Adolescent's Knowledge and Skill to Refuse Drugs

Pengetahuan dan Keterampilan Remaja Menolak Narkoba

Lucky Herawati*, Johan Arief Budiman**, Haryono*

*Yogyakarta Health Polytechnic, Yogyakarta, Indonesia, **Jakarta II Health Polytechnic, Jakarta, Indonesia

Abstract

Various efforts have been made to prevent adolescents from the drug use, despite their knowledge and skill to refuse drugs have never been evaluated. This study was aimed to describe the adolescents knowledge and skill to refuse drugs and their relation to the characteristics. This was an analytic study conducted in 300 students at the seventh grade aged 12-15 years old in two cities in the Special Region of Yogyakarta Province. Variables studied were adolescent's knowledge, skill to refuse drugs, and their characteristics. Data were collected using a self-reported questionnaire, then analyzed using Pearson correlation test and Spearman rho, with 95% level of significance. The findings showed that the average score of adolescent's knowledge of drugs was 66.39+17.48 and the score of skills to refuse drugs was 55.62+16.49. There was a significant relation between knowledge and skills ($p = 0.05$). There was no significant relation between the young adolescent's characteristics (age and sex) with their knowledge and skills to refuse the drug offered. This study concludes that the skill to refuse drugs tends to increase as the adolescents get older, and no significant relation between knowledge and skill to refuse drugs offered by sex and ages.

Keywords: Adolescent knowledge and skill, refuse drugs, characteristic

Abstrak

Berbagai upaya telah dilakukan untuk mencegah remaja dari penggunaan narkoba, kendatipun evaluasi pengetahuan dan keterampilan remaja menolak narkoba belum pernah dilakukan. Penelitian ini dilakukan pada 300 remaja, siswa kelas 7 atau setara usia 12-15 tahun di dua kota di Provinsi Daerah Istimewa Yogyakarta. Penelitian analitik bertujuan mengetahui gambaran pengetahuan, keterampilan remaja menolak narkoba, dan hubungan keduanya dengan karakteristik remaja. Variabel yang diteliti adalah pengetahuan remaja tentang narkoba, keterampilan menolak narkoba, dan karakteristik remaja, yang dikumpulkan dengan menggunakan kuesioner (*self-reported questionnaire*). Data dianalisis dengan uji korelasi Pearson dan Spearman rho, dengan tingkat signifikansi 95 persen. Hasil penelitian menunjukkan bahwa rata-rata nilai pengetahuan remaja tentang narkoba 66,39+17,48 dan nilai keterampilan menolak narkoba 55,62+16,49 dengan nilai maksimum 100. Terdapat hubungan secara bermakna antara variabel pengetahuan dan keterampilan dengan nilai $p = 0,05$. Penelitian ini menyimpulkan bahwa keterampilan menolak narkoba cenderung meningkat dengan bertambahnya usia, namun tidak terdapat hubungan bermakna antara karakteristik remaja (usia dan jenis kelamin) dengan pengetahuan tentang narkoba dan keterampilan menolak tawaran narkoba.

Kata kunci: Pengetahuan dan keterampilan remaja, menolak narkoba, karakteristik

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Correspondence: Johan Arief Budiman, Jakarta II Health Polytechnic, Hang Jebat Street III/F3, Kebayoran, Jakarta 12120, Indonesia, Phone: +62818169026, e-mail: drg.johanarief@yahoo.com

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Introduction

One of three serious problems threatening the future of young generation is the use of narcotics, psychotropic drugs, and hazardous drugs, beside smoking and alcohol. The drugs users were adolescents (5.35%).¹ Although the percentage of adolescent drugs users is relatively low if compared to smokers (69.15%) and alcohol drinkers (13.48%), but the danger for adolescents is more serious than the other two behaviors. The Indonesian National Narcotics Agency data show an increase in drugs users. There are only 2.6 million drugs users in 2008, 4.7 million in 2013, and the prevalence has reached 5.1 million in 2015. The rate of overdose-caused death reaches 40-50 people/day. More than thirty four (34,467) drugs users are rehabilitated in 2010-2014. The Agency and Indonesian University estimated that the number of drugs users in Indonesia would continue increasing. If there is one dealer in jail, it would be 10 prospective dealers wait.² The Indonesian Attorney General says that Indonesia is in drugs emergency status as every day 40-50 people die because of drugs.

Drugs effect deteriorate one's health physically, mentally and emotionally, such as damaging the central nervous system, brain cells irreplaceable, liver, heart, kidneys, lungs, and other organs. Drugs use disorder with injections is at risk of death by seven times higher than the general population of the same age group.²

Indonesian Ministry of Health efforts to combat drugs is implicated on the published and the enactment of the Decree of Minister of Health Number 1529/MoH/SK/X/2010 on Guidelines for the general rural development and active alert district in 31 behaviors that should be practiced in rural communities and active alert district known as Clean and Healthy Lifestyle Behavior. The number 26th behavior is "no smoking, drinking liquor (alcohol), inhaling opium and misusing drugs and other hazardous drugs".³ At the provincial level, the Indonesian National Narcotics Agency forms anti-drugs volunteer cadres at many local universities. While, at municipal/district level including Y city and S district in the Special Region of Yogyakarta Province, the Agency also has conducted activities such as counseling for students and teachers at junior and senior high schools. However, the students' knowledge and skill to refuse drugs have not been evaluated until now.

