional study with chi-square analysis was conducted April 2018 through May 2018 in Medan. The sample of this study were general HIV patients who identified themselves as MSM, were >18 years old, and were able to read and write in Indonesian. Data collection was conducted at Dr. H. Adam Malik Medan Hospital, Pirngadi General Hospital, Padang Bulan, and Teladan Kota Medan Health Center.

Results: Findings show that 55.1% of the participants had severe stress. The results of this statistic showed that only stigma was positively associated with stress ($p=0.049$).

Conclusions: The results suggested that there is a need to reduce HIV stigma in reducing stress levels among HIV-positive MSM. Specific intervention should be designed for this population and integrated into programs to reduce stress levels.

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Introduction

The HIV epidemic in men who have sex with men (MSM) continues to grow in most countries in the world. MSM are the group at highest risk of HIV transmission.¹ In Indonesia, the National AIDS Commission reported a threefold increase in HIV prevalence in MSM in 2016 compared to the previous year.² Medan is one of the cities with the highest HIV/AIDS increase among MSM in Indonesia. The comparison of the spread of HIV in the heterosexual group was 45.68%, while in the MSM group it reached 46.3%.³

MSM have a higher potential for contracting HIV because they are more vulnerable. MSM tend to engage in unprotected anal sex activities, which increases the risk of contracting HIV 18 times compared to unprotected vaginal sex. Semen with HIV can directly infect target cells in T lymphocytes, namely the CD4, CXCR4, and CCR5 receptors. As many as 45–60% of T lymphocyte target cells are in the intestinal tissue (gut-associated lymphoid tissue/GALT) Unprotected anal sex is an effective method of HIV transmission because the anorectal mucosa is easily injured. Those in the receptive role in MSM anal sex are at 13 times more risk of contracting HIV than the opposite role. MSM has an extensive network. Large groupings of HIV infections have multiple variants and multi-variant infections among MSM that are higher than heterosexuals in the same population.^{4–6}

HIV-positive MSM experience stress related to their disease and sexual orientation. Stress simultaneously impacts them physically, emotionally, intellectually, socially, and spiritually. The impact of physical stress can interfere with homeostasis and symptoms arising from the neuroendocrine system, characterized by increased pulse, muscle tension, and increased glucose, among others. Emotional impacts due to stress can generate negative and non-constructive feelings. Intellectual impacts can affect perceptions in problem-solving. The social impact of stress influences social interaction and can spiritually threaten values and beliefs.⁷

Stress on HIV-positive MSM is also caused by negative stigmas such as discrimination and negative views of oneself.^{8,9} Negative stigma arises because they are considered to have non-accordance behavior with social norms and value.¹⁰ Various approaches have been taken to describe the stigma associated with HIV-positive MSM. Stigma can take the form of rejection and discrimination from the community due to HIV patients' status and sexual orientation. Stigma from the community can also be homophobic and involve physical violence, resulting in minority stress as a form of chronic psychosocial pressure. Minority stress was twice to three times as likely to suffer also from high levels of distress. Some studies have also shown that stress on HIV-positive MSM has a negative impact on mental health, depression, and risk of suicide.^{11–13}

Peer support negatively contributes to stigma-related stress. Peer support is a mediator in overcoming the social stigma effect so that it can minimize stressful conditions.^{14,15} Important things needed by people living with HIV/AIDS (PLWHA) are assessing access to peer support, giving groups the opportunity to be involved in clinical settings, and openness in finding support for utilizing facilities.¹⁶

Stressful conditions are also related to family acceptance. HIV-positive MSM who receive strong family acceptance have a high level of self-esteem and good health status, while those who experience family rejection have poor health, suicidal tendencies, high levels of depression, and risky sexual behaviors.^{17,18} This condition is triggered by feelings of distress in MSM making decisions about whether to reveal/hide their sexual orientation from their families and not knowing the right way to tell them about their illness. Another condition are concerned about family rejection and facing stigma from family members include fear of transmission, inconvenience in using shared eating utensils, and avoiding interaction.^{8,19}

This study will identify stress levels in HIV-positive MSM, where there is a relationship with stigma, peer support, and family income that occurs in Indonesia. This information may then be used as a reference for determining the right interventions to reduce/manage stress.

Method

This cross-sectional study involved 176 HIV-positive MSM in Medan. Participants were recruited with the purpose of the sampling technique. Inclusion criteria were >18 years of age, and able to read and write in Indonesian. The participants are the general HIV patient identified as MSM. Identification of participants was assisted by given a screening test and validated from medical records. Permits for research were approved by the research ethics committee at the Faculty of Nursing, Universitas Indonesia. Data were collected from four different health care facilities in Medan: Dr. H. Adam Malik Medan Hospital, Pirngadi General Hospital, Padang Bulan, and Teladan Kota Medan Public Health Center. This study was conducted from April 2018 through May 2018.

Sociodemographic information included: age, occupation, education, income, marital status, and length of diagnosis of HIV. MSM stress level was measured with the Perceived Stress Scale (PSS) (Cronbach Alpha 0.78).²⁰ The stigma measure used was the Berger HIV Stigma Scale (Cronbach Alpha 0.98).²¹ Peer support was based on a modified Peer Group Interactional Scale (PGIS), and family acceptance was measured using the Perceived Acceptance Scale (PAS).

