ORIGINAL ARTICLE

Relationship between Self-Stigma and Self-Harm Behaviour among Adolescent in Rehabilitation Units

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ABSTRACT

Introduction: Self-Harm and self-stigma were maladaptive behaviors that were often experienced by adolescent drug abusers. This condition affected an individual's mental health condition, but research on the relationship between self-stigma and self-harm behavior in adolescent drug abusers was still limited. This study aims to determine the relationship between self-stigma and self-harm behavior among adolescent in rehabilitation units. **Methods:** Correlation analysis with cross-sectional approach on 241 adolescents in several drug rehabilitation units selected through purposive sampling technique. Self-stigma was measured by the Internalized Stigma: Substance Abuse Version questionnaire and self-harm behavior was measured by the Deliberate Self-Harm Inventory questionnaire. Univariate analysis was performed for categorical data using the frequency distribution test and central tendency test for numerical data, while the bivariate test used Pearson Correlation. **Results:** There was a significant relationship between self-stigma and self-harm behavior in adolescents in drug rehabilitation units (r=0.319). The higher the level of self-stigma was proportional to the higher the self-harm behavior of adolescent drug abusers. **Conclusion:** There was a relationship between self-stigma and self-harm behavior in adolescents in drug rehabilitation. For health practitioners, this could be reference for consideration of the importance of self-stigma assessment to improve risk management of harm behavior in providing adolescent nursing care in drug rehabilitation units.

Keywords: Adolescent drug abuse, Self harm behavior, Self stigma

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INTRODUCTION

Adolescents are a transitional period from children to adults who have higher risk to drug abuse. Globally, 5.6% of adolescents from 130 countries have abused drugs in 2016. Early to middle adolescence (12-17 years) is a critical period for initiating drug abuse and can peak in late adolescence (8-25 years) (1). In Indonesia, the prevalence of adolescent drug abusers reaches 24-28% in 2019 (2). Survey stated that 27.32% of drug users in Indonesia were students (3).

Drug abuse can affect the adolescent's growth and development. In addition to burdens of disease, one of the most often experienced by adolescent drug abusers is self-harm behavior (4). Study shows 30% of adolescents who experience self-harm behavior are drug abusers (5). Drug dependence's level is inversely related to the ability's themselves control. The higher level of dependence, the lower ability of adolescents to control their angry behavior (6). Adolescent drug abusers tend to have low self-control (7). Apart from the effect of substance, this condition is also related to the immature emotion in seeking self-identity phase in adolescents.

Self-harm behavior can be caused by stigma (8). Stigma can be internalized into themselves to form self-stigma. Self-stigma is experienced as a negative feeling because of their condition which often leads to feelings of disrespect and maladaptive behavior. Bullying at school is a risk factor for self-harm. This may be related to the development of self-stigma, because bullying is a form of physical and psychological violence that often occurs due to individual's deficiency (9). Other studies have also demonstrated the further consequences of having self-injury scars in the daily lives of people who play in the fight against the stigma of self-injury (10). From several studies, there is no studies that looks at the relationship between self-stigma and self-harm behavior, especially in adolescents. The relationship between self-stigma and self-harm behavior is needs to be known as a consideration in providing care for adolescents who abuse drugs. This study aims to determine the

relationship between self-stigma and adolescent self-harm behavior in drug rehabilitation units.

MATERIALS AND METHODS

Study design

This study used a descriptive-correlative design with a cross-sectional approach that described the relationship between variables, namely the self-stigma variable (independent) on the adolescent self-harm behavior variable (dependent).

Participant and setting

This research was conducted on adolescents from July to October 2020 from seven units, namely the Lido Center for the Rehabilitation of the National Narcotics Agency, the Lampung Center for Rehabilitation of the National Narcotics Agency, the Cipinang Besar Utara Narcotics Penitentiary, the Special Prison for Children of Jakarta, Lampung Narcotics Penitentiary, Wisma Ataraxis Foundation, and Yogyakarta Al Islamy Foundation.

Total respondents in this study was 241 people who were determined by purposive sampling technique. The inclusion criteria for sampling were adolescents (10-25 years), undergoing rehabilitation, able to read and write. Exclusion criteria were having verbal communication barriers, physical illness that interfered with the ability to participate in research, and cognitive inability to answer questionnaires based on psychologist recommendations.

Ethical considerations

Research ethics was carried out through ethical approval by the ethical committee of the Faculty of Nursing, University of Indonesia as evidenced by the Ethics Review Pass Certificate Number: SK-90/N2.F12.DI.2.1/ ETIK 2020. The researcher explained the activities, procedures, objectives, benefits, risk of loss, rights and obligations of participants. Participant is voluntary as evidenced by the signing of the informed consent.

