

## Smoking Behavior of Adolescent Determining in SMP Negeri 1 Simpang Empat 2018

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### Abstract

**Background:**Indonesia ranks fifth in the highest number of cigarette consuming countries and ranks third in the country with the highest number of smokers in the world. There is an increase in the number of smokers from age group under 15 years and the highest increase is in the age group 10-14 years. **Objectives:** This study aimed to determine the factors associated with smoking behavior among male students in SMP Negeri 1 Simpang Empat Asahan in 2018. **Metode:**This research is an analytic survey with cross sectional study design. Number of sample 128 respondents using total sampling. Data analysis was done using univariate analysis, bivariate with chi square test and multivariate with multiple logistic regression. **Results:** The result of the research showed that there was the correlation of knowledge ( $p=0.031 < \alpha=0.05$ ), attitude ( $p=0.001 < \alpha=0.05$ ), affordability of access ( $p=0.015 < \alpha=0.05$ ), ad exposure ( $p=0.00 < \alpha=0.05$ ), parents' role ( $p=0.002 < \alpha=0.050$ ), peer role ( $p=0.001 < \alpha=0.05$ ), school's role ( $p=0.033 < \alpha=0.05$ ). The variable which the most dominant correlation was ad exposure ( $p=0.003$ ; OR=11.806 95% CI 2.345-47.541). **Conclusion:**It can be concluded that the ad exposure highly influences the development of smoking behavior in adolescents on the grounds they smoke to be more acceptable to people especially peers and to look more manly.

Keywords: smoking behavior, adolescent

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## INTRODUCTION

In this globalization era, many teenagers do all the things to recognize new things. Teenagers are more often termed as adolescence, which includes a broad range of meanings, in this case affecting mental, emotional and physical maturity (Durandt, 2015).

Sarwono (2011) states that age 12-15 is an age that is identical to try something, for example trying to smoke and perhaps other deviant behaviors. This behavior is based on the knowledge of adolescents about the effects of these behaviors.

Teenagers who start smoking in large part become cigarette addicts. They are helplessly influenced by the addiction they experience. Actually, several smokers who claim to want to stop the habit especially those who have experienced signs of health problems, but the lack of support from the environment makes addiction more difficult to leave. (RI Ministry of Health 2017).

Based on the prediction, smoking behavior has increase in deaths from non-communicable diseases, namely 41.7% in 1995 to 49.9% in 2001 and 59.5 in 2007 and 2012 reaching 61%, and 21% of the total deaths caused by cigarette related diseases, namely coronary heart disease, stroke, cancer, and chronic obstructive pulmonary disease (Achadi et al, 2005) in Susanto et al, 2011).

The main diseases that are strongly associated with smoking are CVD (cardiovascular disease), diabetes type 2, cancer and chronic respiratory diseases. Cigarettes increase the risk of lung cancer by 23 times greater in men and 13 times greater than those who do not smoke. Cigarettes also increase 2-4 times the occurrence of CHD (coronary heart disease) (CDC, 2009).

According to (WHO, 2015) related to the percentage of the world's population who consume tobacco obtained as much as 57% in Asia and Australia population, 14% in Eastern Europe and the Soviet Union population, 12% of the American population, 9% of Western Europeans and 8% of the Eastern population Central and Africa.

The results of a survey by The Global Youth Tobacco Survey Indonesia (GYTS) in 2014 stated that 88.2% of school children wanted to quit smoking and 24% of them had received help / advice from professionals to stop smoking.

The results of Riskesdas showed that the proportion of the age at which smoking began in adolescents tended to increase in Riskesdas 2007, 2010 and 2013. The highest proportion was in the 15-19 year age group, namely Riskesdas in 2007 (36.3%), Riskesdas in 2010 (43, 3%) and Riskesdas in 2013 (55.4%) (Riskesdas, 2013).

The results of the preliminary study through interviews with Counseling Guidance teachers at Junior High School number 1 Simpang Empat, almost every day there were students who smoking. Some students stated that he smoked because his society require them to do the same thing. The students do that on the slay or even they do behind the school building, or in the free class or they do in the toile.

The formulation of the problem in this study is to determine the factors that influence the students especially for male to smoke in Simpang Empat Junior High School.

The aim of this study was to analyze the smoking behavior in adolescents.

## RESEARCH METHODS

The design in this study uses a quantitative approach with a cross sectional design. The population in this study were all male students in Simpang Empat Junior High School 1 in class VII and VIII with a total of 131 students. The sample in this study is use a total population which means that all populations are sampled.

