



## The Relationship Between Individual Factors And Smoking Behavior In Adolescents In The Working Area Of Rawasari Community Health Center

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<p><b>Track Record Article</b></p> <p>Accepted: 28 February 2023 Revised: 14 March 2023 Published: 31 March 2023</p> <p><b>How to cite:</b> Hidayati, F., &amp; Aswin, B. (2023). The Relationship Between Individual Factors And Smoking Behavior In Adolescents In The Working Area Of Rawasari Community Health Center. <i>Contagion: Scientific Periodical Journal of Public Health and Coastal Health</i>, 5(1), 276–285.</p>	<p style="text-align: center;"><b>Abstract</b></p> <p><i>Smoking is a bad habit that if left unchecked will cause health problems that lead to death. In addition, smoking is closely related to various neurological, cardiovascular, and pulmonary diseases. Cigarettes can also cause other people around the smoker to get diseases due to being a passive smoker. Factors that influence smoking behavior include knowledge and attitudes toward smoking. This study aimed to analyze the relationship between individual factors and adolescent smoking behavior in the Rawasari Health Center, Jambi City working area. This research is a quantitative study with a cross-sectional design. The population in this study were all male adolescents in the working area of the Rawasari Health Center with an age range of 15-24 years, namely 6.490 youths and the sample in this study was 100 adolescents. Data analysis using chi-square. The results of the study most of the respondents smoked, namely as many as 70 respondents (70%). Most of the respondents knowledge was low about smoking, its ingredients, the effects or health impacts caused, and the disadvantages of smoking, namely as many as 69 respondents (69%). More than half of the respondents (59%) have a supportive attitude towards smoking as many do not agree (38 respondents) not to smoke rather than creating a bad image in their environment. Based on the analysis there is a relationship between knowledge (<math>p=0.000</math>) and attitude (<math>p=0.000</math>) with smoking behavior in adolescents (<math>p &lt; 0.05</math>). There needs to be direction and guidance from parents, the role of puskesmas officers to conduct counseling about the dangers of smoking, and appeals not to smoke.</i></p> <p><b>Keywords:</b> <i>Male Youth, Rawasari Health Center, Smoking Behavior</i></p>
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## INTRODUCTION

Health Organization or the World Health Organization, about 6 million people per year die from smoking. Smoking brings various dangers to the smoker and the people around him. There are 4000 chemicals contained in one cigarette that can harm health, the three most dangerous ingredients are carbon monoxide, nicotine, and tar (Budyati et al., 2021).

Smoking behavior is the activity of burning and smoking a cigarette, smoking behavior in the present is always a serious problem because the effects and dangers of smoking are not good for health. Smoking for health can cause serious disturbances in the body, such as feeling sore in the throat and will experience coughing, then will experience lung cancer, reproductive diseases, gastric disease, and stroke caused by smoking can slow down blood vessels. This behavior is carried out and occurs continuously can cause harm to adolescents in health and psychology, and can damage the future of adolescents (Daryanti, 2019).

These materials, especially nicotine, cause many health risks to the smoker himself and others, diseases caused by smoking include interfering with pregnancy and fetal harm, male genital dysfunction, high blood pressure, cancer, pneumonia, stroke, and heart disease (Yang & Song, 2021). It also causes a decrease in the sensitivity of the senses of smell and taste for the culprit. Economically, smoking is detrimental because it wastes a lot of money to burn (the benefits do not exist), especially for smokers without income (Trisanti, 2016).

One of the problems that often occur for adolescents is problems related to smoking behavior. When viewed from various points of view, smoking is very detrimental to oneself and others (Larasati et al., 2019). Based on the 2018 Basic Health Research (Riskesdas) noted that the highest number of smokers was at the age of 15-19 years (52.1%) and the age of 10-14 (23.1%), which means that since elementary and junior high school, many teenagers have started smoking. , even at the age of 5-9 years, 2.5% have smoking behavior (Kemenkes RI, 2018).

The high number of smokers in adult men will have an impact on future health. Therefore, smoking behavior must be changed from an early age by knowing the various factors that influence smoking behavior. The main factors that influence smoking behavior include not knowing and not being aware of the risks of smoking, diseases that can be caused indirectly by smoking such as respiratory and heart disease, harmful ingredients in cigarettes, and other knowledge about smoking (Rumuat et al., 2021).

Based on Lawrence Green's theory in Notoatmojo (2014), the main factor influencing health behavior is knowledge, a person's knowledge of smoking influences an increase in self-control, therefore if a person's knowledge about smoking is very good then that person will often not smoke, so vice versa. However, even if one's understanding of smoking is correct, other factors such as attitudes, advertisements, thinking abilities, the environment, and misinformation about smoking, can have a significant impact on one's smoking decision (Notoatmodjo, 2014). From the knowledge of adolescents who do not know about the dangers of smoking make adolescents have bad attitudes/beliefs (Oktania et al., 2023).