The aim of this study was to describe the adolescent's knowledge and skill to refuse drugs and their relation to the characteristics.

Method

Having approval by the Ethics Committee of Faculty of Medicine, Muhammadiyah University of Yogyakarta, the study was conducted in Y city and S district, the Special Region of Yogyakarta Province, in June-August

2015. The location chosen was based on previous preliminary study on tobacco and drugs. The samples were selected randomly using proportional random sampling from 2,530 students at grade 7 coming from 71 schools in two areas. The sample size was determined using sample size for with 95% degree of confidence hypothesis testing for one sample formula.⁴ Based on that formula, a sample of 300 students were selected. The subjects were the seventh-grade students aged 12-15 years old from 12 junior high schools (148 students from six junior high schools in Y city and 152 students from six junior high schools in S district). These criteria were selected because at this age, young adolescents that lose control from the parent and parental norms because of entering higher education.⁵ Public schools were selected because they had the basic similar role in school management, following the standard regulations for Elementary and Primary Education by Ministry of Education and Culture.

Beside subject's characteristics, the study variables were adolescent's knowledge of drugs and skills to refuse the drugs offer. Knowledge of drugs was assessed by the ability of adolescent to answer six items of questions correctly, packaged in a test, consisting of the knowledge of drugs, the type, and the content, as well as its effects on health. The validity test with Cronbach's Alpha was 0.719. Skill to refuse the drugs offer was the ability of respondents to choose the correct questions of action on seven case items consisting of various forms of drugs offer, packaged in a test, although this study did not observe the skill. The validity test with Cronbach's Alpha was 0.702. Data obtained was analyzed using Pearson correlation and Spearman rho, with 0.05 significant levels.

Results

Subjects came from two locations, namely Y city (49.33%) and S district (50.66%). They were both males (44.6%) and females (52.7%). In the range of 13-15 years of age, the subjects were mostly 13 years old (71.7%) with the average of 13.02 years old (Table 1).

In Table 2, the average respondents' knowledge of drugs was higher than the average score of skill to refuse drugs. The average score of their knowledge of drugs was at 66.39±17.48 (the maximum score of 100). While, the average score for skill to refuse drugs was 55.62±16.49 (the maximum score of 100). After analyzed by Pearson Correlation, there was a significant relation (p value = 0.05), showed in Table 3 and Table 4.

Based on age, it seemed that the 15-year-old age group had the lowest average score of knowledge, but they had the highest score of skill to refuse drugs among the other age groups. The number of sample for 15-year-old group was considered small with only three samples

Table 1. Respondents' Characteristics by Sex, Age, and Location

Characteristic	Category	Y City		S District		Total	
		Frequency	%	Frequency	%	Frequency	%
Sex	Male	66	44.6	76	50.0	142	47.3
	Female	82	55.4	76	50.0	158	52.7
Age	12 years old	24	16.2	17	8.2	41	13.7
	13 years old	104	70.3	111	73.0	215	71.7
	14 years old	19	12.8	22	14.5	41	13.7
	15 years old	1	7.0	2	1.3	3	1.0
	Average	12.98		13.06		13.02	
	SD	0.565		0.555		0.560	
Total		148	49.33	152	50.66	300	100

Notes:

SD = Standard Deviation

Table 2. Knowledge and Skills to Refuse Drugs by Respondents' Characteristics and Location

Variable	Category	Knowledge		Skill to Refuse Drugs	
		Average	SD	Average	SD
Sex	Male (n=142)	65.14	17.96	55.84	16.57
	Female (n=158)	67.51	12.01	55.42	16.47
Age	12 years old (n=41)	63.82	17.44	56.10	17.53
	13 years old (n=215)	66.90	17.46	55.29	17.53
	14 years old (n=41)	66.67	17.48	56.41	12.35
	15 years old (n=3)	61.11	25.45	61.90	21.82
Location	Y City	69.03	16.03	59.36	12.43
	S District	63.82	18.47	51.97	19.00
Total		66.39	17.48	55.62	16.49

Notes:

SD = Standard Deviation

Table 3. Relation between Respondents' Knowledge, Skill to Refuse Drugs by Location

Location	Variable	p Value
Y City (n=148)	Drugs	0.209
	Knowledge	0.011
S District (n=152)	Drugs	0.182
	Knowledge	0.025
Y City and S District (n=300)	Drugs	0.217
	Knowledge	0.001

Table 4. Relation between Respondents' Characteristics, Knowledge and Skill to Refuse Drugs

Variable	Category	Statistic Analyzes	
		r	p Value
Sex	Knowledge of drugs	0.068	0.243
	Skills to refuse drugs	-0.001	0.991
Age	Knowledge of drugs	0.042	0.469
	Skill to refuse drugs	0.028	0.624
Knowledge-Skill to Refuse Drugs		0.213	0.001

because this study wanted to emphasize the importance of age grouping. As analyzed by Spearman's (nonparametric correlation) with 0.05 significant level, there was

no relation of the age difference to the knowledge and skill to refuse drugs with p value = 0.469 and 0.624 respectively (Table 4).

