Knowledge of the Cigarettes Dangers and Attitudes about Cigarettes on the Intention to Quit Smoking in Teenagers **Smokers in Nganjuk District**

Reni Nurhidayah^{1*}, Katmini², Prima Dewi Kusumawati³, Ratna Wardhani⁴

^{1,2,3,4} Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia *Corresponding author: reni.nurhidayah@strada.ac.id

ABSTRACT

Background: The 2019 Global Youth Survey shows data that 19.2% or 50 million young man and women 13-15 years old smoke worldwide. BPS data through the 2021 Susenas shows that teenage smokers in Nganjuk Regency are 20.12%. The high prevalence of teenage smokers indicates the need for intervention to reduce the number of adolescent smokers as quickly as possible.

Purpose: This study aims to determine the relationship between knowledge of the dangers of smoking and attitudes toward smoking with the desire to stop smoking in adolescents in the Nganjuk Regency.

Methods: An observational design with a cross-sectional approach was used in this study. The sample in this study was 300 respondents who were taken using cluster sampling from 10 junior high schools in Nganjuk Regency. There are three questionnaires that use in this study. Data analysis used the Pearson correlation test and Linear Regression.

Results: The percentage of teenage smokers in Nganjuk Regency is quite high at 33% with a dominance of male youth who start smoking by 11% at the junior high school level. P-value of 0.00 (> 0.05), which means that there is a relationship between attitudes about cigarettes and knowledge of cigarette dangers on intention to quit smoking. Beta value (0.311 > 0.193) said that attitudes about cigarettes have a 31.1% effect in making someone have the intention to quit smoking in a negative relationship.

Conclusion: Attitudes about cigarettes variable have a stronger influence on intention to quit smoking than knowledge of cigarette. This shows that to increase the success of the smoking cessation program for adolescents in Nganjuk District, interventions are needed to increase negative attitudes and knowledge of the dangers of smoking.

Keywords: adolescent, attitudes about cigarette, intention to quit smoking, knowledge of cigarette danger

Received August 10, 2023; Revised September 12, 2023; Accepted October 3, 2023

DOI: https://doi.org/10.30994/jnp.v7i1.440

The Journal of Nursing Practice, its website, and the articles published there in are licensed under a Creative Commons Attribution-Non Commercial-ShareAlike 4.0 International License.

ISSN: 2614-3488 (print); 2614-3496 (online) Vol.7 No.1. October 2023. Page.163-168

BACKGROUND

Tobacco control is one of the main focuses of public health. This is in accordance with the 2030 Sustainable Development target which asks all countries to immediately accelerate the implementation of tobacco control policies. This is due to the still high mortality and morbidity rates due to smoking consumption, in 2017 it was reported that 8 million people in the world died due to smoking consumption and 170.9 million people experienced disabilities due to complications of diseases triggered by smoking consumption. This condition is caused by smoking which is a major risk factor for many diseases such as cardiovascular, respiratory, and cancer problems. The high impact caused by smoking does not significantly reduce the number of smokers, especially in adolescents(Chao et al., 2019; Ma et al., 2021).

Suppressing the number of adolescent smokers is crucial because allowing adolescents to smoke will further increase their dependence on cigarettes as adults and increase the risk of chronic disease during their productive age(Kozhevnikova et al., 2021). However, the number of adolescent smokers continues to increase every year, accompanied by a decrease in the age at which they started smoking. The 2019 Global Youth Survey shows data that 19.2% or 50 million young men and women 13-15 years old smoke worldwide (Ma et al., 2021; Organization, 2020). The prevalence of child smokers in Indonesia continues to increase every year, in 2013 the prevalence of child smokers reached 7.20%, then rose to 8.80% in 2016, 9.10% in 2018, and 10.70% in 2019 (Ditjen Kesehatan Masyarakat, 2020). If not controlled, the prevalence of child smokers will increase to 16% in 2030. BPS data through the 2021 Susenas shows that teenage smokers in Nganjuk Regency are 20.12% (Badan Pusat Statistik Jawa Timur, 2022). The high prevalence of teenage smokers indicates the need for intervention to reduce the number of adolescent smokers as quickly as possible.

