



# Public Perception Of Smoking Behavior Based On Level Of Education

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## ABSTRACT

**Backgrounds.** *Basic Health Research* (Riset Kesehatan Dasar, RISKESDAS) in 2010 showed that the average cigarette consumption per person (age 15 and above) was 12 rods per day. Those with higher levels of education are less likely to use tobacco. The prevalence of smoking among university graduates is 20.6% compared to 26.3% among those who are not in school. **Aims.** This research aims to analyze public perception of smoking behaviour according to the level of education and about opinion on how to quit smoking. **Methods.** Research was analytical-detailed with the design of cross-sectional studies in the community of Majasem, Kendal, Ngawi district using structured interview techniques based on a questionnaire about perception, with accidental sampling method. **Result.** The prevalence of non-smokers in high-educated respondents was higher (80.77%) than in low-educated. Prevalence of respondents that knows the danger of smoking (78.85%) and want to stop after knowing (80.77%) even higher in high-educated compared to the low-educated. Respondents with high-education still gained a doubtful attitude to stop smoking (13.46%). **Conclusion.** Education can be a protective factor against smoking behavior, although there are still hesitant behaviors to stop smoking. It is expected to increase the participation of the community with high education to make transfer of knowledge possible to those with low education.

**Keywords:** perception, smoking, level of education.

## INTRODUCTION

Indonesia is the fifth largest tobacco producer and the fourth largest cigarette consumer country. According to national basic health research (RISKESDAS) data in 2010 the consumption of cigarettes in Indonesia on average per person (age 15 years and above) was 12 cigarettes per day. Global Adult Tobacco Survey (GATS) formulated in 2011 the prevalence of smoking in men as much as 67% (57,6 million) dan 2,7% (2,3 million) among women.

As many as 20,3% of school-aged children are smokers where 36,3% of boys and girls are 4,3% (GYTS, 2014). From other data also found those who have higher education do not use tobacco. Smoking prevalence among university graduates is 20,6% compared to 26,3% of those who did not attend school (GATS, 2011). It is unfortunate that the level of college student participation has not been maximized to influence groups of people with low education.

## METHODS

In this study used a descriptive analytic approach with a cross sectional design. This research was conducted in all communities around Al-Hidayah Islamic Boarding School, Majasem Village, Kendal District, Ngawi Regency.

### Sample Size

$$n = \frac{Z^2(pq)}{d^2}$$
$$n = \frac{1,96^2(0,57)(1 - 0,57)}{0,1^2}$$
$$n = 94,15 \sim \text{rounded to } 95$$

n	= sample size
Z $\alpha$	= 1,96 ( $\alpha$ = 0,05)
p	= estimated proportion
d	= absolute deviation (10%)

The sampling technique uses accidental sampling, with this method the researcher records each citizen who came or was met during the research. If included in the citizen inclusion criteria was included in the research.

**Inclusion Criteria**

1. The entire Kendal District community.
2. Willing to be a respondent to be interviewed by signing the informed consent given.
3. Complete the questionnaire.

**Exclusion Criteria**

1. Experiencing severe physical or mental disorders.
2. Residents or administrators of Al-Hidayah Islamic Boarding School.
3. Use electric cigarettes.
4. Age less than 15 years.

The way data collection is done by structured interview techniques using questionnaires that have been made. After all data has been collected, it is included in the Microsoft Excel table and then processed using SPSS 17.0.

**RESULTS**

**A. Demographic Characteristics of Research Respondents**

Of the 128 peoples interviewed, there were 87 complete and analyzed data. Randomization the reduction is done ( $n-1$ ) because the number of samples is less than the sample size ( $n < 95$ ), and there are 2 cases that are excluded because age is too easy (10 years, one people) and use electric cigarettes (one people). This research only analyzed the habit of using kretek cigarettes or cigarettes stems (not electric cigarettes or other types likes *nicotin patch* and *sissha*).

From table below, it can be seen that the age variability of respondents is quite high with ages ranging from 15 to 78 years in which the proportion of less than 40 years is almost equal to the proportion of respondents over 40 years of age. There are more female respondents, the highest distribution of backgrounds is elementari school (SD) graduates and the second position is dominated by S1/S2 graduates. The education level in Kendal District can be said to be satisfactory because it has a college graduate of almost a quarter of all respondents.