This study used self-reported questionnaire to access the knowledge without observing the carried out action, but the questions in the questionnaire also dealt with knowledge and skills to refuse drugs. Based on sex (Table 2), it seemed that the average score of drugs knowledge was relatively higher in female respondents. However, both male and female groups have the same score in the skill to refuse drugs. As analyzed by Spearman rho (non-parametric correlation) with 0.05 significant level, there was no relation of the sex differences to the knowledge and skill refuse drugs score with p value = 0.243 and 0.991 respectively (Table 4).

Based on location (Table 2), it seemed that the average scores of both knowledge and skill to refuse drugs were higher in Y city than S district. As analyzed by Spearman's rho, with 0.05 significant level, there was a significant relation between knowledge and skill to refuse drugs either in Y city or in S district with p value= 0.011 and 0.025, respectively. As analyzed by Pearson Correlation with 0.05 significant level, there was a relation between knowledge and skills to refuse drugs (Table 3).

Discussion

Knowledge of drugs in this study was relatively low with an average score of 66.39. This score was still higher than the adolescent's knowledge of smoking score in Jayapura, Papua, i.e. 60.81.⁶ Although the drugs in the two studies were different, but both included toxic materials, causing addictive, and widely known among adolescents. Even a reference states that smoking is the gateway to the use of alcohol and drugs.⁷ Although the subject criteria in the two studies were the same, but they were carried out in different location. The drugs-related study was conducted in the Special Region of Yogyakarta (Y city and S district), well-known as the student city in Indonesia, while the smoking study was conducted in Jayapura, Papua Province, known with the people having drinking alcohol habit. Hence, the user's behaviors of these harmful (smoking, alcohol, drugs) tend to be influenced by the culture or customs of local communities.

Based on respondents' location, the average scores of both knowledge and skills to refuse drugs were higher in Y city than S district. The differences were probably due to differences in the city (urban) and district (rural), in which the difference also influenced their knowledge and skill to refuse drugs. This condition was also found in another reference as stated by Shannon,⁸ in tribal Appalachian in the village and in the city and Young.⁹ Statistical analysis showed that there was a significant relation between knowledge of drugs and the skill to refuse drugs. This condition could be explained by Green stating that behavior was influenced by predisposing factors such as knowledge, in addition to two other factors,

namely enabling factor (factor predisposing) and reinforcing factor (factor support).¹⁰

Related to sex, female respondents' knowledge of drugs was better than the males, but the skill to refuse the drugs offer was good on both sex. In general, sex is related to drugs as drugs-use component (cigarettes, alcohol, and drugs). There are several studies with different results. One of the studies shows that there is a tendency for male to become drugs users, more than female drug users.⁸ Boys A,¹¹ stated that the number of male drugs users were higher than the female.¹¹ The reason for becoming drug user was also different between male and female. Another study which was conducted on convicted prisoners, showed that the female prisoners' reason to use drugs were to calm down or to eliminate depression.¹² Moreover, Forsythe,¹² also stated that sex plays a role in the relation between drugs users and crimes.

However, the results of the Drugs Abuse and Mental Health Services Administration in Mangerud,¹³ showed that at the age group of 12-17 years, drugs users in male and female have the same number.¹³ As explained by Westermeyer,¹⁴ the drugs user in male and female is associated with variety of ethnic groups. However, in this study, ethnic-related issue did not raise among respondents in both locations (Y city and S district) because they belong to the Javanese.

In terms of age, the results of this study showed that there was no relation between the two variables (knowledge of drugs and the skill to refuse drugs offer) and age. It appears that there was a tendency that score of the skill to refuse drugs increased as the person got older. These results are in accordance with Mangerud that the number of cigarettes, alcohol, and illegal drugs is increasing in line with older age.¹³ This study follows Bar's recommendation that drugs prevention should be carried out at early age, since age is one of the significant internal determinant factors.¹⁵

Conclusion

Adolescent's knowledge of drugs and skill to refuse the drugs offer still need to be improved. There is a significant relation between knowledge of drugs and the skill to refuse the offer. Adolescent's knowledge of drugs is slightly higher in female than male, but the skill to refuse the offer has almost the same result in both sexes. The skill tends to increase in accordance with age, but there is no significant relation between knowledge and the skill to refuse drugs offer in different sex and age. Adolescent's knowledge of drugs and skill to refuse the drugs offer in Y city are higher than S district, and there is a significant relation between knowledge of drugs and the skill to refuse the drugs offer according to the location (urban and rural).

Recommendation

The result of this study can be used as a consideration to health promotion program at Indonesian Ministry of Health and Ministry of Education, to emphasize particularly adolescents aged 12-15 years, or equivalent to junior high school students, to improve their preventive behaviors against drugs use, so that their score in knowledge of drugs and the skill to refuse the drugs offer may increase. In addition, the results are also beneficial for the clean and healthy lifestyle behavior organizer at family structure to pay more attention to drugs users in adolescents' activities.

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