Data collection

The data collection process begins with the determination of the respondents according to the research criteria. Adolescents who meet the criteria are given an informed explanation and are asked for their willingness to be involved in the research. Adolescents who are willing to be participants then agree on a time and place with the researchers for the implementation of data collection.

Data was collected through the method of filling out a questionnaire. The Internalized Stigma: Substance Abuse Version questionnare was adapted from Luoma et al., (2016) by Suratmini (2020). The questionnaire consists of 28 statements with four answer options, namely: Strongly Agree (score 4), Agree (score 3), Disagree (score 2), and Strongly Disagree (score 1) which can be categorized into high self-stigma (score 1). average 2.51-4.00) and low (mean score 1.00-2.50). This questionnaire is valid with r≥3.610 (r:0.394-0.814) and reliable with Croncbach Alpha>0.700 (Cronbach's Alpha If Items Deleted: 0.902) (11).

The second questionnare, Deliberate Self-Harm Inventory was adapted from Gratz (2001) by Herliani (2020). The questionnaire consists of 11 statements with two answer options, namely: Appropriate (score 1) and Not Appropriate (score 0) which can be categorized into self-injuring behavior clean (score 0), low (score 1-3), moderate (score 4-7), and high (score 8-11). This questionnaire is valid with r≥3.349 (0.574-0.847) and reliable with Croncbach Alpha>0.700 (Cronbach's Alpha If Items Deleted: 0.855) (12).

Data Analysis

Univariate analysis was performed using a frequency distribution test for categorical data (age, gender, last education, and rehabilitation agency) and a central tendency test for numerical data (length of rehabilitation, level of self-stigma, and adolescent self-injurious behavior). Based on the Kolmogorov-Smirnov test, the numerical data are normally distributed (p>0.05), so that bivariate analysis was carried out through the Pearson correlation test to see the relationship between self-stigma and adolescent self-injuring behavior.

RESULTS

Description of the characteristics of the respondents

Characteristics of respondents in this study consisted of age, gender, latest education, rehabilitation agency, length of rehabilitation, self-stigma, and self-harm behavior of drug abusers. The description of the distribution of age and duration of rehabilitation is shown in Table I, while the description of the distribution of the latest education, gender, institution of rehabilitation, self-stigma, and self-harm behavior is shown in Table II. Table I shows that the mean of respondents has an age of 21.16 years with the youngest age 15 years and the oldest age 25 years and a standard deviation of 2.16 years (95% CI: 20.88 - 21.43). In addition, the average length of rehabilitation of respondents in this study was 38.35 weeks with the shortest rehabilitation time of one week and the longest rehabilitation duration of 396 weeks and a standard deviation of 56.94 weeks (95% CI: 31.12 - 45.57).

Table II shows that the respondents' last education in this study consisted of four levels, namely; primary school, junior high school, senior high school, and college. Most of the respondents in this study had a

Table I: Distribution of respondents by age and duration of rehabilitation (n= 241)

Variable	Mean	SD	Min-Max	95% CI
Age	21.16	2.16	15-25	20.88-21.43
Duration of Rehabilitation	38.35	56.95	1-396	31.12-45.57

SD: Standard Deviasi; Min: Minimal; Max: Maximal; CI: Confidence Interval

Table II: Distribution of respondents by education, gender, rehabilitation institution, self stigma, and self harm behavior (n=241)

Variable	n	%
Education		
Primary School	36	14.9
Junior High School	92	38.2
Senior High School	107	44.4
College	6	2.5
Gender		
Male	240	99.6
Female	1	0.4
Rehabilitation Institution		
Rehabilitation Center	88	36.5
Correctional Institution (Prison)	153	53.5
Self Stigma		
No High Self Stigma	119	49.4
High Self Stigma	122	50.6
Self Harm Behavior		
Clean	122	46.5
Low	78	32.4
Medium	48	19.9
High	3	1.2

senior high school education level (44.4%) and were male (99.6%). The majority of respondents in this study underwent prison (53.5%) and had a high level of self-stigma (50.3%). Table II also shows that most of the respondents in this study had a clean category of self-harm behavior (46.5%).

The Relationship between Self-Stigma and Self-Harm Behavior

The results of the analysis of the relationship between self-stigma and self-harm behavior in adolescents in drug rehabilitation units are described in Table III. Based on Table III, it is known that there is a significant relationship between self-stigma and self-harm behavior with moderate strength (r = 0.319) and has a positive relationship direction, namely the higher the self-stigma, the higher the self-harm behavior of adolescents in drug rehabilitation units

DISCUSSION

Drug abusers often get stigma not only from community but also from health workers (13). They are negatively assessed as immoral, weak, or sick, which has an impact on reducing positive life opportunities in society (14), even though they are no longer abusing drug (15). Stigma from society can be internalized into person to form self-stigma which has negative consequences either directly or indirectly for an individual's life.

