

<http://heanoti.com/index.php/hn>



RESEARCH ARTICLE

URL of this article: <http://heanoti.com/index.php/hn/article/view/hn20112>

Social Support and Substance Abuse Relapse

Adelia Perwita Sari^{1(CA)}, Chatarina Umbul Wahyuni², Arief Wibowo³

^{1(CA)}Department of Epidemiology, Faculty of Public Health, Airlangga University, Indonesia;
adelia.perwita@yahoo.com (Corresponding Author)

³Department of Epidemiology, Faculty of Public Health, Airlangga University, Indonesia

³Department of Biostatistic and Population, Faculty of Public Health, Airlangga University, Indonesia

ABSTRACT

Substance abuse is the health problem that affects physical, mental and social health. Rehabilitation program is one of the strategies to reduce the number of addictive substance users but the relapse is common happen to the users that taking rehabilitation. The aim of this study was to assess social support as risk factors for substance abuse relapse. This case-control study was conducted to 39 people in each control and case group. The samples were obtained with simple random sampling. The cases were the person who relapses after completed rehabilitation program, while the controls were the person who still being abstinence after completed rehabilitation program. Data were collected with the questionnaire and analyzed with Chi-square test. The result showed that social support was related to substance abuse relapse ($p=0.000$). The lack of social support was related to the higher risk of substance abuse relapse ($OR=6.92$, $95\%CI=2.51 - 19.22$). The appraisal support was the dominance risk factor ($OR=10.88$, $95\%CI=3.48 - 33.98$) of substance abuse relapse compared to informational, instrumental, and emotional support. The involvement of the source of social support in rehabilitation program is important to help the users stay abstinence after released from the rehabilitation center.

Keywords: Substance abuse, Social support, Relapse risks

INTRODUCTION

Addictive substance abuse is the health problem that can affect physical, mental and social health. The definition of the substance abuse is the use of the illicit addictive substance without medical intention or supervision that can be harmful and hazardous toward the users. The substance use that repeated over time will lead to addiction. Addiction is a chronic disease that affects the brain and typically includes the compulsivity to take the addictive substance in any situations despite the harmful consequences⁽¹⁾.

The prevalence of addictive substance abuse in worldwide tends to increase every year. The worldwide addictive substance abuse prevalence is estimated around 5.2% in the population age 15 – 64 years old in 2013. In Indonesia, the prevalence of addictive substance abuse reaches 2.20% in 2015. The addictive substance abuse related to the mortality and morbidity rate in certain diseases⁽²⁾. There are 40 deaths in every one million population age 15-64 years old caused by addictive substance abuse in 2012. Addictive substance abuse and addiction are accounted for 20.0 million DALYs in every 100.000 population in 2010⁽³⁾.

The substance control including prevention and rehabilitation is needed to stop the higher number of substance abuse in the future. Besides the prevention program, the rehabilitation is also being the main concern in effort to control addictive substance abuse. The rehabilitation is aims to help the users to stop using addictive substance, being abstinence and have the healthy life again. Relapse is one of the barriers to reach those goals. Relapse is common happen to the users that have intention to stop using addictive substance by taking rehabilitation program. The study to identify factors related to relapse is needed to get better understanding and prevention program⁽⁴⁾.

Social support is the positive interaction that aims to help and assist the receiver of support to solve the problem they encountered. Social support is not always directly related to the etiology of disease but it may influence the health outcome. Social support play role as a protective factor by helping person to cope with stressor and minimize the unwanted effect of the stressor on health. The social support can be given by people that live around the receiver and exchange interpersonal interaction such as family, spouse or partner, friends or healthcare professional.

Social support can be categorized into four types of acts. Informational support is given in the form of information related to the health problem, advice, and suggestion. Instrumental support is given in the form of

tangible help and service that the person needs directly. Emotional support is given in the form of love, empathy, and attention. Appraisal support is given in the form of affirmation and constructive feedback that can be used as self evaluation. All of the types of social support are directed to influence the certain thoughts and health behaviors⁽⁵⁾.

Prior studies showed the role of social support in substance dependence problem. The social support acts can help the users through withdrawal phase and maintain the longer time of abstinence. Giving guidance, information and suggestion increase the commitment to stay abstinence hence the quitting process more bearable for the users⁽⁶⁾. There is significant difference of social support between relapse and abstinence user. The users that have been abstinence have the higher score of social support compared to the user that relapse. The social support predicts 22% of change in the substance relapse⁽⁷⁾.