The research data will be analyzed by univariate with frequency distribution, bivariate with chi square test and multivariate by multiple logistic regression test.

## RESULTS

### Univariate Analysis

**Table 1 Results of Univariate Analysis of Determinants of Smoking Behavior in Adolescents**

Based on table 1 above shows that adolescents who have good knowledge as much as 67.9%, adolescents who have a positive attitude 77.1%, easy access to cigarettes 64.1%, rarely	Variabel	Category	Frequency (n)	Percent (%)
	Knowledge		Good	89
Less			42	32,1
Attitude		Positive	101	77,1
		Negative	30	22,9
Access		Easy	84	64,1
		Difficult	47	35,9
Ad Exposure		Often	45	34,3
		Rarely	86	65,6
Parents Role		Large	72	55
		Small	59	45
Peer friends Role		Large	46	35,1
		Small	85	64,9
School Role		Large	100	76,3
		Small	31	23,7
Smoking Behavior		Smoking	41	31,3
		No Smoking	90	68,7

exposed to cigarette advertisements 65.6%, large role of parents to cigarettes 55%, small peer influence 64.9%, Large school role 76.3% and teenagers who smoke 41%.

### Bivariate analysis

**Table 2. Results of Bivariate Analysis**

Variabel Independen	Category	Smoking Behavior						P value
		Smoking		No Smoking		Total		
		n	%	n	%	n	%	
Knowledge	Good	22	16.8	67	51.1	89	67.9	0,031
	Less	19	14.5	23	17.6	42	32.1	
Attitude	Positive	24	18.3	77	58.8	101	77.1	0,001
	Negative	17	13	13	9.9	30	22.9	
Access	Easy	33	25.5	51	38.9	84	64.1	0,015
	Difficult	8	6.1	39	29.8	47	35.9	
Ad Exposure	Often	28	21.4	17	13	45	34.4	0,001
	Rarely	13	9.9	73	55.7	86	65.6	
Parents Role	Large	14	10.7	58	44.3	72	55	0,002
	Small	27	20.6	32	24.4	59	45	
Peer friends Role	Large	38	29	8	6.1	46	35.1	0,001
	Small	3	2.3	82	62.6	85	64.9	
	Large	26	19.8	74	56.5	100	76.3	

School Role	Small	15	11.5	16	12.2	31	23.7
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Based on table 2 above shows that statistically there is a relationship between all of the factors: knowledge, attitudes, access, exposure to cigarette advertisements, the role of parents, the role of peers, the role of schools with smoking behavior in junior high school students. This is evidenced by the p value of the statistical calculation  $<0.05$ .

### Multivariate Analysis

**Table 3. Results of Multiple Logistic Regression Test Analysis**

Variabel Independen	B	Sig	OR	95% C.I	
				Lower	Upper
Knowledge	-0,243	0,773	0,784	0,150	4,087
Attitude	1,450	0,150	4,265	0,592	30,731
Access	0,070	0,937	1,072	0,190	6,064
Ad Exposure	2,469	0,003	11,806	2,345	47,541
Parents Role	-0,845	0,447	0,429	0,049	3,802
Peer Friends Role	-5,201	0,001	0,007	0,001	0,035
School Role	0,208	0,824	1,231	0,196	7,715

Based on table 3 above shows that the odds ratio (OR) of the ad exposure variable is 11.8 (95% IC: 2.345 - 47.541), it means that students who are often exposed to cigarette advertisements have a smoking opportunity 11 times compared to students who are rarely exposed to cigarette advertisements.

In this data means that the exposure variable of cigarette advertising has the most influence on smoking behavior in adolescents.

## DISCUSSION

According to 2014 Global Youth Tobacco Survey (GYTS) data, 18.3 percent of Indonesian students already have smoking habits with 33.9% of male students at the junior secondary level aged 13-15 years. This is in accordance with the research respondents that the respondents selected were early adolescents (12-15 years) with the age of respondents who were 14 years at the most as many as 75 (57.3%) in this study.

The results showed that there was a relationship of knowledge with smoking behavior in adolescents ( $p = 0.031$ ), in line with research studies (Rachmat, et al. 2013) which showed that adolescent knowledge about cigarettes in the high category was (83.4%). Although well-informed but there are still students who behave smoking this is because the knowledge of teenagers is only to the extent of understanding smoking behavior and is unable to apply their knowledge about the dangers of smoking.

