

Analysis of Social Networks against Individual Coping Resources and Community Stigma in People with HIV-AIDS (Study in Jagir Village, Wonokromo Subdistrict, Surabaya City)

Ismayani¹, M Bagus Qomaruddin², Rachmat Hargono²

¹Master Candidate, Departement of Public Health Sciences, Faculty of Public Health, Universitas Airlangga, Indonesia, ²Senior Lecturer, Department of Health Promotion and Behavioral Sciences, Faculty of Public Health, Universitas Airlangga, Indonesia

ABSTRACT

Background: HIV-AIDS is priority health problems in the city of Surabaya. HIV and AIDS cases are likely to rise each year. The city of Surabaya is the highest contributor to the cases in East Java. This study aims to analyze the influence of social networks toward individual coping resources in the prevention of HIV-AIDS transmission and the influence of social networks against society's stigma in people with HIV-AIDS.

Material and Methods: The research type is analytic observational with cross-sectional design. The sample of the study was 380 respondents aged 18–49 years who lived in the village of Jagir with inclusion criteria who are willing to be respondents. Method of sampling with multistage random sampling. The study was conducted from May to June 2017. Data were collected using guided interviews with questionnaire. Data analysis by regression.

Result: The result of data analysis shows that social networks has significant and positive influence to individual coping resources in prevention of HIV-AIDS transmission = 90.9% ($P = 0.006$, $\beta = 0.909$) and toward community stigma to people with HIV-AIDS = 39.8% ($P = 0.038$, $\beta = 0.398$).

Conclusion: Social networks that run properly can increase the community's ability in problem solving, improve community control in HIV-AIDS prevention efforts, and improve the ability of public access toward the sources of information against HIV-AIDS. Social networks can also minimize that society stigma against people living with HIV-AIDS.

Key words: Community stigma, Individual coping resources, Social networks

BACKGROUND

HIV-AIDS is a global emergency problem, governments and public institutions have done various break through for preventing the spread of HIV-AIDS, but every year cases of HIV-AIDS are likely to increase. HIV-AIDS is still an issue of health in East Java, according to data of the Ministry of Health of Indonesia year 2014, East Java province is the second highest with HIV-AIDS cases after the DKI Jakarta.^[1] The number of cases of HIV in East Java up to December 2015 cumulatively, i.e., 32.645 cases, and AIDS totaled 15.461 cases. In the year 2016, HIV-infected pregnant women amounted to 270 cases, whereas babies born with HIV positive amounted to 35 cases.^[2]

In East Java, the city of Surabaya is one of the cities with the highest HIV-AIDS cases among the 38 Kab/Kota. Every year,

HIV cases are likely to rise in 2011, as many as 429 cases, 2012 as many as 418 cases, 2013 as many as 501 cases, 2014 as many as 572 cases, and 2015 as many as 652 cases. Similarly, cases of AIDS are likely to rise in the year 2011 as many as 382 cases, 2012 as many as 334 cases, 2013 as many as 253 cases, 2014 as many as 363 cases, and 2015 as many as 281 cases.^[3] Based on a report from the Department of health of the city of Surabaya, a case of HIV-positive pregnant women in the year 2016 amounted to 35 cases and HIV positive babies up to the year 2016 amount to 87 cases.^[4]

Seeing the magnitude of the problem of HIV-AIDS in the city of Surabaya, in 2015, the health promotion center of the Ministry of Health Indonesia developed community mobilization of pilot project program in the prevention of HIV-AIDS. The program

CORRESPONDING AUTHOR:

Ismayani

Master Candidate, Departement of Public Health Sciences, Faculty of Public Health, Universitas Airlangga, Indonesia.

E-mail: ismayani1973@gmail.com

Submission: 09-2017; Peer Review: 10-2017; Acceptance: 11-2017; Publication: 12-2017

was first implemented in the cities of Surabaya and Cirebon.^[5] In the city of Surabaya was held in Jagir Village which is one of the primary health care of Jagir. Cases of HIV-AIDS are high in Jagir. Data recorded 28 cases of HIV from the year 2012 until June 2016, of which there are 6 cases of HIV in pregnant women. In the year 2015, cases of HIV positive in pregnant women amounted to 3 cases, one of which is the case in Jagir village.^[6]

The purpose of the program is the implementation of the community's movement to the HIV prevention and control identified by citizens for citizens, formed a support group of peers (mother, father, and youths), preventing the public stigma against people with HIV-AIDS.^[6] In other words, the purpose of the program is to build social networks in the community in the prevention of HIV-AIDS.

