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Family acceptance, peer support, and HIV serostatus disclosure of MSM-PLWHA in Medan, Indonesia☆

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KEYWORDS
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Abstract
Objective: This study was conducted to determine the correlation between family acceptance and HIV serostatus disclosure, and the correlation between peer support and HIV serostatus disclosure.
Methods: This was a quantitative study with a cross-sectional design involving 176 MSM-PLWHA (Men who have sex with men-people living with HIV and AIDS). Instruments used in this study is Brief Scale of HIV disclosure, perceived acceptance scale, and peer group caring interaction scale.
Results: The analysis showed a significant correlation between peer support and HIV serostatus disclosure (*p*-value 0.011), but there was no significant correlation between family acceptance and HIV serostatus disclosure (*p*-value 0.979).
Conclusion: Peer support affects HIV serostatus disclosure in MSM-PLWHA. Peer group interventions need to be improved. Providing systematic peer group support for MSM-PLWHA and integrating intervention with peer support might need to be done for the next care plan for MSM-PLWHA in Medan, Indonesia.

Introduction

The World Health Organization (WHO) states that HIV is a global epidemic, with 36.7 million people infected as of 2016. The populations with the highest numbers of people living with HIV/AIDS (PLWHA) are in Africa, America, and Southeast Asia, with a total of 25.6 million, 3.3 million, and

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Table 1 Age and length of diagnosis of MSM-PLWHA in Medan, Indonesia, April–May 2018 ($N = 176$).

Variable	Mean	Median	Std. dev.	95% CI
Age	29.40	28	6.442	28.45–30.36
Period of diagnosis	18.98	12	15.949	16.61–21.36

Table 2 Distribution of education, employment, income, and marital status of MSM-PLWHA in Medan, Indonesia, April–May 2018 ($N = 176$).

Variable	Frequencies	Percentage (%)
Education		
Elementary school	2	1.1
Junior high school	6	3.4
Senior high school	104	59.1
University	64	36.4
Work		
Not working	14	8
Civil servant	4	2.3
Private employee	89	50.6
Laborer	7	4
Other	27	15.3
Entrepreneur	35	19.9
Wage		
<RMW	90	51.1
≥RMW	86	48.9
Marital status		
Not married	159	90.3
Married	17	9.7

3.5 million, respectively.[1] The Indonesian Ministry of Health reports that the highest transmission rates have occurred in the heterosexual group (4672 cases), followed by men who have sex with men (MSM) 3604 cases (Table 1).

MSM are 24 times more susceptible to HIV than the general population.[2] MSM are more at risk because of the thinness of the anal wall, which can provide access for the virus to enter the bloodstream. Genital lesions arising from sexually transmitted diseases can also increase the risk of HIV transmission by up to three to five times.[3] Of the 208,909 HIV positive cases spread across the 34 provinces in Indonesia, 37% were MSM. While the number of reported infections increased from 2010 to 2015, it had decreased to 3604 cases by June 2016.[4] North Sumatra also experienced an increase in the number of infections in MSM from 2010 to 2015, reaching 10%. The data above show that MSM-PLWHA constitutes a population in their own right, with a number that cannot be ignored, either in the world or in Southeast Asia and Indonesia (Table 2).

MSM comprise those men who have sexual intercourse with other men, whether they continue to have sexual intercourse with women or not, and regardless of whether they declare themselves gay or bisexual.[5] Some MSM experience stigmatization, homophobia, discrimination, and violence, so there is a tendency to conceal their identity.[2] Stigma and discrimination can also cause stress, depression, and despair to PLWHA. PLWHA may also be led keep their health status from their closest family and friends, so that PLWHA are unable to obtain the support they should be getting.[6]

Peer support is a subcategory of differentiated social support based on sources of support. Research into MSM-PLWHA in Indonesia is still very limited even though the number of MSM-PLWHA has continued to increase in this decade. In addition, no study on HIV serostatus disclosure among MSM-PLWHA has been conducted. This study was conducted to determine the correlation between family acceptance and HIV serostatus disclosure, as well as the correlation between peer support with HIV serostatus disclosure (Table 3).

Method

This was a quantitative study with correlative analytical methods using a cross-sectional design, conducted at the Haji Adam Malik General Hospital, Pirngadi Hospital, Teladan Health Center, and Padang Bulan Health Center from April to May 2018. The study was conducted on 176 MSM-PLWHA aged over 18 years, able to read and write, and willing to participate in the research. Sampling in this study used non-probability sampling with a consecutive sampling technique (Table 4).