Although many studies showed the positive effect of social support but some studies showed that social support is not always an effective predictor of recovery steps and other factors may contribute the effectiveness of the recovery outcome. The study showed the negative relationship between social support and addiction relapse. However, the current research only investigated about the correlation of social support with substance abuse relapse without assessed the correlation of each type of social support^{(8),(9)}.

The substance abuse relapse is a barrier in the substance abuse control program. According to the role of social support that was mentioned above the aim of this study was to examine the correlation of social support and its elements with the substance abuse relapse.

METHODS

This case-control study was conducted to the participants that completed the rehabilitation program in three rehabilitation centers in Surabaya, Indonesia. The sample size was 39 people in each group, case and control. The cases were the person who completed rehabilitation in July 2016-June 2017 and relapse. The controls were the person who completed rehabilitation in July 2016-June 2017 and still abstinence. The samples obtained using simple random sampling.

In this study, the dependence variables was relapse that was defined by the userstaking any illicit substance after completed rehabilitation program. The independence variables was social support that was measured by informational support, instrumental support, emotional support, and appraisal support. The data were collected by interview with the questionnaire that consisted of sociodemographic information and social support. Social support contained 15 item that assessed about informational, instrumental, emotional support and appraisal support. In the end of questionnaire there was question about the source of social support. The validity and reliability test were done and all of items in the questionnaire were valid and reliable.

All of those variables measured based on 4 points Likert scale and the total score of social support was counted. Then, the data were categorized as high support and low support based on total score of social support as a whole or separated for each element of social support. Chi square and risk calculation were used to assess the relationship of the social support with substance abuse relapse and to calculate the Odds Ratio (OR).

RESULTS

The result of this study related to the sociodemographic condition showed that the majority of participants were adult, male, marital status single, completed high school, and had a job. Participants who relapsed 82.1% were adult, while the participants who abstinence 64.1% were adult. The frequency of male participant who relapsed were 84.6% while in the abstinence group the male participants were 74.4%. Frequency distributions of participant with marital status single in relapse group were 43.2% while in the abstinence group were 56.6%. Participants who completed high school in relapse group were 84.6%, while in the abstinence group were 69.2%. Job status of the participant in relapse group 64.1% were had a job, while in the abstinence group were 74.4%.

The social support categorized as lack of social support and high social support based. Finding showed that in the relapse group the participants with lack of social support were 79.5%. In contrary, in the abstinence group there were 64.1% participants that had high social support. There were 84.6% participant with lack of informational support in the relapse group. However, in the abstinence group 51.3% participant had high informational support. There were 74.4% participants in the relapse group with lack of instrumental support, while in the abstinence group there were 76.9% participant with high instrumental support. Participants with the lack of emotional support were 82.1% in the relapse group, while in the abstinence group there were 59.1% participants with high emotional support. There were 87.2% participants in the relapse group with lack of appraisal support, while participant who were abstinence 61.5% had high appraisal support.

Table 1 showed that chi-square test for the sociodemographic variables showed no significance correlation to substance abuse relapse. However social support was related to the substance abuse relapse with $p=0.000$. The informational support, instrumental support, emotional support and appraisal support were also significant correlated to substance abuse relapse with $p<0.05$. The OR of social support was 6.92 that means the odds of individuals with lack of social support to relapse were 6.92 times higher than the individuals with high social

support. The dominant factor was appraisal support with OR 10.88. Therefore, the chance to relapse for individual with lack of appraisal support were 10.88 times higher than individuals with high appraisal support.