Rumuat's research in 2021 concerning the relationship between knowledge and attitudes and smoking behavior in Mariri Satu Village, Poigar District, found that there was a relationship between attitudes and smoking in adolescents in Mariri Satu Village, Poigar District because the p-value = 0.000 is less than 0.05, so  $H_0$  is rejected and  $H_a$  accepted (Rumuat et al., 2021). Based on research conducted by Prautami in 2017 concerning the Relationship between Knowledge and Attitudes toward Smoking Behavior in adolescents at

SMA PGRI 2 Palembang 2017 also found a relationship between knowledge and attitudes toward smoking behavior with a  $p$ .value = 0.000 (Prautami & Rahayu, 2018).

The lowest PHBS achievement in Jambi City in 2019 was at Tahtul Yaman Health Center (44.2%), Rawasari (60.6%), Talang Bakung (60.8%) (Dinkes Provinsi Jambi, 2020). The Tahtul Yaman Health Center was the lowest in achieving PHBS, but the location was far and difficult to reach, with the involvement of researchers, the researchers chose the second lowest, namely the Rawasari Health Center. Based on data from the Rawasari Health Center, it can be seen that the population aged 18-45 years in the UPTD Work Area of the Rawasari Health Center is 10,763 (Rawasari, 2019).

Knowledge is everything that is known or intelligence. Knowledge is the result of knowing. This occurs after a person senses a particular object, namely the senses of sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears. Knowledge/cognition is a very important domain in shaping one's actions. Attitude is how the opinion or assessment of people or respondents to matters related to health, health, and illness, and factors related to health risk factors. Newcomb, one of the social psychologists, stated that attitude is a readiness or willingness to act, and not an implementation of certain motives. In other words, the attitude function is not yet an action (open reaction) or activity, but a predisposition to behavior (action) or a closed reaction (Notoatmojo, 2018). Based on this background, the researcher is interested in analyzing the relationship between individual factors and smoking behavior in adolescents in the working area of the rawasari community health center.

## **METHODS**

This research was conducted in a descriptive-analytic manner with a cross-sectional approach where this research is a study where variables include risk factors and variables include the effect of observations simultaneously. This research was conducted in Alam Barajo District, Jambi City. The population in this study were male adolescents aged 15-24 who lived around the working area of the Rawasari Health Center, namely 6,490 people. The sample in this study based on the sampling formula obtained as many as 100 samples using sampling, namely propotuinale stratified random sampling. The instrument in this study used a questionnaire, with the results of the validity test showing an  $r$ -value of 0.860 – 0.870 and out of 20 items 18 were declared valid. The reliable value of the research questionnaire showed a Cronbach alpha value of 0.876 so it was declared reliable. Data analysis was performed using

the chi-square test with an estimated 95% CI. The presence of bivariate analysis for knowing the relationship between research variables (Lapau, 2013).

## RESULTS

The Rawasari Health Center was originally a Sub-Health Health Center (Pustu) under the auspices of the Pal V Health Center, which was built in 1980. In 1994, the status of the health center increased to become the Main Health Center by overseeing 4 Pustu namely, Pustu Villa Kenali Permai, Pustu Simpang 3 Sipin, Pustu Sei sawang, and Hidayat Village Pustu. The Rawasari Health Center has a working area with 4 sub-districts, namely Simpang 3 Sipin sub-district, Mayang Mengurai sub-district, Rawasari sub-district, and Beliang sub-district which are located in the Kota Baru sub-district. In 2016 there was an expansion of the Kota Baru sub-district area. The Rawasari Health Center is located in the expansion district, Alam Barajo sub-district.

Validity and reliability tests need to be carried out on measuring instruments used in research. Validity and reliability were tested using a computer program. From the test results, it is known that the value of  $\alpha$  is 0.853, where the magnitude of the R table is 0.227. This means that the research questionnaire that has been distributed can be said to be valid. And from the reliability test, it is known that the Cronbach Alpha value is 0.64, meaning that the questionnaire used in the study is reliable.

### Description of research variables

**Table 1. Frequency Distribution of Research Variables**

Variable	category	n	%
1. Smoking Habits	Smoke	70	70
	Do not smoke	30	30
2. Knowledge	Hight	31	31
	Low	69	69
3. Attitude	Support	41	41
	Does not support	59	59

Based on the results in table 1, it is known that the majority of respondents smoke, namely as many as 70 respondents (70%). Most of the respondents' knowledge was low about smoking, its ingredients, the effects or health impacts caused, and the disadvantages of smoking, namely as many as 69 respondents (69%). A person's knowledge can reflect how his behavior. Someone who has low knowledge tends to have bad behavior, whereas someone who

has high knowledge is expected to have good behavior. Even though the respondents knew the harm caused by smoking, specifically the health impact due to smoking, most of the respondents did not know. This is evidence that the respondents' knowledge about smoking is still low. This is also one of the causes of the large number of male teenagers who smoke in the Rawasari Health Center, Jambi City.