According to the theory of health behavior with Catherine, Barbara A Israel^[7] that social networks now a days in an important part in increasing the degree of health. Social networks can influence the frequency and duration of exposure to the stressor, reducing exposure to stress associated with improved health. Social networks can increase the coping resources of the individual, namely, the ability of the individual to access the new contacts and information and to the identify and solve problems. If the support provided may help reduce uncertainty, a sense of personal control over certain situations and domains of live will be improved.^[7]

One of the causes of high HIV-AIDS cases is due to the stigma of the society toward people living with HIV-AIDS (PLWHA). The society stigma against PLWHA still pounds and it hard to be eliminated. Stigma results in the blocking of HIV prevention efforts.^[8] Stigma is one of the greatest obstacles in the prevention of HIV-AIDS and countermeasures against PLWHA also include the quality of life of PLWHA.^[9] People who are at risk will be afraid to do the HIV test because when it was revealed the results of their reactive will be excommunicated. They fear disclosing HIV status and decided to defer to medical treatment when ill, which will impact more and decrease in the level of their health and HIV transmission is not be controlled.

With social networks that run well expected to increase coping resources of individuals in the prevention of HIV transmission and prevent the stigma of the society toward PLWHA. The purpose of the study is to analyze the influence of social networks toward individual coping resources in the prevention of HIV-AIDS and the stigma of the society toward PLWHA.

MATERIALS AND METHODS

The type of the research is observational analytic with cross-sectional design. The population in this research is the entire population aged 18–49 years, domiciled in Jagir village. Technique sample taking using multistage random sampling. The sample size is 380 respondents. Research conducted in May until June 2017. Data were collected using guided questionnaire with interviews. Data analysis was performed using logistic regression with a level of significance of 5% ($P < 0.05$).

RESULTS

Characteristics of Respondents

Characteristics of respondents in this research include age and sex. Distribution of respondent characteristics can be seen in Table 1.

Based on Table 1, it can be noted that the largest group of respondents aged 40–49 years, the number of respondents in the age group of the smallest <20 years. Grouping age of respondents is based on age groups that are still active in social activities in the community and are expected to be known how coping resources of the individual in preventing the transmission of HIV-AIDS as well as the perceptions of the respondents against PLWHA. It can be known that female respondents are more than male respondents. This is because those who are willing to be interviewed at the time of the survey were mostly women.

Social Networks

Social networks in this study are the social relationships in the community that creates a system or chain of information, mutual coordination, support, and interact each other actively in the efforts of prevent of HIV-AIDS. With are involved peer support group indicators do counseling about HIV-AIDS, citizens are actively in the prevention of HIV-AIDS, regular meetings to discuss about HIV-AIDS, sharing information among citizens about HIV-AIDS, citizens care when there are citizens and environment with a risk of occurrence of HIV-AIDS, and there are communication channels for sharing information about HIV-AIDS. Social networks are measured using 10 questions with a choice answers yes and no, yes answer get score 2, no answer gets score 1 and then grouped into 3 categories with some answers score. Social networks is low when the score is 10–13, score low when social networks is medium when the score is 14–17. Social networks are high when the score is 18–20. Frequency distribution of respondents based on social networks can be seen in Table 2.

Based on Table 2, it can be seen that the condition of social networks in the community related to HIV-AIDS has run when viewed the percentage of medium and high category, although there are still some citizens who stated that social networks are low. This shows that there are still some indicators of social networks that have run and have not run well. Based on the results of the survey indicator that has been running is the socialization of HIV-AIDS at regular meetings of the community, citizens are involved in the discussion community about HIV-AIDS, residents reported if there are people who are sick for a long time and do not heal. Indicators that have not

Table 1: Characteristics of respondents

Category	n (%)
Age (years)	
<20	48 (12.6)
20–29	75 (19.7)
30–39	126 (33.2)
40–49	131 (34.5)
Sex	
Male	122 (32.1)
Female	258 (67.9)

Table 2: Distribution of respondents based on social networks

Category	n (%)
Social networks low	145 (38.2)
Social networks medium	133 (35.0)
Social networks high	102 (26.8)
Total	380 (100)

run are young age groups who have not been actively involved in the socialization of prevention of HIV-AIDS transmission, not all people know the phone number that can be contacted for consultation on HIV-AIDS, the people are not yet accustomed to share information about HIV-AIDS.