This study shows that the higher the level of self-stigma is proportional to the higher the self-injury behavior carried out by adolescent drug abusers. There are several negative consequences of self-stigma. First, comes shame, fear, loss of self-esteem, stress, and failing to seek treatment. Second, individuals refuse to be defensive against stigma, causing problems in emotional aspects such as anger, feeling like failure, or getting self-confidence to continue maladaptive behavior (16). Internalized stigma will become a burden that causes anxiety (17). These consequences are related to one another so that they can reduce the physical and mental abilities of drug abusers in their lives.

In this study, self-harm behavior is classified into four categories, namely; no, low, moderate, and high self-harm behavior, while self-stigma is classified into two categories, namely; low and high self-stigma. The results show that the majority of adolescent drug abusers who are undergoing rehabilitation have a high level of self-stigma and perform self-harm behavior in the low to high category. These results may be influenced by several factors such as age, gender, education, type of drug rehabilitation agency, and others.

Adolescence is a crucial period with various aspect changes that affect how individuals perceive themselves (18). The majority of respondents in this study were male. This is relate with the prevalence and culture rates globally (1), that drug abusers are higher in the male group. Men identified as having more mental health problems and high self-stigma (19). Differences in biological conditions between men and women affect the feelings and behavior of adolescents (20). In addition to the age and gender, the level of education will affect cognitive development that affects behavioral decisions (18). The higher the level of education will make adolescents have more mature cognitive abilities in dealing with stimuli in lives.

Substantively, the level of self-stigma is also related to the environment's culture (21). In this study, there are two types of rehabilitation units, namely Community Service Units (prisons) and Rehabilitation Units. The label given to the prisons as a place for individuals who commit crimes can increase the self-stigma (22). Status as a prisoner damages their self-esteem and thus affects their psychological condition. Individuals who experience

Table III: Correlation analysis of self-stigma and self-harm behavior of adolescent drug abusers (n=241)

Self Stigma	Self Harm Behaviour				Total	r coefficient	p value
	Clean	Low	Moderate	High			
Low	75 63.0%	36 30.3%	8 6.7%	0 0.0%	119 100%	0.319	0.000
High	37 30.3%	42 34.4%	40 32.8%	3 2.5%	122 100%		
Total	112 46.5%	78 32.4%	48 19.9%	3 1.2%	241 100%		

** Correlation is significant at the 0.01 level (2-tailed)

self-stigma will define themselves as criminals who tend to be consistent with maladaptive behavior (23).

Self-harm is often used by individuals with self-stigma. However, self-harm can also threaten social fabric, which triggers more shame (24). Individuals with self-stigma are dominated by shame, worthlessness and self-blame which lead to self-injury (9). This can decrease an individual's self-confidence or efficacy (25). Self-efficacy and self-confidence are important components in achieving psychological well-being and reducing negative behavior. Low self-efficacy increases the risk of self-harm behavior in adolescents as a critical period for personality formation towards adulthood.

Self-stigma will increase the psychological pressure on perceptions and emotions (26). Healthy emotions are characterized by the ability to understand, assess, and manage them to build positive goals not to cause harmful behavior. Apart from being influenced by the age factor and development, drugs are proven to affect a person's emotional situation. Changes in neurotransmitter performance by drug consumption are factors that cause neurobehavioral changes (1). Drug abuse can affect emotion and cognitive abilities which can lead to negative perceptions of oneself which can increase the risk of self-harm behavior.

Limitations in this study relate to the lack of female respondents due to the limited number of participants at the research site during the Covid-19 pandemic. This affects the level of variation in the characteristics of the data obtained in the study

As for implications for practice, the risk of self-injurious behavior in adolescents in drug rehabilitation units who have self-stigma can be taken into consideration in the process of providing nursing care. Raising awareness of the existence of self-stigma and providing effective steps can be taken to help patients deal with this condition. Nurses can assess the level of self-stigma early and carry out risk management to prevent violent behavior in adolescents who are in drug rehabilitation units.

CONCLUSION

Self-stigma is related to self-injury behavior by drug abusers in rehabilitation units. The existence of self-stigma will affect the psychological and psychosocial aspects of individuals. This has an impact on the emergence of self-harm behavior to get relief, describe feelings of not being accepted, or as an attempt to keep in touch with others. The risk of self-harm in adolescents with self-stigma in drug rehabilitation units can be one of the problems in the process of providing nursing care. It is important to assess the level of self-stigma early on to manage the risk of self-harm behavior among adolescent drug abusers in rehabilitation units. Further studies on effective psychological and psychosocial interventions conducted on adolescent drug abusers may be developed to overcome self-stigma and prevent self-harm behavior.

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