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Correlation of family acceptance and peer support group toward sexual behavior risk on MSM with HIV/AIDS in Medan, Indonesia☆

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Abstract
Objectives: This research aims to determine the relationship of family acceptance and peer group support toward sexual behavior risk and the sociodemographic factors that influence it.
Method: The study uses cross-sectional design, which involves 180 MSM (men who have sex with men) with HIV/AIDS as respondents, using a consecutive sampling technique.
Results: The results show that most respondents have high family acceptance (52.8%) and good peer support (56.1%); 56.7% of respondents have high sexual behavior risk. The chi-squared test determined a significant relationship between family acceptance and peer support with sexual behavior risk ($p < 0.001$ and $p < 0.001$; $\alpha = 0.05$).
Conclusion: Nursing interventions that encourage family members to always accept the condition of patients-specifically MSM-with HIV/AIDS are necessary to prevent sexual behavior risk.

Introduction

HIV cases around the world show that it has infected 70 million people, with 25 million among them face death. In 2015, the number of HIV/AIDS cases in Indonesia was 30,935, with 6,081 new cases, and in 2016, there were 41,250 cases, with 7,491 new cases; the increase in new cases is approximately around 23.18%. HIV/AIDS cases in

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Indonesia are spread throughout the province, including in North Sumatera,[1] where there are 16,856 cases of HIV/AIDS. New HIV/AIDS cases in North Sumatera experienced a significant increase. In 2014, there were as many as 1,628, which increased to 1,891 new cases in 2016. According to data on the risk factors of HIV/AIDS patients in Medan, in 2016, 46.34% of patients were homosexual, and 45.68% were heterosexual. The rest of the patients became infected by transmission through injecting drug user, blood transfusion, or some unknown.[1]

Risky sexual behaviors that increase HIV transmission in MSM include having anal sex without using condoms, having anal sex with an unclear HIV-status partner, and having multiple sexual partners.[2,3] Two factors that positively influence sexual behavior risk are family acceptance and peer group support.[4,5]

Lack of family acceptance may cause infected people to experience depression, high psychological stress, and anxiety, due to family and religious rejection, as their sexual identity may be considered contrary to cultural and social norms. Some MSM has negative experiences with families and religious groups, which later lead to a negative impact on their health.[6] Family refusal increases behavior risk and decreases the level of physical and mental health in MSM. In addition, family refusal also increases higher-risk sexual behavior, drug abuse, and involvement in unsafe sexual relations.[7]

Peer group support also strengthens positive and healthy feelings and helps group members understand complex health information. Peer group support also helps clients seek health services, develop networks and strategies to remember treatment programs, and scheduled visits to the clinic.[8] Peer group support is essential for avoiding social isolation, increasing access to sources of knowledge about HIV prevention and transmission, reducing abusive behavior received in the workspace, reducing behavior risk changes, and reducing the number of the sexual partners after patients are diagnosed with HIV.[9,10]

Method

Study design

This research is a quantitative study using a cross-sectional method with consecutive sampling techniques involving 180 MSM over the age of 18 and diagnosed with HIV/AIDS. The study takes place in H. Adam Malik Central General Hospital, Dr. Pirngadi Hospital, Teladan Public Health Center, and Padang Bulan Public Health Center, in Medan, Indonesia. The locations are owned and managed by Indonesia's ministry of health and have Voluntary Counselling and Testing services. Each respondent filled out a questionnaire translated from English to Bahasa, which was then turned back to English by experts in English. This research was conducted from May to June 2018.

Measures

Data were obtained from demographic data and questionnaires about family acceptance, peer group support, and sexual behavior risk. The validity and reliability of all questionnaires are declared valid and reliable, with the value of each family acceptance questionnaire being 0.8, each peer group support questionnaire being 0.9, and each sexual behavior risk questionnaire being 0.8.

Analysis

Data analysis using statistical analysis software. The researchers looked at the frequency and percentage of each variable, using an ordinal and nominal scale. Interval scale variables were analyzed through the mean value and standard deviation. Analysis of the relationship of family acceptance variables and peer group support with sexual behavior used a chi-squared test.

