Original Research Article

The Relationship of Knowledge, Attitudes, and Practices Towards Smoking Habits in Students Faculty of Medicine Indonesian Christian University

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ABSTRACT

Smoking is burning tobacco and then inhaling the smoke, either using a cigarette or using a pipe. Smoking is an unhealthy habit or lifestyle. Data from the 2014 Global Youth Tobacco Survey (GYTS 2014) shows that the prevalence of smoking in Indonesia is 34.8% and as many as 67% of men in Indonesia are smokers, which is the largest figure in the world. Statistics show that 52.3% of smokers in Indonesia smoke 1-10 cigarettes per day and around 20 percent smoke 11-20 cigarettes per day. This research aims to determine the relationship between knowledge, attitudes and practices on smoking habits among FK UKI students class of 2018 in 2022. The method of the research design was cross-sectional using primary data involving a sample of 32 FK UKI students class of 2018 analyzed univariately and bivariately. Sampling used the total sampling method. Data collection is done by filling out a questionnaire. The research results showed that 32 students smoked. The results of the Spearman correlation rank analysis showed a significant relationship between the level of knowledge and smoking habits (p = 0.004). There is a relationship between attitude level and smoking habits in the pre-clinical students class of 2018 (p = 0.022). There is a significant relationship between the level of smoking practice and smoking habits (p = 0.000). Conclusion: The prevalence of smoking among FK UKI students class of 2018 was 32 people. There is a relationship between the level of knowledge and smoking habits, there is a relationship between the level of attitude and smoking habits, and there is a significant relationship between the level of smoking practice and smoking habits.

Keywords: smoking, smoking habits, attitudes, knowledge

INTRODUCTION

Smoking is burning tobacco and then inhaling the smoke, either using a cigarette or using a pipe.[1] Smoking is an unhealthy habit or lifestyle.[2] Smoking has affected various groups of men and women, from children to the elderly. The number of smokers has increased from year to year. The problem of smoking still cannot be addressed. This smoking behavior is very detrimental, both for yourself and the people around you because cigarettes contain several chemicals such as nicotine, tar, carbon monoxide, and other toxic chemicals. Smoking has been linked to diseases related to almost all organs of the body, including respiratory organs, and reduces health status and is very dangerous for the fetus.[3] One in ten deaths in adults is caused by tobacco use and it kills more than

5 million people every year.[4] In Indonesia in 1996 it was said that 57,000 people or 157 people died every year due to smoking. In fact, by 2030 it is estimated that the number of deaths will reach 8,000,000 people.[1] According to WHO World Tobacco Epidemic data in 1993, it is stated that every year the death rate is 3 million people.[5] The National Socio-Economic Survey (Susenas) and Basic Health Research (Riskesdas) show The prevalence of smokers aged 15 years and over according to Susenas has increased from 27% in 1995 to 34.4% in 2004, while according to Riskesdas there was increase from 34.7% in 2007 to 36.3% in 2013. Data from the 2014 Global Youth Tobacco Survey (GYTS 2014) shows that the prevalence of smokers in Indonesia is 34.8% and 67% of men in Indonesia have the largest number of smokers in the world.[6] Statistics show that 52.3% of smokers in Indonesia smoke 1-10 cigarettes per day and around 20 percent smoke 11-20 cigarettes per day. The age group with the highest prevalence of smoking is 25–64 years, while 18.6% of the 15–24 year age group have started smoking every day.[7] The world population who consume tobacco is 57% of the Asian and Australian population and 14% of the European population. East, 12% of the American population, 9% of the Western European population, and 8% of the Middle Eastern and African population. The prevalence of smoking is highest in ASEAN countries with Indonesia ranking first with the highest number of smokers at 46.16% after the Philippines, Vietnam, Myanmar, Thailand, Malaysia, Cambodia, Laos, Singapore, and Brunei.[8]

Even though it is clear that smoking has a bad impact and is dangerous to health, the smoking habit tends to increase among students. Most students smoke on campus. Many factors influence smoking habits among students, including environmental influences from parents, friends' influences, personality factors, and advertising. The high prevalence of smoking among students especially among medical students shows that awareness and level of knowledge about the dangers of smoking is still very low. Based on researchers' observations, many students at the Faculty of Medicine at the Indonesian Christian University are active smokers and most students, especially men, smoke on campus even though there is a smoking ban on the Indonesian Christian University campus. However, there has been no research regarding the factors that influence smoking habits among FK UKI students. Based on the background above, the researcher wants to conduct research at the Faculty of Medicine, Indonesian Christian University to find out the factors that influence smoking habits among FK UKI students class of 2018

MATERIALS & METHODS
Research Design
The type of research used is analytical research with a cross sectional method. Cross sectional is a type of research that emphasizes the time of measurement/observation of independent and dependent variable data only once at a time. This research was conducted to determine the relationship between one variable and another variable.