### The Relationship Between Individual Factors and Smoking Behavior in Adolescents

**Table 2. Independent Variable Relationship with Dependent Variables**

Variable	Category	Smoking Habits				P-Value	PR (95%) CI
		Do not smoke		Smoke			
		n	%	n	%		
Knowledge	Hight	5	7,2	64	93,8	0,000	4,792
	Low	25	80,6	6	29,4		
Attitude	Support	2	3,4	57	96,6	0,000	3,047
	Does not support	28	68,2	13	31,8		

Based on the results of the analysis in table 2, it is known that 64 (93.8%) respondents have low knowledge about cigarettes and smoke cigarettes in their daily lives. As many as 25 respondents have high knowledge about smoking and then do not smoke in their daily lives. Furthermore, based on the analysis using the chi-square test, it is known that the value of  $p = 0.000$  ( $p.value < 0.05$ ), meaning that there is a relationship between knowledge and smoking behavior in adolescent boys in the working area of the Rawasari Health Center, Jambi City.

Based on the results of the analysis in table 2, it was obtained an overview of 41 respondents (41%) who had a positive attitude, 28 respondents (28%) who did not smoke, and 13 respondents (13%) who smoked. Meanwhile, out of 59 respondents (59%) who had a negative attitude, 57 respondents (57%) smoked and 2 respondents (2%) did not smoke. To find out the relationship between attitudes and smoking behavior in the Rawasari Health Center, Jambi City. A chi-square test was used with a confidence level of 95% ( $\alpha = 0.05$ ), so P-Value ( $0.000 > \alpha (0.05)$ ) was obtained. then there is a significant relationship between attitudes towards smoking behavior. OR value of 3.047. This shows that respondents who have a negative attitude have a risk of 3 times greater to smoke.

## DISCUSSION

Teenagers are the nation's future assets. Adolescent behavior will affect the youth's future. Such risky behavior Smoking will cause health status to decline in adulthood. This research is only limited to the relationship between knowledge and attitudes of respondents

towards smoking behavior in the UPTD Work Area of the Rawasari Health Center, Jambi City. The research results of respondents' knowledge about smoking in the UPTD Work Area of the Rawasari Health Center showed that as many as 31 respondents (31%) had high knowledge and 69 respondents (69%) had low knowledge.

The research results are inversely proportional to research conducted by Budiayati (2021) which found no relationship between knowledge and smoking behavior, but this research is in line with research conducted by Sampe in 2022 concerning the Relationship between Knowledge and Attitudes toward adolescent smoking behavior in Kayuuwi Satu Village West Kawangkoan District, Minahasa Regency. The results of this study indicate that there is a relationship between knowledge and smoking behavior in adolescents with a p-value = 0.002 ( $p < 0.05$ ) (Sampe et al., 2022).

The difference in the results of this study with previous studies is due to several factors that can cause differences. It could be due to differences in the information obtained or because of the different knowledge of each respondent in each region so it influenced the research results which then led to differences with the results of previous studies. Teenagers get knowledge about smoking with various types of information media both from television, radio, and from other social media. Adolescent smoking behavior is not only influenced by the information media. Smoking behavior can also be influenced by other factors such as the influence of friends and adults who usually smoke around them. However, many teenagers still smoke even though they already know about the dangers of smoking and prevent smoking behavior from decreasing. Even smoking has become a habit and something that is then tolerated and not questioned by society.

The results of this study are in line with research conducted by Farkhah who examined the relationship between the level of knowledge and attitudes of adolescents toward smoking behavior, which found that 55% of adolescents had poor knowledge about smoking (Farkhah, 2021). Knowledge can be the basis of a person's behavior, knowledge can assess how much it influences a person's behavior compared to behavior that is not based on knowledge. If the respondent has high knowledge it will affect his smoking habit, so it is hoped that not smoking will be his behavior

The low knowledge of respondents about smoking is caused by educational background, and lack of information on smoking problems. The low knowledge of respondents can be seen when answering questions about the magnitude of the risk of people around

smokers, the majority of respondents answered that the risk is smaller or the same, and respondents do not know that passive smoking has a greater risk.

More than half of the respondents (59%) have a supportive attitude towards smoking as many do not agree (38 respondents) not to smoke rather than creating a bad image in their environment. Attitude is a person's response to behavior, and attitude towards smoking is a person's opinion of how smoking is formed from the willingness and influenced by emotions which can be seen from the actions taken or habits carried out (Liang et al., 2022).