Results

The sociodemographic characteristics of the participants are presented in [Table 1](#). Overall, the participants were mostly in early adulthood (20–40 years) (93.8%) and working as employees (49.4%). Income less than the provincial minimum salary (51.1%), though many participants reported a high education level (95.5%). Most are unmarried (90.3%) and have been diagnosed with HIV within the last ≤18 months (61.4%). The main variables are presented in [Table 2](#). The participants had good family acceptance (54.0%), support from good peer groups (56.2%), high stigma (51.7%), and severe stress levels (55.1%).

Other analysis shown in [Table 3](#), that high stigma is associated with severe stress level (p -value=0.016; $<\alpha$ (0.05),

Table 1 Sociodemographic characteristics among HIV-positive MSM in Medan 2018 ($n = 176$).

Variable	N	%
Age		
Early adult (20–40 years old)	165	93.8
Adult (40–61 years old)	11	6.3
Work status		
Unemployed	13	7.4
Work	163	92.6
Civil servant	7	4.0
Private employee	87	49.4
Labor	7	4.0
Self-employed	35	19.9
Other (sex worker, bartender)	27	15.3
Income		
Low	90	51.1
High	86	48.9
Education		
Low	8	4.5
High	168	95.5
Marital		
Single	159	90.3
Married	17	9.7
Long HIV diagnosis		
≤ 18 months	108	61.4
> 18 months	68	37.8

and the value of Odds Ratio (OR) 1.886 highlights that participants who feel high stigma 1.8 times higher experience severe stress more than those who feel low stigma (OR = 95%; Confidence Interval (CI) 1.034–3.442).

Discussion

In this study, it was found that most respondents experienced severe stress levels. Many studies show the relationship between stress and stigma. The cause of stress

Table 2 Stigma, peer support, family acceptance, and level of stress among HIV-positive MSM in Medan 2018 ($n = 176$).

Variable	N	%
Stigma		
Low	85	48.3
High	91	51.7
Family acceptance		
Bad	81	46.0
Good	95	54.0
Peer support		
Bad	77	43.8
Good	99	56.2
Stress level		
Low	79	44.9
Severe	97	55.1

for HIV-positive MSM can be unpredictable health conditions, a feeling of depression in telling others about their illness, and being rejected because of fear of transmitting HIV. A whole thing is a form of stigma that can be felt by people with HIV. In addition, MSM experienced a double stigma related to deviant sexual behaviors, so the stigma is not only in the form of community rejection of HIV status, but also related to sexual orientation problems.^{8,11} Research done on HIV stigma in MSM found that Latin American MSM experienced a higher stigma associated with their HIV status compared to African American MSM, but African American MSM experienced a higher stigma regarding their sexual orientation status compared to American MSM.¹⁴

In Indonesia, the stigma associated with HIV status and the problem of sexual orientation deviations is still quite high. This view of the disease is that it is contrary to moral, social, and religious standards, so the norms and culture of society do not allow recognition/acceptance of HIV-positive MSM. But in this study, MSM have good family acceptance, although in any family in Indonesia it is difficult to accept that there are family members who are MSM and suffer from

Table 3 Relationship stigma, peer support, family acceptance, and stress level among HIV-positive MSM in Medan 2018 ($n = 176$).

(95% CI)	n (%)	Stress level			OR	p-Value
		Low	Severe	Total		
Stigma						
Low stigma	85 (48.3)	45 (52.9)	40 (47.1)	85 (100)	1.886 (1.034–3.442)	0.049*
High stigma	91 (51.7)	34 (37.4)	78 (62.6)	91 (100)		
Family acceptance						
Bad	81 (46.0)	34 (42.0)	47 (58.0)	81 (100)	0.804 (0.442–1.461)	0.544
Good	95 (54.0)	45 (47.4)	50 (52.6)	95 (100)		
Peer support						
Bad	77 (43.8)	31 (40.3)	46 (59.7)	77 (100)	0.716 (0.392–1.308)	0.289
Good	99 (56.2)	48 (48.5)	51 (51.5)	99 (100)		

Bold values are statistically significant.

* p -Value < α (0.05).

HIV. This perspective will still form stigma, discrimination, judgmental behavior, rejection, and threats of violence.^{22,23} This is what causes MSM to cover their status within their families. So, whatever their condition, even if they are accepted or not accepted in their families, MSM will still experience stress.

Research shows stressful life events contribute to symptomatic exacerbations, reduce antiretroviral therapy (ART) adherence, and reduce the quality of life.^{13,24} Assessing the causes of stress involves understanding the impact of a stressful situation on HIV-positive MSM, where stigma is a significant factor. Those who experience stress will have some negative biopsychosocial impacts on life. This study also explained the stigma of prevents HIV-positive MSM from encouraging the use of conducive resources for health, such as seeking information and assistance related to treatment.²⁵ In other words, severe stigma can endanger health. In summary, this study is the first to examine the relationship between stigma, family acceptance, and peer support and stress level among HIV-positive MSM. Intervention to reduce stigma among this population is needed to decrease stress levels among HIV-positive MSM in Medan.

Conflict of interests

The authors declare no conflict of interest.

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