HIV serostatus disclosure was assessed by the Brief Scale of HIV disclosure instrument. This instrument consists of 12 questions with answer choices in the form of ''yes'' or ''no,'' scoring 1 or 0. Peer support was assessed by a peer group caring interaction scale questionnaire. This questionnaire consists of 10 questions with a Likert scale comprising four response options: ''strongly agree,'' ''agree,'' ''disagree,'' and ''strongly disagree.'' Family Acceptance was assessed by a perceived acceptance scale (PAS) questionnaire. The acceptance instrument has 44 statements with response options in the form of ''strongly disagree,'' ''disagree,'' ''agree,'' and ''strongly agree.''

Statistical tests on all data were carried out using SPSS version 23 software to analyze each component variable. Univariate analysis was used to identify the characteristics of the variables, while bivariate analysis was used to analyze the correlation between variables. The bivariate analysis used a chi-square test to analyze the correlation between family acceptance and peer support with HIV serostatus disclosure. Previous research proposals had passed the ethics test by the Faculty of Nursing ethics committee at Universitas Indonesia (Table 5).

Results

The average age was 29.4 years (95% CI: 28.45–30.36), with the youngest being 20 years and the oldest being 56 years. The median age was 28 years (Table 6).

Of the respondents, 104 had a high school education (59.1%), 64 respondents had a university education (36.4%),

Table 3 Univariate analysis of HIV serostatus disclosure, peer support, and family acceptance of MSM-PLWHA in Medan, Indonesia, April–May 2018 ($N = 176$).

Variable	Min–Max	Mean	Median	Std. dev.	S.E.	95% CI
HIV serostatus disclosure	1–11	6.51	7.00	2.009	.151	6.21–6.81
Peer support	10–40	28.09	29.00	4.994	.376	27.35–28.83
Family acceptance	44–154	111.77	111.00	12.379	.933	109.93–113.61

Table 4 Results of the normality test on HIV serostatus disclosure, peer support, and family acceptance of MSM-PLWHA in Medan, Indonesia, April–May 2018 ($N = 176$).

Variable	Statistic skewness	S.E.	Skewness	Data distribution	Cut-off point
HIV serostatus disclosure	−.015	.183	−.08	Normal	6.51
Peer support	−.249	.183	−1.36	Normal	28.09
Family acceptance	−.666	.183	−3.64	Abnormal	111.00

Table 5 Overview of HIV serostatus disclosure, peer support, and family acceptance of MSM-PLWHA in Medan, Indonesia, from April to May 2018 ($N = 176$).

Variable	Frequencies	Percentage (%)
HIV serostatus disclosure		
Disclosed	91	51.7
Closed	85	48.3
Peer support		
Supported	94	53.4
Unsupported	82	46.6
Family acceptance		
Accepted	93	52.8
Unaccepted	83	47.2

6 people had a junior high school education (3.4%), and 2 had an elementary school education (1.1%). Most of the respondents were not married (90.3%); 17 were married (9.7%). The average period of diagnosis of respondents was 18.98 months (S.E. = 1.202). Most worked as private employees (50.6%) and earned below the regional minimum wage (RMW) (51.1%).

The minimum score for a respondent's HIV serostatus disclosure was 1, while the maximum score was 11. The mean score of HIV serostatus disclosure was 6.51 (95% CI: 6.21–6.81), while the median of the data was 7. The minimum value for peer support scores was 10 and the maximum was 40. The average value of peer support obtained from the results of the questionnaires was 28.09 (95% CI: 27.35–28.83), while the median was 29. The average score for family acceptance was 111.77 (95% CI: 109.93–113.61) with a minimum value of 44 and a maximum value of 154. The majority of participants were open about their HIV status (51.7%), received peer support (53.4%), and were accepted by their families (52.8%).

There was a significant relationship between peer support and HIV serostatus disclosure (p-value: 0.011 α: 0.05). Analysis of the estimated risk between the two variables showed a value of 2.175 (95% CI: 1.199–3.977). This result means that MSM-PLWHA who did not receive peer support were at twice the risk of concealing their HIV status than were those who received support from their peer group. With the same statistical test, it was concluded that there was no significant relationship between family acceptance and HIV serostatus disclosure (p-value: 0.979 α: 0.05). The

Table 6 Relationship between peer support and family acceptance to HIV serostatus disclosure of MSM-PLWHA in Medan, Indonesia, from April to May 2018 ($N = 176$).