Research Location and Time
Research Location
Research is located at the Faculty of Medicine, Indonesian Christian University
Research Time
The research was carried out from April 12 to May 14 2022
Population and Sample
Research Population
Target Population
The target population in this research was all 160 FK UKI pre-clinical students, class of 2018.
Reachable Population
The affordable population that will be used as a research sample is obtained through a target population that is filtered using inclusion and exclusion criteria, namely:

1. Inclusion criteria:

a. UKI FK student class of 2018 who is an active smoker.
b. UKI FK students class of 2018 who are willing to be research respondents.
c. FK UKI Preclinic students class of 2018 who filled out all the questionnaires.

2. Exclusion criteria:

a. FK UKI students class of 2018 who smoke only use electronic cigarettes.
b. FK UKI students class of 2018 who did not fill out the questionnaire completely or gave multiple responses.

Based on the inclusion and exclusion criteria above, the total population covered in this study was 32 people

Research Sample

The sample in this study was all FK UKI students class of 2018 who met the inclusion criteria.

Sampling Technique

The sampling technique in this research is total sampling. Total sampling is a sampling technique with the number of samples equal to the population. The reason for taking total sampling was because the population was less than 100.

Data Management and Analysis

Data processing and analysis using the SPSS program. Data processing and analysis is carried out using a computerized system through the following process:

1. Variable developer, to ensure all variable specifications required by the research are included in the data that has been collected.
2. Coding, namely changing data in the form of letters into data in the form of figures/numbers which will later be useful for making data analysis easier and also speeding up data entry.
3. Entry, namely transferring coding data from the questionnaire to the software.
4. Cleaning, namely the process of checking data to see again whether the data that has been entered has errors or not
5. Data analysis, where the data that has been collected is then processed and analyzed. To facilitate data analysis, a computerized program is used, namely SPSS (Statistical Package for the Social Sciences), which is an analysis and statistics program, including univariate analysis and bivariate analysis.

Univariate analysis

Used to see an overview of the frequency distribution of variables. In general, this analysis only produces frequency and percentage distributions of each variable. Univariate analysis of this research includes smoking habits, and characteristics of respondents, including the distribution of knowledge, attitudes and practices regarding smoking among respondents.

Bivariate analysis

Carried out on two variables that are thought to be related or correlated. Analysis of statistical test results uses the Spearman rank correlation test with a significance level of 5% (0.05). Data analysis using the SPSS program. In this research, we will analyze how knowledge, attitudes and practices relate to smoking habits, using the Spearman rank correlation test, which has the following interpretation:

a. p-value $< \alpha$ (0.05) then the hypothesis is accepted
b. p-value $> \alpha$ (0.05) then the hypothesis is rejected

RESULT

Research result

This research is about the relationship between knowledge, attitudes and smoking practices and smoking habits among 2018 pre-clinical students at Indonesian Christian University in 2022 using 32 respondents.

Univariate Analysis

Table 1. Distribution of Respondents Based on Smoker Classification

Variable	Total	
	N	Percentage (%)
Light Smoker	17	53,1
Moderate-Heavy Smoker	15	46,9
Total	**32**	**100**

From the results of the variable frequency distribution, it was found that the number of students from the 2018 class of the UKI Faculty of Medicine who were classified as light smokers was 17 people, 15 people as moderate-heavy smokers. These results are similar to research conducted by Cantika A in 2017 on "Characteristics of Smokers among USU Faculty of Medicine Students Class of 2014" with a total of 36 smokers (100%), but in this study, only light smokers were found.[34]

Table 2. Distribution of Smokers by Gender

Variable	Total	
	N	Percentage (%)
Male	22	68,8
Female	10	31,3
Total	**32**	**100**

In the frequency distribution results, 22 male respondents were smokers and 10 female respondents. This result is in line with research conducted by Cantika A where there were more male smokers, namely 33 people (91.7%) compared to 3 female smokers (8.3%).[34]

Table 3. Distribution of respondents based on education level when they started smoking

Variable	Total	
	N	Percentage (%)
Elementary School	1	3,1
Junior High School	7	21,0
Senior High School	11	34,4
High Education	13	40,6
Total	**32**	**100**

In the results of the frequency distribution, 1 person smoked for the first time during elementary school, 7 people during junior high school, 11 people during high school, and 13 people only started smoking when they entered college. These results are not in

line with research conducted by Samrotul F and Febrijanto Y on students at STIKES Baptist Hospital Kediri, where most respondents smoked for the first time during high school, namely 18 people (54.5%).[35]

Table 4. Distribution of smokers based on level of knowledge

Variable	Total	
	N	Percentage (%)
Good knowledge	19	59,4
Lack knowledge	13	40,6
Total	**32**	**100**

In the results of the frequency distribution of respondents based on their level of knowledge about smoking and its dangers, it was found that 13 people had poor knowledge and 19 people had good knowledge. These results are in line with research by Umari Z, et al., where based on the level of smokers' knowledge of cigarettes, it was found that 62 people out of 78 people in the study had a good level of knowledge.[36]

Table 5. Distribution of smokers based on attitudes towards cigarettes

Variable	Total	
	N	Percentage (%)
Good attitude	27	83,4
Not good attitude	5	15,6
Total	**32**	**100**

In the results of the frequency distribution of respondents based on attitudes towards smokers, it was found that 27 people had a good attitude, while 5 people had a less good attitude. This is in line with research conducted by Rahmadi A, et al, it was found that 89 people had a good attitude and 7 people had a poor attitude.[37]

Table 6. Distribution of smokers based on smoking practices

Variable	Total	
	N	Percentage (%)
Not good practice	12	37,5
Good practice	20	62,5
Total	**32**	**100**

In the frequency distribution results based on smoking practices, it was found that 20

people had good smoking practices, while there were 12 people who had poor smoking practices.