Individual Coping Resources in the Prevention of HIV-AIDS Transmission

Individual coping resources are the ability of respondents to predict threats or opportunities for HIV-AIDS transmission, evaluate the resources or environmental carrying capacity that can be used to overcome threats, and use strategies to mitigate these threats. Indicator of coping resources consist of 3 categories, namely, the ability of problem solving, the ability of information access, and perception of respondent about his ability to prevent HIV-AIDS. Individuals coping resources are measured using 12 attitude questions with Likert scale. Choice of answer strongly agrees score 4, agrees score 3, does not agree score 2, and strongly disagrees score 1 and then grouped into 2 categories by summing score answer. Coping resources are low if the score <36, coping resources high when the score ≥36, frequency distribution of respondents based on coping resources can be seen in Table 3.

Based on Table 3, it can be seen that the conditions of individual coping resources are mostly at high criteria. Based on the survey results, most respondents' attitudes have shown the ability to solve HIV-AIDS problems in their environment, the ability to access information, and the ability to state that they can prevent HIV-AIDS.

Community Stigma against People living with HIV-AIDS (PLWHA)

What is meant by the stigma of the people toward PLWHA in this study is the negative perception of respondents to HIV-AIDS sufferers, that is, HIV-AIDS sufferers should be avoided or ostracized, joint activity (touching, shaking, exercising together, and using toilet together with HIV sufferers) can transmit HIV virus. The stigma of society is measured by one favorable question using Likert scale with very agree choice score 4, agree score 3, disagree score 2, and strongly disagree score 1 and two unfavorable questions with very agree choice score 1, agree score 2, disagree score 3, and strongly disagree score 4 and then grouped into 2 categories by summing the score of answers. Community stigma is low if score ≥8, and community stigma is high if score <8. The frequency distribution of respondents based on community stigma can be seen in Table 4.

Table 3: Distribution of respondents based on individual coping resources

Category	n (%)
Coping resources high	251 (66.1)
Coping resources low	129 (33.9)
Total	380 (100)

Table 4: Distribution of respondents based on community stigma against PLWHA

Category	n (%)
Community stigma low	253 (66.6)
Community stigma high	127 (33.4)
Total	380 (100)

PLWHA: People living with HIV-AIDS

Based on Table 4, it can be seen that community stigma is mostly in low condition, but there are still some people who have negative perception toward PLWHA. Based on the survey results of community stigma on people living with HIV-AIDS, patients should be avoided and there are still some people who have a perception that HIV-AIDS can be transmitted through joint activities with PLWHA. This is still a constraint in efforts to prevent HIV-AIDS transmission.

Analysis of the Influence of Social Networks on Individual Coping Resources in the Prevention of HIV-AIDS Transmission

Table 5 shows the results of the analysis of the influence of social networks on individual coping resources. It can be concluded that high social networks cause high individual coping resources. Logistic regression test results obtained that there is a significant influence of social networks to individual coping resources ($p = 0,05$). Social networks affects 90.9% cause high individual coping resources.

Analysis of the Influence of Social Networks on the Stigma of People in People with HIV-AIDS (PLWHA)

Table 6 presents the results of cross-tabulation between social networks and the stigma of society. Logistic regression test results obtained, there is significant influence of social networks to stigma of society in PLWHA ($P = 0,038$). It can be seen that high category social networks can provide greater opportunities for lower community stigma by 39.8%.

DISCUSSION

The results of this study provide the view that if the social networks are well established it can increase the awareness and ability of the community to prevent the spread of HIV-AIDS and reduce the stigma of people to PLWHA.

Social Networks on Individual Coping Resources in Prevention of HIV-AIDS Transmission

Social networks are used to describe social relationships in society, namely, the formation of social networks that surround individuals. With social networks can improve the ability of people to gather resources and solve problems. The results of statistical tests show that there is a significant influence between social networks are individual coping resources. This is in line with Thoits's^[7] opinion that social networks relationships in the community can help them interpret events or problems more positively and constructively.