Variable	HIV serostatus disclosure						OR (95% CI)	p-Value
	Closed		Disclosed		Total			
	N	%	*n*	%	*n*	%		
Peer support							2.175	0.011
Unsupported	48	58.5	34	41.5	82	100	(1.199–3.977)	
Supported	37	39.4	57	60.6	94	100		
Total	85	48.3	91	51.7	176	100		
Family acceptance							0.992	0.979
Unaccepted	40	48.2	43	51.8	83	100	(0.549–1.794)	
Accepted	45	48.4	48	51.6	93	100		
Total	85	48.3	91	51.7	176	100		

estimation risk is 0.992 (95% CI: 0.549–1.794), indicating that the absence of relations is also related to the estimation of risks that are less than 1.

Discussion

The average age of respondents involved was 29.4 years, with a range between 28.45 and 30.36 years. The results of this study are in accordance with data compiled by the Directorate General of P2P Ministry of Health of the Republic of Indonesia in 2016 that 70% of HIV infections occur in the age range of 25–49 years. The average age of respondents of the 176 MSM-PLWHA in this study tended to be younger than that for some previous studies.[7] Most of the MSM-PLWHA were highly educated.[8–12] The results of this study are also consistent with several other studies which found that the majority of MSM-PLWHA are not married; they are single, divorced, or widowed.[9,13,14]

Further analysis revealed that there was a significant correlation between peer support and HIV serostatus disclosure. This phenomenon is related to disclosure theory, social cognitive theory, and communication privacy management (CPM) theory. In social cognitive therapy, part of a person's knowledge can come from observing other people, so that with regard to the process of disclosing their HIV serostatus, PLWHA will be influenced by the people and environment around them. On the basis of social cognitive theory, peer support provides knowledge for MSM-PLWHA about the process of disclosure of HIV serostatus. MSM-PLWHA can observe the behavior and the disclosure process of members of their peer group, which will allow them to make a judgment about their own disclosure. This is supported by qualitative research on 40 PLWHA who stated that the process of disclosure of their HIV status was influenced by trust and knowledge about HIV.[15] This phenomenon is also in accordance with previous studies that found that peer support influences behavior change.[16] On the basis of CPM theory, peer support acts as a motivation for MSM-PLWHA disclosing their HIV serostatus. A qualitative study of 40 PLWHA examining the process of disclosure of HIV status among PLWHA identified a schema according to which, after obtaining trust and knowledge about HIV, PLWHA will be disclosed following consideration of five factors: (1) who (the person to whom the disclosure is made), (2) when (determining the right time), (3) where (determining the right place), (4) message (the message to be conveyed by the disclosure), and (5) why (the reason behind the disclosure).[15] These five factors are part of the model disclosure process concept. Peer support is part of the why element and acts as a disclosure motivation. In the same study, the majority of respondents decided to disclose their HIV serostatus as a way to encourage at-risk friends to check their HIV status and avoid transmission. In the analysis of the data from the 176 MSM ODHA in Medan, Indonesia, the peer support received influences HIV serostatus disclosure.

The results of the data analysis regarding the relationship between peer support and HIV serostatus disclosure showed that respondents who received peer support tended to disclose their HIV status. Previous research that directly examined the relationship between these two variables could not be found, but other studies on peer support show that it can be a significant supporting factor for HIV serostatus disclosure. In general, peer support received by respondents can increase the effectiveness of coping and mental health in general.[17–19] Furthermore, the general impact of peer support can reduce the incidence of depression in patients with terminal illness.[17,20] On the other hand, these results contradict studies that have found that low support does not affect the behavior of concealing HIV status from others.[21] The same study also indicated that MSM-PLWHA who disclosed their serostatus actually experienced symptoms of depression.[21] Family acceptance based on a chi-square analysis indicated no significant relationship with HIV serostatus disclosure. Previous research on the direct relationship between these two variables could not be found. However, family acceptance could theoretically have an effect as a supporting factor for disclosure of serostatus. The results of the data analysis in the current study contradict previous studies that found that family acceptance can increase self-esteem, a supporting factor for disclosure.[22] On the other hand, the results of the current study also support research indicating that the main factors that influence HIV serostatus disclosure are self-efficacy and expected outcome of disclosure.[23]

Peer support showed a significant correlation with HIV serostatus disclosure, while family acceptance was shown not to have a significant relationship with HIV serostatus disclosure by MSM-PLWHA in Medan, Indonesia. It was concluded that peer support received by MSM-PLWHA can motivate them to disclose their serostatus. HIV serostatus disclosure is an aspect that can help PLWHA to obtain greater support during their treatment period. Therefore, interventions in peer groups need to be carried out in health facilities. Provision of systematic peer group support for MSM-PLWHA and the integration of intervention with peer support may be necessary for the next care plan for MSM-PLWHA in Medan, Indonesia.

Conflict of interests

The authors declare no conflict of interest.

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