The results showed that there was a relationship between attitudes with smoking behavior in adolescents ( $p = 0.001$ ). This is in line with the research of Alamsyah, et al (2017) which shows that there is a relationship between attitudes with smoking behavior in adolescents ( $p = 0,000$ ). In accordance with Aryani's theory (2010) that attitude is a very important thing related to smoking behavior, because in essence the attitude will determine someone to behave towards something that is either conscious or unconscious.

The results showed that there was an affordability of access to smoking behavior in adolescents ( $p = 0.015$ ). This is in line with Soesyasmoro's research, et al. (2016) which showed that there was an effect of cigarette access on smoking behavior ( $p = 0.006$ ). This was in accordance with the behavioral theory of Green et al. sold around the house in retail, my

excess money and there is no prohibition for teenagers who buy cigarettes making it easy for teenagers to get cigarettes.

The results showed that there was a relationship between ad exposure and smoking behavior in adolescents ( $p = 0.001$ ). This is supported by Alamsyah's research, et al (2017) there is a significant relationship between cigarette advertising and smoking behavior ( $p = 0,000$ ). Based on the results of the study, 74% of teenagers felt attracted to cigarette advertisements on television and as many as 35% of teenagers who smoked felt like cigarette advertising stars, for example, felt macho or male when they smoked, this was in accordance with Suryaningrat's (2007) theory of cigarette advertisements in print and electronic media that shows the picture that smokers are a symbol of male or glamorous nature, making teenagers often triggered to follow the behavior as in the ad.

The results showed that there was a relationship between the role of parents and smoking behavior in adolescents ( $p = 0.002$ ). This research is in line with research conducted by Kustanti (2014) which shows the results of hypothesis testing  $p = 0.003$  which means there is a relationship between the influence of the family environment with teen smoking behavior. According to King (2013) Family is an environment that is very influential for the development of children who are responsible for planting values and norms in the formation of children's behavior. Parents become role models for their children both positive and negative behavior. False parenting from parents can cause their children to fall into deviant acts such as smoking, using illegal drugs, promiscuity (King, 2013).

The results showed that there was a relationship between peer roles and smoking behavior in adolescents ( $p = 0.001$ ). This is supported by the results of Natalia's research (2015) which shows that there is a relationship between peer roles and smoking behavior ( $p = 0,000$ ).

From the results of the data and conclusions from the questionnaires that have been filled in by the respondents they smoke more likely to be together with their friends when they gather and form a group. They together also sometimes collect money together (joint ventures) to buy cigarettes, and it is not uncommon for them to offer their friends to smoke together. They assume that smoking is a symbol of close friendship and as a sign of introduction. They say that smoking after going home from school on the soccer field right behind school is in line with the theory of Fikriyah (2012) Adolescents consider that smoking is mandatory when they gather with their friends.

The results showed that there was a relationship between the role of schools and smoking behavior ( $p = 0.033$ ). This is in line with the research of Alamsyah, et al (2017) which shows that there is a relationship between the role of schools with smoking behavior in adolescents ( $p = 0.005$ ). Although there has been a prohibition on smoking bans, there are students still who smoke this due to the lack of strict sanctions from the school against school citizens who are caught smoking.

The results of multivariate analysis showed that the most dominant variable influencing is advertising exposure. Students who are often exposed to cigarette advertisements have a chance of smoking 11.8 times (95% CI: 2.345 - 47.541) than students who are rarely exposed to cigarette advertisements. According to (Afrianto, 2010) advertisements that have a wider range of media and high-frequency slots allow viewers to receive advertisement information more often and feel the impression of these advertisements and if the ad does not have the 5 right times when broadcast then the target is not on target.

## CONCLUSION

From the discussion above it can be concluded that there is a relationship of knowledge with smoking behavior, there is a relationship between attitudes with smoking behavior, there is an affordability relationship to access to smoking with smoking behavior, there is a

relationship of exposure to cigarette advertising with smoking behavior, there is a relationship between the role of parents with smoking behavior, there is a role relationship peers with smoking behavior, there is a relationship between the role of schools with smoking behavior and the most dominant variables related to smoking behavior in adolescents is the variable exposure to cigarette advertisements.

Based on the conclusions above the authors suggest that there needs to be a policy to limit the display of cigarette advertisements in electronic media and prohibit the advertisement of cigarettes in public places or small shops. It is also hoped that the government will further improve health promotion related to the dangers of smoking, especially among teenagers so that they are aware of the dangers of smoking to health.

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