Table 1. Distribution of Sociodemographic and Social Support

Social Support	Relapse		Abstinence		p	OR (95%CI)
	n	%	n	%		
Age						
• Youth (18 – 24 y.o)	7	17.9	14	35.9	0.079	0.39 (0.14 – 1.11)
• Adult (25 – 48 y.o)	32	82.1	25	64.1		
Sex						
• Male	33	84.6	29	74.4	0.266	1.89 (0.61 – 5.86)
• Female	6	15.4	10	25.6		
Education						
• Primary School	1	2.6	2	5.1	0.273	1.00 (0.07 – 13.86)
• High School	33	84.6	27	69.2		
• University	5	12.8	10	25.6		
Marital Status						
• Single	19	48.7	25	64.1	0.349	0.49 (0.17 – 1.43)
• Divorced / Widower	3	7.7	3	7.7		
• Married	17	43.6	11	28.2		
Job status						
• Unemployed	14	35.9	10	25.6	0.328	1.62 (0.61 – 4.29)
• Employed	25	64.1	29	74.4		
Social support						
• Low	31	79.5	14	35.9	0.000*	6.92 (2.51 – 19.11)**
• High	8	20.5	25	64.1		
Informational Support						
• Low	33	84.6	19	48.7	0.001*	5.79 (1.98 – 16.93)**
• High	6	15.4	20	51.3		
Instrumental Support						
• Low	29	74.4	9	23.1	0.000*	9.67 (3.43 – 27.22)**
• High	10	25.6	30	76.9		
Emotional Support						
• Low	32	82.1	16	41.0	0.000*	6.57 (2.33 – 18.54)**
• High	7	17.9	23	59.0		
Appraisal Support						
• Low	34	87.2	15	38.5	0.000*	10.88 (3.48 – 33.99)**
• High	5	12.8	24	61.5		

* significant at $\alpha = 0.05$

** OR significance

Table 2. Source of social support

Source of social support	Frequency	Percentage
Parent	40	51.3
Spouse	20	25.6
Friend	10	12.8
Counselor	8	10.3
Total	78	100.0

Table 2. showed the source of social support that users received. Family such as parents and spouse were the bigger source of social support with frequency 51.3% and 25.6%, respectively. The other source of social support that mentioned were friends and counselor in rehabilitation center. There were 10.3% participant who mentioned their source of social support was given by counselor.

DISCUSSION

Social support plays significant role in the process of substance abuse treatment and rehabilitation. This finding in line with the research that stated that social support is important for the individual with substance abuse problem to go through the rehabilitation process and to keep maintaining abstinence after the program ended. Substance abuse is the health problem that affects not only physical but also psychological and social aspect. Most

of the individuals who decided to quit from their substance use found that the process was hard. Hence, the social support is important to keep them stay in their previous intention to be free from substance dependencies^{(7),(10),(11)}.

Social support such as empathy and assistance can reduce the negative effect of the stress that commonly happen to the individual with substance abuse problem. Negative emotions such as frustration, guilt, anger, and anxiety are part of daily routine for them, but when they are not properly treated, it can cause the unwanted behavior that lead to other problem. Low social support has been associated with the heightened stress reactivity such as elevated heart rate, increased blood pressure and emphasize the neuroendocrine response. The individual with low of social support and stressed while still maintain being abstinence will lead them to use the substance as a stress reliever. Social support can be protective factor by giving assurance that the individuals were not alone and had person care for them⁽¹²⁾.

The findings showed that all the types of social support are related to the substance abuse relapse. The informational support is needed to remind the individuals of their goals and how to achieve it. Informational support can be given as a suggestion how to keep abstinence and how to avoid relapse. Instrumental support can be given as financial aid to get treatment and providing the healthy meals and access to physical activities so the individual can start a healthy life. Emotional support can be given as the empathy to their condition and listen to their problem. Appraisal support can be given by appreciating their effort of trying to stop abusing substance and keep them motivated to stay abstinence by giving positive feedback⁽¹³⁾.

Appraisal support is the dominant factor of substance abuse relapse. Appreciation for the effort of quitting substance use is important. The individuals need to acknowledge that they are doing a good job and be able to change their behavior permanently. The problem for some individuals who completed program and back into the society is stigmatization. The people around the users may still labeling that the individuals who have been abusing drugs as a bad person despite their intention to stop. Appraisal support may affect the individual self-esteem and increase their doubt of their ability to keep abstinence^{(14),(15)}.

The social support can be given by families such as parent or spouse, friend, and counselor. Each source provides different types of social support. Family can provide all of the types of social support such as informational support, instrumental support, emotional support, and appraisal support. However, friend and counselor usually only provide informational and emotional support. Therefore, family has a significant role to help the individual keep their maintaining process⁽¹³⁾.

Family relationship is considered as the risk of relapse. A person with positive family relationship were less likely to relapse after discharged from program. Individual with spouse or friend who did not support them to abstinence were more likely to relapse than individual who have friend or spouse that support them. Family who does not have adequate information and understanding due to condition of individual who tried to stop abusing illicit drugs may it has low tolerance and difficulty of accepting addiction as a disease that needs to treated properly. Misinformation and family ignorance cause the low of support for the individual who tried to maintain their abstinence⁽¹⁶⁾.

