# **ORIGINAL ARTICLE**

# Predictors Factor of drug abuse by adolescents in Sidrap, Indonesia

SULAEMAN<sup>1</sup>, ABDUL AZIZ ALIMUL HIDAYAT<sup>2</sup>, NURHAYATI<sup>3</sup>

<sup>1</sup>Lecturer, Sekolah Tinggi Ilmu Kesehatan Muhammadiyah, Sidrap, Indonesia

<sup>2</sup>ssociate Professor, University of Muhammadiyah Surabaya, 60113, Indonesia

<sup>3</sup>Associate Professor, University of Muhammadiyah Jakarta. Indonesia

Correspondence to Dr. Abdul Aziz Alimul Hidayat, Email. azizhidayat@um-surabaya.ac.id, Telp. +62 31 3811966, fax. +62 31 3813096Hp. +62 81 331340187.

#### **ABSTRACT**

**Background:** The South Sulawesi National Narcotics Agency has recorded an increase in the number of drug addicts in South Sulawesi. The number is based on the number of users who are undergoing rehabilitation. From BNN's records, since April 2015 there were 1,280 clients undergoing rehabilitation, 1,196 clients in 2016, 920 clients in 2017 and 1,505 clients in 2018. Some predictor factors that can affect drug use are knowledge, family factors, peer factors, school environmental factors, and community environmental factors.

Aim: To identify predictors that influence drug abuse in adolescents in Sidrap Regency.

**Method:**This study used a quantitative research with observational descriptive design, using a cross sectional approach. The sample consisted of 111 teenage respondents chosen using purposive sampling technique.

**Result:**The chi-square test result showed that there was a significant relationship between knowledge factors (P Value = 0.002), family factors (P Value = 0,000), peer factors (P Value = 0,000), school environmental factors (P Value = 0.001), and community environmental factors (P Value = 0,000) with drug abuse with a value (constant = 0.397) calculated by the formula Y = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5.

**Conclusion:** It is necessary to develop health promotion programs with presentations covering drug abuse problems in adolescents by working with relevant institutions.

Keywords: Drug Abuse, Adolescents, Knowledge, Family, Peer Group, School Environment Factors

# INTRODUCTION

According to the WHO, adolescents are residents between 10-19 years old. According to Republic of Indonesia Minister of Health Regulation number 25 of 2014, adolescents are residents between 10-18 years old. Meanwhile, according to the National Population and Family Planning Board (BKKBN in Indonesia), teenagers are between10-24 years old and unmarried<sup>1, 2</sup>. The World Drugs Report 2017 (UNODC) stated that around 5% of the population aged 15-64 years or a quarter of a billion individuals (i.e. 158-351 billion people) are drug users in 2015. This percentage has been relatively stable for the last decade (5%)<sup>3, 4</sup>.

Of this, 0.6% of the world's total population have used drugs and about 29.5 million individuals suffer from drug related problems and disorders that result in drug dependence <sup>5</sup>. Iswanti stated that the majority of drug users aged between 13-21 years old, which include middle adolescents at 16 years old <sup>6</sup>. Nababan (2008) stated that adolescents are highly susceptible to drugs since they are easily influenced by friends, highly curious, wanting to have friends, sign of group solidarity and to eliminate boredom.

The National Narcotics Agency (BNN in Indonesia) stated that narcotics abuse among students in 13 provincial capitals in Indonesia amounted to 1.77% or approximately 3.38 million people. In 2018, the prevalent of drug abuse reached 3.2% or equivalent to 2.29 million people and in 2019 it touched 4 million. The South Sulawesi National Narcotics Agency recorded the number of drug addicts undergoing rehabilitation as 1.280 clients in April 2015. 1.196 clients in 2016, 920 clients in 2017 and 1.505 clients in 2018. Some predictor factors that can affect drug use are knowledge, family factors, peer factors, environmental factors, and community environmental factors 7,8.

Based on the results of interviews, Sidrap Regency is an area at risk of drug abuse, especially the Lalebata Sub-District area with 523 teenagers. Nearly 75% of adolescents have used drugs and the area attracts many drug dealers. Some teenagers smoke electric cigarettes mixed with liquid laced with drugs and others have peers who like to drink alcohol. These influences can lead to drug abuse. There are many predictors that can affect drug abuse in adolescents, including knowledge, family factors, peer group factors, school environmental factors, and community environmental factors prevalent in Sidrap Regency. The phenomenon above shows the threats of drug abuse in adolescents, if not controlled optimally. This research analyzed the predictor factors that influence the incident of drug abuse in adolescents in Sidrap Regency.

## **MATERIALS AND METHODS**

The study used a descriptive observational research design using the cross sectional approach. There were 111 respondents, chosen by purposive sampling, with the following criteria: Adolescents aged 10-19 years, never married, willing to participate in the by signing an agreement.

Questionnaires were used to collect the data. Pearson Product Moment correlation test was used to test for validity and the results showed the data was valid. Meanwhile, one shot test was used to test for reliability and the data was found to be reliable. The data was measured using the Guttman scale. Logistic regression was used to analyze the predictor factors that influence drug abuse

#### **RESULTS**

Table 1 shows that out of 111 respondents, most respondents are between 17-19 years old: 47 (42.3%),

most respondents are male: 69 (62.2%) and most of them have Junior High School education: 60 (54.1%).

