



## Research Articles

# Relationship of knowledge and attitude with smoking habits at low healthy family index

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## ABSTRACT

Smoking is one of the habits that are often done by the people of Indonesia. Smoking habits are influenced by several things, such as knowledge and attitudes. Having good knowledge will tend to avoid smoking habits, and having a positive attitude will make someone stop smoking. This study aims to determine the relationship between knowledge and attitudes toward smoking habits in Tugu District residents with a Low Healthy Family Index. This research is an observational study with a cross-sectional approach carried out in Tugu District with residents with a low Healthy Family Index. The samples used were 81 samples. The analysis used is the Spearman test. The results showed that 34 respondents (42%) had sufficient knowledge, 64 respondents had a negative attitude (79%), 36 respondents were heavy smokers (44.4%), and 45 respondents were moderate smokers (55.6%). The results of the relationship between knowledge and attitudes toward smoking habits are each with p values of 0.000 and 0.005. This study concludes that there is a relationship between knowledge and attitudes toward smoking habits in Tugu District residents with a Low Healthy Family Index.



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### INTRODUCTION

Smoking is a habit that many people often do. Globally, 1.1 billion people smoke over the age of 15, with 945 million male and 180 million female smokers. ASEAN data shows that there are 122 million adult smokers, and the number of smokers in Indonesia is 65 million (Lian & Dorotheo, 2018). The prevalence of smoking in Indonesia has increased from 7.2% in 2007 to 9.1% in 2018. This is contrary to the 2019 RPJMN target of 5.4% (Kementerian Kesehatan RI Badan Penelitian dan Pengembangan, 2018). The Central Java Health Profile shows the proportion of the smoking population aged 10 years in Central Java has increased from 2013 by 22.9% to 23.19% in 2018 (Profil Kesehatan Provinsi Jawa Tengah, 2019).

No family member who smokes is one of the 12 indicators of the Healthy Indonesia Program with a Family Approach (PIS-PK). In Central Java, the indicator that no family member smokes has decreased in percentage, from 44.58% in 2018 to 44.01% in 2019, while for the City of Semarang, it is 54.86% and is the four lowest of the 12 indicators. . Tugu District has the lowest prevalence of non-smoking family members, which is 45.37% (Kemenkes, 2017).

Smoking habits are influenced by several factors, namely predisposing factors (predisposing factors), enabling factors, and reinforcing factors. Predisposing factors include knowledge, attitudes, beliefs, beliefs, and individual values. Supporting factors (enabling factors) are manifested in the physical environment, such as health facilities and information media, and reinforcing factors are manifested in reference groups from the habits of the person concerned, such as parents and community leaders. (Notoatmodjo, 2014). Smoking habits are influenced by knowledge which is an important thing in the formation of

one's actions. Someone who has good knowledge will tend to avoid smoking. In addition to knowledge, attitudes also affect smoking habits. A positive attitude towards smoking habits can make a person's intention to quit smoking low, and a negative attitude towards smoking habits can make a person's intention to quit smoking high. (Alamsyah, 2017). This study aimed to determine the relationship between knowledge and attitudes toward smoking habits in Tugu District residents with a Low Healthy Family Index.

### METHODS

This research is an observational study with a cross-sectional design. This research was carried out in February 2021 in Mangunharjo Village and Mangkang Wetan Village. The sample of this study was 81 samples with the sampling technique of consecutive sampling according to the inclusion and exclusion criteria. The inclusion criteria for this study were (1) PIS-PK members who smoked, (2) had an unhealthy/low Healthy Family Index, (3) over 17 years of age, and (4) registered in the work area of the Mangkang Health Center. The exclusion criteria for this study were PIS-PK members who were passive smokers and had a pre-healthy and healthy index. Data was collected through a questionnaire of knowledge, attitudes, and smoking habits. The data that has been collected was analyzed using the Spearman test on SPSS version 26, with a degree of significance was less than 0,05. This research has received ethical approval with the number 082/EC/FK/2020.

### RESULTS

Data on knowledge, attitudes, and smoking habits in the sample are in table 1. The table shows that the majority of respondents have sufficient knowledge as many as 34 respondents (42%), negative attitudes 64 respondents (79%), and moderate smokers as many as 45



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respondents (55.6 %).