High coping resources at Jagir village are caused by social networks that are beginning to run, namely, socialization on HIV-AIDS done by peer group cadres at regular community meetings such as RW meetings, regular social gathering groups, and recitation of the Quran, peer support group cadres always motivate citizens to behave in a way to prevent HIV-AIDS, and citizens always remind each other not to behave HIV-AIDS. Also influenced by the presence of HIV-AIDS cases in the Jagir urban area has caused citizens to be more vigilant and improve communication among citizens in an effort to prevent HIV-AIDS transmission.

Social Networks Against Community Stigma

Community stigma against PLWHA is still found and difficult to remove. Stigma leads to inhibition of HIV prevention efforts. The results of the research showed that there was an influence of

Table 5: Analysis of the influence of social networks on individual coping resources

Social networks	Individuals coping resources, n (%)		Total n (%)	P	β
	Coping resources high	Coping resources low			
Low	74 (51.0)	71 (49.0)	145 (38.2)	0.006	0.909
Medium	91 (68.4)	42 (31.6)	133 (35.0)		
High	86 (84.3)	16 (15.7)	102 (26.8)		
Total	251 (66.1)	129 (33.9)	380 (100)		

Table 6: Analysis of the influence of social networks on the stigma of PLWHA

Social networks	Community stigma, n (%)		Total n (%)	P	β
	Community stigma low	Community stigma high			
Low	95 (65.5)	50 (34.5)	145 (38.2)	0.038	0.398
Medium	82 (61.7)	51 (38.3)	133 (35.0)		
High	76 (74.5)	26 (25.5)	102 (26.8)		
Total	253 (66.6)	127 (33.9)	380 (100)		

social networks on the stigma of society. High social networks provide greater opportunities to minimize the stigma of society. However, based on the survey results, there are still respondents who have the perception that patients should be avoided, HIV-AIDS can be transmitted by joint activity. To overcome this problem, it takes a long process and time for the community to be given knowledge and information that is true, complete, and continuous about HIV-AIDS disease including its health services.^[10] Shaluhyah *et al.*^[9] stated that knowledge of HIV-AIDS greatly affects one's attitude toward HIV-AIDS. Lack of public knowledge of HIV-AIDS has an impact on people's fear of PLWHA. With the right information about HIV-AIDS, it is expected that the stigma of the people toward PLWHA can be minimized.

This opinion is in line with Ahwan's^[11] research which states that discrimination cases occur in people living with HIV-AIDS in society both in social intercourse, education environment, working world, and health service. This is indicated by the strong stigma of PLWHA. Low and/or even misguided knowledge and views on HIV and AIDS issues often lead to discrimination in PLWHA.

Efforts to reduce stigma against people living with HIV are very important, a study conducted in Bandung JEN in collaboration with KPAN in 2011 that examines the role of Islamic religious leaders in preventing and overcoming the spread of HIV-AIDS shows that community leaders contributed to overcome the problem of stigma and discrimination against PLWHA.^[12] Therefore, in minimizing the stigma of the community in Jagir village, it is needed the optimal support from community leaders in this case is the cadre of peer support groups. To increase people's understanding of how HIV-AIDS prevention and transmission, the intensity of counseling about HIV-AIDS needs to be improved through regular group meetings in the community. This is related to the existing social structure of the community, where intergroup cooperation is still high with the existence of social activities such as regular social gathering and recitation of the Quran. Such conditions as social capital which is potential to be utilized and developed.^[13]

CONCLUSION

The existing social networks in Jagir village can improve the community's ability to solve problems, improve community control in HIV-AIDS prevention efforts, and improve people's access to HIV-AIDS information resources. High categories of social networks can also minimize the stigma of people living with HIV, but there are still some people who have a perception that people with HIV should be avoided and ostracized, HIV-AIDS diseases can be transmitted by joint activities such as eating together, using shared toilets, swimming together. Therefore, people still need to be given knowledge and information that is true, complete, and continuous about HIV-AIDS disease, especially about HIV-AIDS transmission. Similarly, social networks should be further improved so that the goals of community mobilization programs in the prevention of HIV-AIDS transmission can be realized.

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HOW TO CITE THIS ARTICLE:

Ismayani, Qomaruddin MB, Hargono R. Analysis of Social Networks against Individual Coping Resources and Community Stigma in People with HIV-AIDS (Study in Jagir Village, Wonokromo Subdistrict, Surabaya City). *Int J Prevent Public Health Sci* 2017;3(4):13-17.