Table 2 shows that individual factors significantly influenced by drug abuse (with sig <0.05). Other variables

such as family, peers group, school environmental, community environmental (with sig> 0.05). These variables do not significantly affect drug abuse.

Table 1: Respondents Characteristics in Sidrap Regency

No	Variable	Frequency	Percentage
		n (111)	(100%)
1.	Age		
	10-14 Years	28	25,2
	15-16 Years	36	32,4
	17-19 Years	47	42,3
2.	Gender		
	Man	69	62,2
	Woman	42	37,8
3.	Education		
	Elementary school	14	12,6
	Junior high school	23	20,7
	High school	60	54,1
	College	14	12,6

Table 2: Multiple Linear Regression Testing

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	,396	,433		,914	,376
1 -	Knowledge factor	,734	,266	,772	2,757	,015
	Family Factor	-,403	,298	-,070	-1,352	,198
	Peer Group Factors	,420	,239	,074	1,760	,100
	School Environment Factors	,242	,266	,250	,907	,380
	Community Environmental Factors	-,009	,183	-,007	-,049	,962

R<sup>2</sup>= 0,991, Rad= 0,996

# **DISCUSSION**

Effect of Knowledge Factors on Drug Abuse: The results showed that knowledge factors had a significant influence on drug abuse in Sidrap Regency with p-value of 0.002 <0.05. The results are in line with Soetjiningsih (2008) who stated that knowledge is one of the factors that influence drug abuse. If drugs are consumed continuously it can have a negative impact on health, caused by substances contained in drugs, which can damage physiological and psychological health <sup>9, 10</sup>.

Tambunan (2008) conducted multivariate analysis on the determinants of drug use behavior in adolescents with a value of r = 0.548. The result showed that there was a strong relationship between drug use behavior and adolescent curiosity and teenagers tend to ignore issues or risks of a certain behavior due to curiosity. Such impacts are often overlooked by adolescents and can be detrimental to their can future both biopsychosocially and spiritually <sup>11</sup>. The above shows that teenagers are exposed to negative influences like drug abuse if they are unable to obtain enough and correct right information about drugs and its dangers.

**Effect of Family Factors on Drug Abuse:** The results showed that family factors had a significant influence on drug abuse in Sidrap Regency with p-value of 0,000 <0,05. The results are in line with research from Simangunsong who conducted interviews with various respondents that

showed that family factors influenced drug abuse among teenagers. This usually impacts teenagers from poor families who consume drugs with the aim of forgetting their families' socio-economic problems.

Meanwhile, the lack of good communication between parents and children can lead to disharmony in families and this exposes adolescents to drug abuse. The incident of drug abuse is also strongly influenced by other factors like personality disorders since some respondents tried drugs due. This indicates that the teenager has a personality disorder because the dangers of drug use are quite obvious to all.

#### Effect of Peer Group Factors on Drug Abuse

The results showed that peer factors had a significant influence on drug abuse in Sidrap Regency with p-value of 0,000 <0.05. The results are in line with Rahmadona (2014) who researched drug abuse in Prof. RSJ. HB. Sa'anin (2014) concluded that there was a significant relationship between peer role and influence on drug abuse with a p-value of 0,000. Researches have shown that adolescents are easily influenced by their peers, both positively and negatively. Teenagers who are friends with drug abusers are easily exposed to drug use. Meanwhile, adolescents with friends who act positively will also exhibit positive behavior. Therefore parents need to supervise their children's environment.

Effect of School Environmental Factors on Drug Abuse

The results showed that school environmental factors had a significant influence on drug abuse in Sidrap Regency with p-value of 0.001 <0.05. This is in line with research from Herman who sampled 385 high school students regarding factors related to drug abuse and discovered that students who had less knowledge about drugs risk were 4.52 times more likely to abuse drugs than students who had good knowledge about drugs <sup>12</sup>. This needs to be contrasted to Tasiam (2012) who found that there was no relationship between the school environment and risk of drug abuse <sup>13</sup>.

Based on further analysis, the main cause of drug use in adolescents in a school environment is the presence of schoolmates who are drug users. Schools are expected to instill discipline in their students and deter students by handing out punishments. Students who are drug users must be immediately rehabilitated so as not to encourage more drug use of in schools.

Effect of Community Environmental Factors on Drug Abuse: The results showed that community environmental factors had significant influence on drug abuse in Sidrap Regency results with p-value of 0,000 <0,05. This is in line with Muslihatun's (2015) who studied the dangers of drug abuse on adolescents reproductive health. The study concluded that there was a significant relationship between community related factors and drug abuse with a p-value of 0.009. Adolescents who live in an environment where drugs are easy to obtain and use being more widespread are more at risk of drug abuse 14. In essence, negative community environmental factors can negatively influence adolescents. A poor, uncaring and indifferent community environment increase adolescents' exposure to drug use. Communities that do not care about drug trafficking allow drugs to be easily obtained by adolescents and affects norms and values in the area. To check the spread of drug abuse, communities must increase their vigilance, and enforce correct societal norms and values.

## **CONCLUSIONS**

Based on the result of research and discussion, it can be concluded as follows: that various factors namely knowledge factors, family factors, peer factors, school environmental factors, and community environmental factors influence of drug abuse in Sidrap Regency.

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