Good knowledge of the dangers of smoking may not necessarily change smoking behavior or habits, especially if someone's knowledge is not good/low it causes the possibility of causing someone's attitude to smoke higher in this study it is proven that the low knowledge of respondents results in many respondents' attitudes positive/negative to smoking These results are in line with research conducted by Budiyati in 2021 concerning knowledge, attitudes and smoking behavior in adolescents, where the results showed that 56.7% of adolescents had a bad attitude towards smoking. In Budiyati's research, it was stated that even though adolescents had good knowledge about smoking, it did not guarantee that attitudes would also be good (Budiyati et al., 2021). In addition to knowledge, attitude is also influenced by perception, knowledge, and perception can affect one's assessment of smoking habits. Attitude is also one of the main factors in a person's habit of smoking, attitude can also make a person's intensity to smoking increase.

Based on the analysis in table 2, it is known that 57 respondents (96.6%) have a supportive attitude and cause smoking in their daily behavior. Furthermore, based on the analysis using the chi-square test, it is known that the value of  $p = 0.000$  ( $p.value < 0.05$ ), meaning that there is a relationship between attitude and smoking behavior in adolescents in Alam Barajo District, Jambi City.

The results of this study are in line with research conducted by Latif in 2022 on the Relationship between Knowledge and Attitudes and Smoking Behavior of SMA 3 Students in Pagar Alam City. Based on the results of his research, showed that there was a relationship between attitudes and smoking behavior of students at SMAN 3 Pagar Alam City, indicated by a p-value of 0.000, meaning that the value of  $p < \alpha$  (0.05) (Latif et al., 2022). The results of Anam's research in 2019 showed that the better the student's attitude toward smoking behavior, the lower the student's willingness to smoke. Because students feel that smoking is not good and can harm themselves as well as the people around them. Smoking can cause personal health and people and the surrounding environment to be disrupted (Anam K, Ilmi MB, 2019).

The results of this study show that knowledge is related to smoking behavior. One of the drivers of smoking behavior is knowledge. A teenager who understands smoking and its dangers will have a strong belief in avoiding smoking. Alamsyah17's research also stated that knowledge about the dangers of smoking had a significant relationship with smoking habits. Other research states that knowledge about the dangers of smoking with smoking behavior is significantly related (Nurussalam & Marli, 2019). Adolescents have difficulty quitting smoking due to dependence factors with chemicals and social habit factors. Efforts to quit smoking will be futile if not based on strong intentions (Nasution, 2020).

The relationship between attitude and smoking behavior is also significant. Attitude is negatively related to smoking behavior, and someone who has a good attitude about the dangers of smoking will reduce the risk of smoking behavior. and smoking has a bad impact on the health of people around), affective aspects (feelings of liking/disliking smoking behavior), and conative aspects (desire to smoke) (Anhar et al., 2021).

Attitude is an assessment or can be a person's opinion of a stimulus or object. After someone knows the stimulus or object, the next process will be to judge or behave towards the stimulus or object (Purba et al., 2022). Attitude towards smoking is a person's judgment or opinion about smoking. Attitude is divided into three components, namely cognitive, affective, and conative components. The cognitive component contains the perceptions, beliefs, and stereotypes that individuals have about an object. The cognitive component represents what the individual owner of the attitude believes. The affective component concerns a person's emotional problems towards an attitude object. Someone who believes that smoking hurts his health will form a feeling of dislike for smoking. The conative component is the attitude component in the form of a person's readiness to behave concerning the attitude object. Contains a tendency to act toward something (Azzahra, 2022).

The trend of increasing smoking prevalence requires the attention of parents, friends, schools, and the government. Research that can be carried out includes research on the effectiveness of applying smoking rules in schools, persuasive techniques to prevent smoking, or empowering peers to prevent smoking in adolescents. Research can also be developed by examining external factors (such as socio-cultural factors) and psychological factors as predictors of one's behavior (Saleh, 2020).



## CONCLUSIONS

This study concludes that the majority of respondents, in this case, teenagers, engage in smoking behavior. Furthermore, knowledge and attitudes based on analysis related to smoking behavior in adolescents in the working area of the Rawasari Health Center. Knowledge as a determinant of smoking behavior plays an important role in influencing smoking behavior. Someone with high knowledge of the dangers of smoking is expected to be able to know the dangers caused by smoking behavior so that it can reduce the desire to smoke or behavior to smoke. Attitude as a determinant of smoking behavior is also something important and can influence someone in smoking behavior. Attitude will determine a person's decision to smoke or not smoke. There needs to be direction and guidance from parents, the role of Puskesmas officers to conduct counseling about the dangers of smoking, and appeals not to smoke.

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