Ethical consent

The researcher obtained an ethical test approval letter from the Faculty of Nursing, Universitas Indonesia. The study also obtained written informed consent and each respondent's approval before filling out the questionnaire, which emphasized established ethical principles, such as self-determination, anonymity, and confidentiality. The process of filling out the questionnaire took place in a particular room, to protect the privacy of the respondent.

Results

Respondents' characteristics

As shown in Table 1, the majority of respondents in this study are young adults, and most of them are employees within the formal sector like private companies. On the other hand, some of them work in the informal sector like a small business, in beauty salons, as bartenders, or as sex workers. Although most of them are private employees who are categorized as having high incomes, some of them work as permanent employees in the government sector. As many as 48.8% of respondents have a high salary. Most respondents have passed through secondary to higher education, have not formally married, and were diagnosed within the last 18 months.

Analysis at 5% alpha found a significant relationship between family acceptance and risky sexual behavior in respondents ($p = 0.000$; $\alpha = 0.05$) and peer group support and risky sexual behavior in respondents ($p = 0.000$; $\alpha = 0.05$). Meanwhile, the analysis of the closeness of the relationship between family acceptance and risky sexual behavior obtains OR = 0.219 (OR 95%; CI 0.115–0.415). There is a significant relationship between peer group support and risky sexual behavior in respondents ($p = 0.000$; $\alpha = 0.05$). Meanwhile, the analysis of the close relationship between peer group support and sexual behavior risk obtains OR = 4.992 (OR 95%; CI 2.638–9.446).

Discussion

Most of the respondents in this study (52.8%) have good family acceptance (Table 2), with a significant relationship with sexual behavior risk in MSM diagnosed with HIV/AIDS

Table 1 The distribution of MSM diagnosed with HIV/AIDS respondents in Medan in 2018, based on their age, occupation, income, educational background, marital status, and time of diagnosis ($n = 180$).

Variables	Qty.	Percentage
Age		
Young adult (20–40 years old)	165	91.7
Adult (41–61 years old)	15	8.3
Occupation		
Unemployed	14	7.8
Employed	166	92.2
Govt. employees	4	2.41
Private employees	89	53.61
Laborers	7	4.21
Self-employed (small shop, beauty salon)	38	22.90
Other (sex worker, bartender)	28	16.87
Income		
Low	92	51.2
High	88	48.8
Educational background		
Primary education	8	4.4
Secondary to higher education	172	95.6
Marital status		
Single	163	90.6
Married	17	9.4
Time of diagnosis		
≤18 months	112	62.2
>18 months	68	37.8

($p = 0.000$; $\alpha = 0.05$). This study showed the same results as research conducted that showed that social and family acceptance of men with HIV/AIDS is lower (Table 2), and MSM who are well-accepted in their families demonstrate better emotional welfare but not significant to reduce on risky sexual behavior.[11,12] Other studies show similar results. One study of 247 respondents found that 81 respondents receive low family acceptance, 83 respondents receive regular family acceptance, and 81 respondents receive good family acceptance. From these results, it can be concluded that lower family acceptance is associated with increased levels of depression, drug abuse, risky sexual behavior, and suicidal tendencies. Whereas MSM who receive good acceptance have high self-esteem, good health, and good social acceptance related to CD4 lymphocyte counts in MSM with HIV/AIDS.[11,13] This is also in line with the results of research conducted on MSM in which those who experience rejection from their families have poor physical and mental health, suicidal tendencies, high levels of depression and drug abuse, high sexual desire, and high-risk sexual behavior. Social support is a factor that psychologically affects MSM diagnosed with HIV/AIDS, in that those who get good support have low levels of depression and anxiety, high adherence to treatment, and lower-risk behavior.[7,13,14]

HIV/AIDS is a chronic disease that requires intensive care and treatment. Therefore, MSM with HIV also needs family support and assistance, including financial support, information, daily activities and self-care services, support for treatment programs, and psychological support.[4] Other research shows that a family member diagnosed with HIV/AIDS will create a psychological burden on the family, which will include feeling angry, embarrassed, sad, and not accepting the condition. The family is more likely to isolate the member diagnosed with HIV/AIDS. In addition, the family also feels a social burden when the community isolates families who live with HIV/AIDS patients. Economic burdens are also often felt by families, as people lose their jobs because of deteriorating health conditions.[7,15]

This study also found that 56.1% of respondents have good peer support, with a significant relationship with risky sexual behavior in MSM diagnosed with HIV/AIDS ($p = 0.000$;

Table 2 The relationship between family acceptance and peer group support and MSM sexual behavior risk in MSM with HIV/AIDS in Medan, 2018 ($n = 180$).