**Table 1. Demographic Characteristics of Respondents**

Demographic Characteristics		Percentage (%)
<i>n</i> sample = 84 respondents		
Age (15-78 tahun)	< 40 years	47,1
	> 40 years	52,9
Gender	Male	39,1
	Female	60,9
Education	No School	12,6
	Elementary School (SD)	27,6
	Junior High School (SMP)	14,9
	Senior High School (SMA)	20,7
	S1/S2	24,1
Occupation	Housewife	10,3

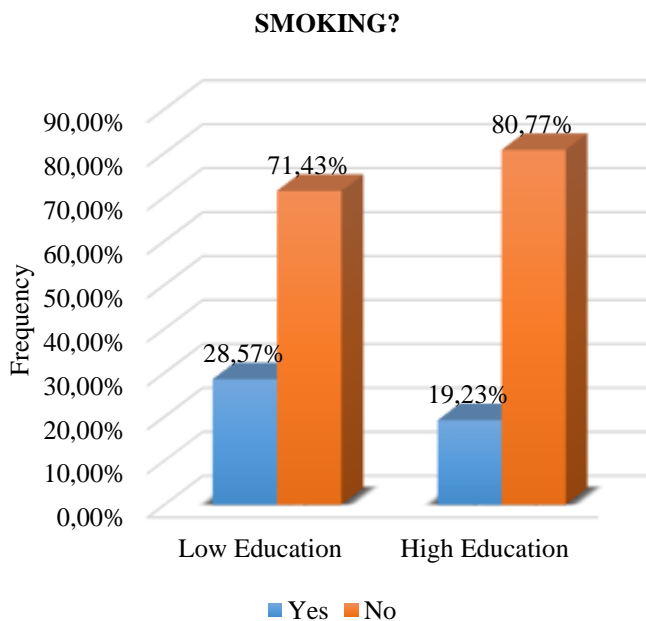
Farmer	40,2
Employee	3,4
Teacher	17,2
Student	12,6
College Student	5,7
Private-employee	10,3

The actual counter-indicative thing if you look at the proportion of the work of respondents where the number of housewife and farmer's work reaches half of the all respondents compared to the very small number of employees and teachers. It can be assumed that the level of higher education (senior high school (SMA) dan S1/S2) is still enjoyed by a small proportion of the residents of Kendal District.

### B. Perception of Smoking Behavior

There is one third of respondents who are active smokers (20 peoples or 22,99% from all respondents), with the average cigarette use per day is 2 stems and the most is 16 stems (1 pack) per day.

If the level of education is a reflection of the level of one's knowledge, it is also necessary to analyze the level of education on the attitude of respondents to smoking. Based on statistical analysis where the level of education is not normally distributed, then the education level is grouped into two types based on mode (elementary school, SD), namely low education (no school dan SD) dan high education (SMP, SMA, S1, dan S2). The following graphs the distribution of smoking behavior at the education level.

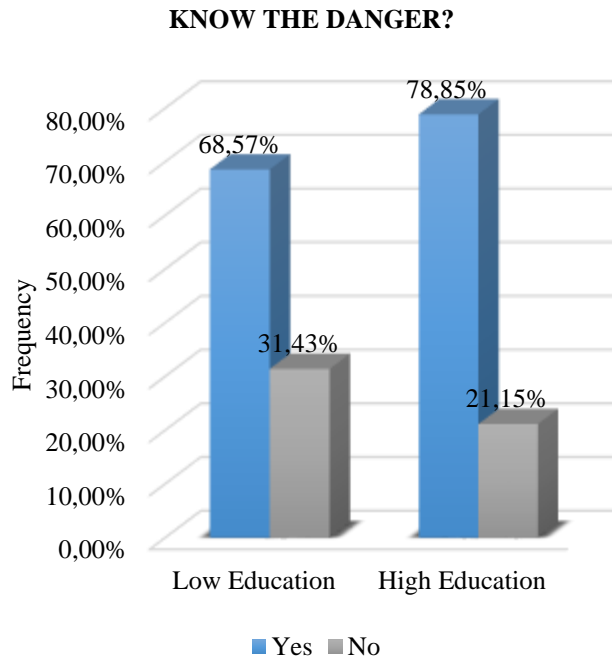


**Graph 1. Distribution of Smoking Behavior at The Level of Education**

From graph 1 above, it can be seen that the prevalence of non-smokers in higher education is higher than in low education. This is probably due to the fact that there is a greater level of knowledge about the dangers of smoking in higher education making someone in higher education choose not to smoke. Respondents with higher education had more non-smokers prevalence compared to low education as much as 80,77%.

After knowing the number of active smokers and non-smokers respondents on the distribution of education levels, in the graph below, we will explain the knowledge of the dangers of smoking

in higher education and give it low. The following is a graph of the distribution of knowledge about the dangers of smoking at the education level.