In table 2, the data were analyzed using the Spearman test. The results showed that the majority of respondents who are heavy smokers have less knowledge as much as 20 (55.6%) of the 36 respondents who are heavy smokers. In comparison, moderate smokers have sufficient knowledge; as many as 24 (55.3%) of 45 respondents were moderate smokers and no light smokers were found. Statistical test results obtained p-value of 0.000 ( $p < 0.05$ ). This shows that there is a relationship between knowledge and smoking habits. The correlation coefficient value was 0.444, indicating a moderate level of relationship between knowledge and smoking

habits.

Table 3 shows that the majority of respondents who are heavy smokers have a negative attitude; as many as 25 (69.4%) of the 36 respondents who are heavy smokers, moderate smokers have a negative attitude as many as 39 (86.7%) of 45 respondents who are moderate smokers and not found light smoker respondents. Statistical test results obtained a p-value of 0.005 ( $p < 0.05$ ). This shows that there is a relationship between attitudes and smoking habits. The correlation coefficient value is 0.311, indicating a low level of relationship between attitudes and smoking habits.

**Table 1.** Individual Characteristic

No	Variable	Category	N=81
1	Knowledge	Poor	24 (29.%)
		Moderate	34 (42%)
		Good	23 (28.4%)
2	Attitude	Very Positive	0 (0%)
		Positive	10 (12.3%)
		Negative	64 (79%)
		Very Negative	7 (8.6%)
3	Smoking Habits	Heavy Smoker	36 (44.4%)
		Moderate Smoker	45 (55.6%)
		Light SMoker	0 (0%)

**Table 2.** Relationship between Knowledge and Smoking Habits

Knowledge	Heavy Smoker	Moderate Smoker	Light Smoker	p- value	Correlation Coefficient
Poor	20 (55.6%)	4 (8.9%)	0	0.000	0.444
Moderate	10 (27.8%)	24 (53.3%)	0		
Good	6 (16.7%)	17 (37.8%)	0		
Total	36 (100%)	45 (100%)	0		

**Table 3.** Relationship between Attitude and Smoking Habits

Attitude	Heavy Smoker	Moderate Smoker	Light Smoker	p- value	Correlation Coefficient
Very Positive	0	0	0	0.005	0.311
Positive	9 (25%)	1 (2.2%)	0		
Negative	25 (69.4%)	39 (86.7%)	0		
Very Negative	2 (5.6)	5 (11.1%)	0		
Total	36 (100%)	45 (100%)	0		



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### DISCUSSION

In this study, it was found that there was a relationship between knowledge and smoking habits of Tugu District residents who had a low/unhealthy family index in PIS-PK. Based on the questionnaire, the majority of respondents who are heavy smokers have less knowledge. They believe that smoking is a habit that is difficult to break and accept that smoking is not harmful to health and cigarette smoke is not detrimental to those around them. The majority of respondents who are smokers have sufficient knowledge. They believe that smoking causes dependence, but they think that smoking is harmful to health and cigarette smoke is detrimental to those around them (Huong et al., 2016). This study's results align with research conducted by Yan, which shows that smoking is caused by low knowledge (Yan et al., 2014).

In this study, it was found that there was a low-level relationship between knowledge and smoking habits of Tugu District residents who had a low/unhealthy index in PIS-PK. Based on the questionnaire, the majority of respondents who were heavy smokers had a negative attitude. They believe that smoking is free anywhere and will not stop smoking even if sick. While smokers have a negative attitude, they believe quitting smoking is not easy, but it is not impossible. Then they believe that they are more confident when smoking, but they will stop smoking if there are people who are bothered by cigarette smoke. This study's results align with research conducted by Lake, which states that there is a relationship between attitudes and smoking behavior (Lake, Hadi, & Sutriningsih, 2018).

Based on behavioral theory, according to Notoatmojo, before someone adopts a new behavior, within that person, a sequential process occurs, namely awareness, in the sense that the individual knows in advance

about the stimulus (object). Furthermore, the subject feels interested in the stimulus or object, then weighs whether or not the stimulus is good for him. Furthermore, the subject begins to try to do something according to what is desired by the stimulus. And in the last stage, the subject has new behavior according to their knowledge, awareness, and attitude towards the stimulus.

One of the most important factors for the formation of a person's behavior is because, from experience, it turns out that behavior is based on knowledge, and attitudes will be more lasting than behavior that is not based on knowledge (Maseda DR, et al. 2013). The limitation of this research is that this research was conducted during the COVID-19 pandemic, thus limiting the scope of the research, and has not examined in depth other behavioral factors on health status.

### CONCLUSION

This study concludes that there is a relationship between knowledge and attitudes toward smoking habits of Tugu District residents with a low family index.

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