CONCLUSION

Substance abuse relapse is the common problem that happens to the users even after completed rehabilitation program. Social support plays significant role to the substance abuse relapse. The lack of social support can increase the risk of substance abuse relapse. The dominant type of social support is appraisal support. Appraisal support can be given in the form of appreciation and positive feedback for the users who try to abstinence. It is important to involve the family or significant other in every step of rehabilitation program and train them to provide support for the individuals as needed. Family or other significant others need to accept the condition of substance users and learn about what they need when they go through the maintaining process. The family preparedness will help the transitioning process when the individual completed the treatment and back to their own house and society.

This limitation of this study was the selection bias that might happen because the sample was the users that still can be contacted by rehabilitation center and their data were completed. The case-control design study might cause the recall bias. Developing a prospective study to follow up the individual with substance abuse problem who get rehabilitation services could help to determine the specific time of relapse and other risks factor of relapse.

REFERENCES

1. UNODC (United Nation Office of Drugs and Crime). International Standards for The Treatment of Drug Use Disorders. United Nations Publication, E/CN.7/2016/CRP.4; 2016.
2. BNN Jatim (Narcotics National Boards of Jawa Timur, Indonesia). Annual Report of Rehabilitation Services for Addictive Substance Abuse 2015-2016. Surabaya: BNN Jatim; 2017.
3. Degenhardt L, Whiteford H, Ferrari A, Baxter A, Charlson F, Hall W, Freedman G, Burstein R, Johns N, Engell R, Flaxman A, Murray C, Vos T. Global Burden of Disease Attributable to Illicit Drug Use and Dependence: Findings from The Global Burden of Disease Study 2010. *The Lancet*. 2013;382(9904):1564-1574.

4. Marlatt GA, Donovan DM. Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors. New York: The Guilford Publisher; 2005.
5. Glanz K, Rimer BK, Viswanath K. Health Behavior and Health Education: Theory, Research, and Practice (4th ed). San Francisco: Jossey-Bass; 2008.
6. Atadokht A, Hajloo N, Karimi M, Narimani M. The Role Of FamilyExpressed Emotion And Perceived Social Support In Predicting AddictionRelapse. International Journal of High Risk Behavior Addict. 2015;4(1):ee21250.
7. Nikmanesh Z, Baluchi MH, Akbar A, Motlagh P. The Role of Self-Efficacy Beliefs and Social Support on Prediction of Addiction Relapse. International Journal of High Risk Behaviour Addiction. In Press:e21209; 2016.
8. Nashee Q, Amjad N, Rafique R, Naz A. Perceive Social Support and Relapse Proneness in Persons with Substance Use Disorders. J Addict Res Ther. 2014;5(3).
9. MacDonald EM, Luxmoore M, Pica S, Tanti C, Blackman JM, Catford N. Social Networks of People with Dual Diagnosis: The Quantity and Quality of Relationships at Different Stages of Substance Use Treatment. Community Mental Health Journal. 2004;40(5):451-64.
10. Hapsari, Filia L, Induniasih. Role of Family support in Addictive Substance Abuse Relapse. Media Ilmu Kesehatan. 2012;1(1).
11. Ellis B, Bernichon T, Yu P, Roberts T, Herrell J. Effect of social support on substance abuse relapse in a residential treatment setting for women. Evaluation and Program Planning. 2004;27(2):213-221.
12. Ozbay F, Johnson DC, Dimoulas E, Morgan CA, Charney D, Southwick S. Social Support and Resilience to Stress: From Neurobiology to Clinical Practice. Psychiatric. 2007;05.
13. Andita L. Social Support for Patient of Methadone Treatment. Bachelor Thesis. Universitas Indonesia; 2012.
14. Deng Z, Liu S. Understanding Consumer Health Information-Seeking Behavior from The Perspective of The Risk Perception Attitude Framework and Social Support in Mobile Social Media Websites. International Journal of Medical Informatics. 2017; 105:98-109.
15. Lloyd C. The Stigmatization of Problem Drug Users: A Narrative Literature Review. Drugs: Education, Prevention and Policy. 2012;20(2):85-95.
16. Silva M, Guimarães C, Salles D. Risk and Protective Factors to Prevent Relapses of Psychoactive Substances Users. Revista da Rede de Enfermagem do Nordeste. 2014;15(6):1007-1015.