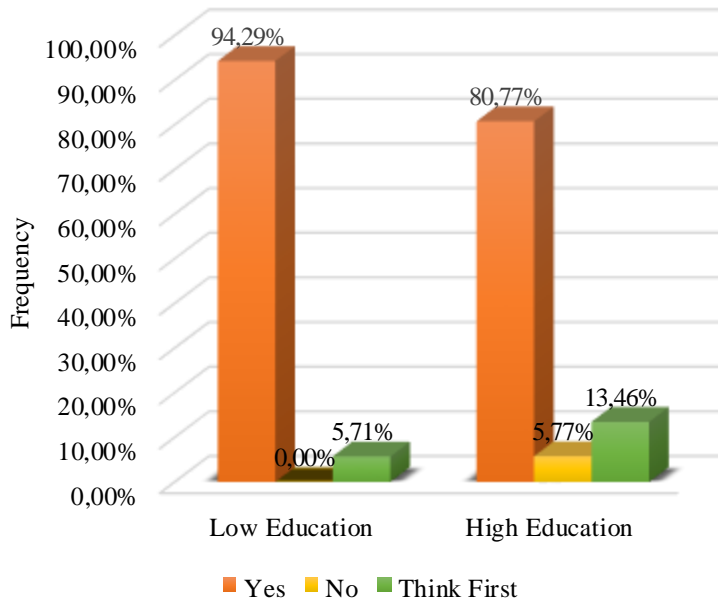


**Graph 2. Spread of Knowledge About The Dangers of Smoking at The Education Level**

From graph 2 it can be seen that the prevalence of knowing the dangers of cigarettes is more in higher education as much as 78,85%. This is not surprising, because someone with higher education must have more knowledge of the dangers of smoking. While the prevalence of those who know the dangers of smoking in education is as low as 68,57%. This is due to the influence of the level of education. Someone who has a higher education is more likely to have higher knowledge than low education.

After knowing the danger we asked a question will the respondent want to stop smoking. The following is explained in the graph of the distribution of education levels for smoking behavior.

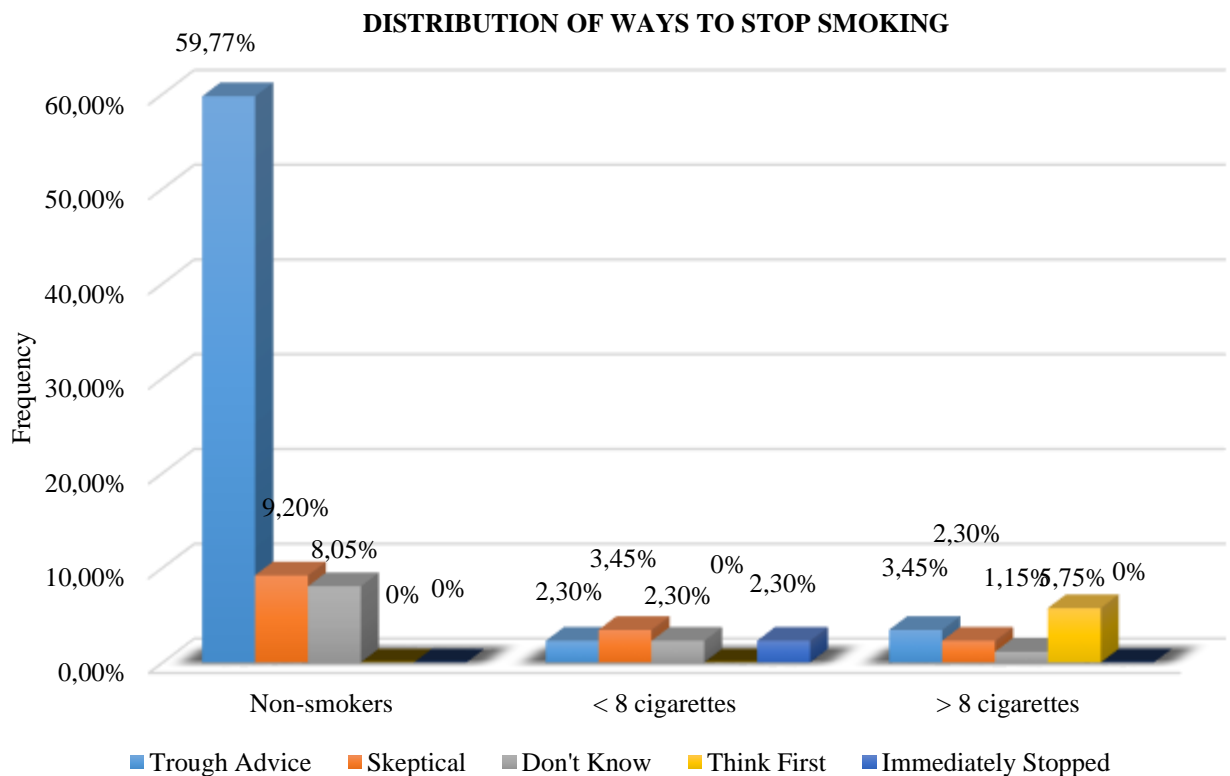
### KNOW THE DANGER AND WANT TO STOP?