Bivariate Analysis

Bivariate analysis is used to determine the relationship between dependent and independent variables which are analyzed using the Spearman correlation rank test. It is said to be significant if the p value <0.05. The results of the bivariate analysis can be seen in the following table 7.

Table 7. Relationship between level of knowledge and smoking habits in pre-clinical students class of 2018

Variable	Smoking Habit				P-value
	Light Smoker		Medium-Heavy Smoker		
	N	**%**	**N**	**%**	
Knowledge level is poor	3	42,8	10	66,6	0,004
Good Knowledge Level	14	57,2	5	33,4	
Total	**17**	**100**	**15**	**100**	

Based on table 7 of the research we conducted, it is known that there were 3 respondents who had a poor level of knowledge who were light smokers, 10 people who were medium - heavy smokers, while those who had a good level of knowledge were 14 people who were light smokers and 5 people who were moderate smokers. Based on statistical tests, it was found that p value = 0.004, so there is a significant relationship between the level of knowledge and smoking habits. The level of knowledge of 2018 pre-clinical students regarding the dangers of smoking is divided into two categories, namely good and poor.

In this research, the instrument used was a questionnaire containing 12 multiple choice questions. So, samples that have a good level of knowledge are those who fill in 6 to 12 questions correctly and those who have a poor level of knowledge are those who fill in at most 5 questions correctly. This is not in line with research conducted by Astrid Brilianty in 2019 and Arti in 2012, showing that there is no significant relationship between knowledge and the incidence of smoking. light. However, in our research it was stated that if a person's level of knowledge was good, that person's level of smoking was lighter.[38,39]

Table 8. The relationship between attitude level and smoking habits in pre-clinical students class of 2018

Variable	Smoking Habit				P-value
	Light Smoker		Medium-Heavy Smoker		
	N	**%**	**N**	**%**	
Level of Good Attitude	17	94,1	11	73,3	0.022
Level of Unfavorable Attitude	1	5,9	4	26,7	
Total	**18**	**100**	**15**	**100**	

Based on table 8 of the research we conducted, it is known that all respondents had a good level of attitude, namely 17 people were light smokers and 11 people were moderate-heavy smokers, while the level of unfavorable attitudes was found in 1 person who was a light smoker and 4 people who were a heavy smoker. Based on statistical tests, it was found that p-value = 0.022, this shows that there is a relationship between attitude level and smoking habits in pre-clinical students class of 2018. This research is not in line with research conducted by Manitik et al in 2020, where there was no significant relationship (p-value = 0.019) with the act of smoking. According to this research, a good attitude does not influence a person's smoking habit, but other factors make a person smoke, such as the influence of the social environment, namely siblings or parents who smoke.[40]

Table 9. The relationship between practice level and smoking habits in pre-clinical students class of 2018

Variable	Smoking Habit				P-value
	Light Smoker		Medium-Heavy Smoker		
	N	%	N	%	
Practice Level is less	6	35,2	1	6,6	0,000
Level of Good Practice	11	64,8	14	93,4	
Total	**17**	**100**	**15**	**100**	

Based on table 9 of the research we conducted, it is known that 6 respondents who had a low level of practice were light smokers, 1 person was a moderate-heavy smoker. Meanwhile, those with a good practice level were 11 light smokers, 14 moderate-heavy smokers.

Based on statistical tests, it was found that p value = 0.000, so there is a significant relationship between the level of smoking practice and smoking habits. Our research is in line with research conducted by Tindle et al in 2011, where heavy smokers tend to have poor levels of smoking practice while light smokers tend to have good levels of smoking practice. Based on the research, it is said that this can make it difficult for heavy smokers to quit, this can be due to a lack of desire and withdrawal caused by dependence. In research conducted in 2010, a relationship was found between the level of practice and smoking habits. In this study, someone who smokes tends to have less good practices compared to people who do not smoke.[41]

CONCLUSION

Based on the results of research and discussion regarding smoking habits and their relationship with knowledge, attitudes and practices regarding smoking among students at the Faculty of Medicine Class of 2021, Indonesian Christian University in 2022, it was concluded that:
1. 17 respondents fell into the light smoker category, 15 people were moderate-heavy smokers (43.8%).
2. There are more male smokers than female smokers, namely 22 people.
3. Most respondents started smoking when they were studying at college, 13 people.
4. Most respondents had a good level of knowledge (19 people), good attitudes (27 people), and good smoking practices (20 people).
5. There is a relationship between the level of knowledge (p value = 0.004), attitude (p value = 0.022) and practice (p value = 0.000) with the smoking habit of 2018 class students

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