	Sexual behavior risk						OR (95% CI)	Sig.
	Low		High		Total			
	n	%	*n*	%	*n*	%		
Family acceptance								
Poor	21	26.9	64	62.7	85	47.2	0.219 (0.115–0.415)	0.000*
Good	57	73.1	38	37.3	95	52.8		
Total	78	100	102	100	180	100		
Peer group support								
Poor	51	65.4	28	27.5	79	43.9	4.992 (2.638–9.446)	0.000*
Good	27	34.6	74	72.5	101	56.1		
Total	78	100	102	100	180	100		

* Meaningful at $\alpha = 0.05$.

$\alpha = 0.05$). This research is in line with the results of a study that found that peer education that uses peer groups shows a significant impact in influencing positive changes about knowledge of HIV/AIDS awareness, the use of condoms, and MSM attitudes[16]; however, the effect on sexual behavior and the level of sexually transmitted infections shows s contrary result. Peer support groups function as an important source of assistance for MSM, as an important place for the clinical care of individuals with HIV/AIDS, and as assistance in providing solutions to improve the psychosocial function of MSM with HIV/AIDS There are three important things that MSM with HIV/AIDS need, in relation to peer support groups: (1) assessing how patients can access peer support, (2) providing opportunities for peer groups to be involved in clinical settings, and (3) increasing openness and skills to seek support and being able to use existing support facilities. Increasing peer support can also reduce the likelihood of subsequent transmission, after diagnosis.[10,17]

Other studies have shown significant results in the level of confidence in daily life, knowledge about HIV/AIDS, prevention and transmission behavior, and positive activities in MSM diagnosed with HIV/AIDS who are involved in peer support groups. The benefits of peer support and education are improved interpersonal skills, because the groups have a significant impact on the lives of others; increasing equality, because of the nature of giving and receiving between others; providing knowledge; increasing knowledge; a positive attitude toward HIV-related topics; and reducing the use of hazardous drugs with a high risk of HIV.[18,19] Similar results were also found in a study conducted in Uganda for adolescents with HIV, in which peer group support was an effective approach to reducing psychological distress, such as depression, anxiety, and anger, and are expected to reduce risk factors for HIV transmission in the group.[20]

Other research conducted on MSM finds that peer group support programs effectively reduce the use of drugs; reduce depression; reduce stigma; improve individual welfare; improves adherence to HIV testing recommendations; reduces individual risk factors; and creates positive changes in knowledge, attitudes, and perception of HIV/AIDS risk.[21–23] Other research on MSM diagnosed with HIV/AIDS shows that peer support group is the most dominant factor in the prevention of sexually transmitted infections; MSM diagnosed with HIV/AIDS who have good peer support see 36 times greater prevention of sexually transmitted infections. Peer support is important for reducing social isolation, increasing knowledge, preventing HIV, and reducing workplace violence.[9,21] Similar results are also found in research conducted in Santiago, Chile, where peer groups provide health education, through group discussions about safer sexual activity, unprotected sexual activity, dynamic involvement in HIV-prevention programs within the clinics and the community, but do not report on the number of their sexual partners and standard precautions.[24]

The three characteristics of the peer group structure identified within the MSM group are (a) the group has many entry points, (b) the network uses the leadership structure, and (c) the network is regulated by formal and informal rules. There are also three main features that characterize the function of an MSM peer social group, for instance (a) the group serves as a place for MSM to feel freedom to express themselves, (b) the group is a source of psychological and sociocultural support, and (c) the group meets the sexual needs of each member.[25]

Family acceptance and peer group support act as psychological support and support systems for People living with HIV/AIDS, specifically MSM, to be open to their status, to reduce social isolation, to be a source of knowledge about HIV, and to prevent sexual behavior risk. Nurses have an important role in involving families in taking care of MSM diagnosed with HIV/AIDS and forming peer support groups because nurses generally interact with MSM with HIV for long periods. In addition, most MSM with HIV is open to nurses about their status, which helps nurses in performing their function as facilitators for the interventions needed by MSM.

Conflict of interests

The authors declare no conflict of interest.

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