**Graph 3. Distribution of Education Level to Smoking Behavior**

From graph 3, a surprising fact is seen, stangely after knowing the dangers of respondents with low education more who choose to stop compared to respondents in higher education. In high prevalence education which shows that there are also many who want to stop, however, there are still many respondents who are highly educated who choose to think before deciding to stop smoking.

From this research illustrates how smoking or not a person is not always determined by the level of knowledge that is against the dangers of smoking. This is interesting because so far the knowledge of cigarettes has always been associated with one's attitude towards smoking.



**Graph 4. Distribution of Advice on How to Stop Smoking**

From graph 4, it is known that more than half of the respondents suggested smoking cessation by advising, while the other four said they did not know how to even be skeptical. Although the distribution of active smokers with less than 8 cigarettes per day shows skepticism and does not know how to stop smoking, a small portion of them say they are ready to stop immediately. While active smokers with more than 8 cigarettes per day have not stated that they are ready to stop and many even think about stop smoking.

### Discussion

Based on the formula from Skinner, formulating that a person's behavior can be formed through a series of habits (Faris, *et al.*, 1957). Habituation must be natural, so the changes that are felt not too drastic. A change must also have a pleasant nature (assuring reward), or far from inconvenience (avoiding punishment) (Schreuders, *et al.*, 2018). Like smoking, it must be natural so that it is easy to accept. Smoking must also have some kind of assuring reward or avoiding punishment so that cigarettes are fun to be repeated over and over so that it becomes a habit.

The natural side of cigarettes is the need for certain substances (namely low-grade stimulant) that make it easier for a person to maintain a performance such as "smoothing" his way of thinking. The condition of each person's brain is different, although it requires to maintain performance when tired, it doesn't have to be filled with cigarettes. This can be replaced with coffee (low-dose caffeine), tyramine in chocolate or cheese, or other food or beverage ingredients with the same properties. However, as though smoking has become the only property believed to improve learning performance. Belief this is what is called assuring reward, and "maintaining" the performance when tired, this is called avoiding punishment.

Indonesian people are still strong in character. When the behavior has been made as closely as possible, then he gets a reward in the form of increased self-confidence, as well as a belief that he will

not be denigrated by others because of his social status (avoiding punishment). On the other hand, imitating behavior aims so that he is not excluded by those around him (social identification to avoid social punishment). The desire to avoid this exclusion has a strong enough influence to eliminate one's critical attitude towards.

According to Emilia in 2008, smoking behavior has to do with knowledge, attitudes toward smoking, and education. Sufficient knowledge will motivate individuals to behave well (Putri, 2010).

Smoking habits on students are caused by misunderstanding of information, the influence of advertising, and the influence of friends. Limited knowledge about cigarettes will be very dangerous, it will be able to encourage someone to do smoking activities that can damage the body.

## CONCLUSIONS AND RECOMMENDATIONS

As explained in religion (in this case Islam) ordered his servant to maintain health, one of which was to enter *halal* and *thoyyib* (good) substances or ingredients into him. If a Muslim includes a substance or material other than these two conditions, let alone a substance or material that is dangerous, then he includes harming or harming himself).

Someone who knows the dangers of smoking does not mean he choose not to smoke, and someone who does not smoke does not mean because he already understands the dangers of smoking. Maybe this sentence can describe the relationship between the knowledge and attitudes of respondents to smoking.

This research confirms the research conducted by Sitti Chotidjah in 2018 which states that there is no relationship between smoking behavior and one's knowledge of smoking (Chotidjah, 2018).

Knowledge of the distribution of education to smoking behavior allows program makers to educate about the dangers of smoking choosing the right targer of education. It is expected that there will be an increase in participation in the community with higher education to carry out the transfer of knowledge to people with low education.

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