A smoking cessation program for adolescents is needed to reduce the number of adolescent smokers. There are many factors that contribute to the success of this smoking cessation program, the main thing is an increase in the intention to quit smoking. There are many factors that influence the intention to quit smoking, there are knowledge regarding the dangers of smoking and their attitude or perspective toward smoking (Kozhevnikova et al., 2021; Ng'ombe et al., 2020; Siregar et al., 2021; Zahrani & Arcana, 2020).

METHODS

An observational research design with a cross-sectional approach was used in this study. The sample in this study was 300 respondents who were taken using cluster sampling from 10 junior high schools in Nganjuk Regency. The instrument used in this study was GATS: H02c to measure knowledge about the dangers of smoking, attitude questionnaires towards smoking, and smoking cessation intention questionnaires. Bivariate data analysis used the Pearson correlation test and Linear Regression to analyze the variables that most influence the intention to stop smoking among adolescents in Nganjuk Regency.

RESULTS

The characteristics of the respondents in this study can be seen in Table 1

Table 1. Characteristics of the Respondents

	Charactetistic	N	%
Sex			
Female		99	33%
Male		198	67%
Age			

https://thejnp.org/

ISSN: 2614-3488 (print); 2614-3496 (online) Vol.7 No.1. October 2023. Page.163-168

13 years old	51	17%
14 years old	145	48%
15 years old	51	17%
Smoking Status		
Yes	100	33%
No	200	67%
Initial Smoking Ages		
Never	207	69%
≤7 years old	6	2%
8-9 years old	20	7%
12-13 years old	28	9%
14-15 years old	33	11%

The table above shows that 66% of respondents are male with 48% of respondents aged 14 years. For the smoking history of adolescents, 33% had ever tried smoking with 11% of respondents starting to try smoking at the age of 14-15 years. From this data, it can be seen that the percentage of teenage smokers in Nganjuk Regency is quite high at 33% with a dominance of male youth who start smoking by 11% at the junior high school level.

Table 2. Bivariate Correlation

	N	r	p-value
Attitudes about cigarettes -Intention quit smoking	300	-0,434	0,000
Knowledge of Cigarettes dangers -Intention quit	300	0,391	0,000
smoking			

The data above shows a p-value of 0.00~(>0.05), which means that there is a relationship between attitudes about cigarettes and knowledge of cigarette dangers on intention to quit smoking. The correlation value (r) obtained between the intention to quit smoking and attitudes about cigarettes is -0.434 and knowledge of cigarettes dangers is 0.391 indicating an adequate correlation (r > 0.250). This means that the lower or negative attitudes about cigarettes, the higher the intention to quit smoking, conversely, the higher the knowledge of cigarettes' danger, the higher the intention to quit smoking.

Table 3. Multivariate Analysis

•	R	R	В	SE	Beta	Sig
		Square				
Attitudes about cigarettes	0,459	0,210	-0,088	0,19	-0,311	0,00
Knowledge of Cigarettes			0,049	0,17	0,193	
dangers						

The table above shows that attitudes about cigarettes are a variable that has a stronger influence on the intention to quit smoking than knowledge of cigarettes' danger. This can be seen in the Beta value (0.311 > 0.193). So it can be said that attitudes about cigarettes have a 31.1% effect in making someone have the intention to quit smoking in a negative relationship, the more negative the attitudes about cigarettes, the greater the intention to quit smoking. The equation obtained from this study is Intention to quit smoking = 0.00 + (0.311x attitudes about cigarettes) + (1.93 x knowledge of cigarettes' danger).

DISCUSSION

Relationship between attitudes about cigarettes and intention to quit smoking

The results showed a significant relationship between attitudes about cigarettes and the intention to quit smoking with a correlation value of 0.434. This is proof that when someone

https://thejnp.org/

ISSN: 2614-3488 (print); 2614-3496 (online) Vol.7 No.1. October 2023. Page.163-168

wants to change his behavior, he must have the right view or perspective on it. When our perspective or attitude still views the behavior as good or positive, it will not be easy to leave it, and when our perspective or attitude is negative about it, it will be easier for us to leave it. Our perspective or attitude is the result of our assessment of something we believe in (Ng'ombe et al., 2020; Vogel et al., 2021).

Attitudes towards smoking differ between smokers and non-smokers. Non-smokers tend to be better able to judge from the available evidence, for example regarding the dangers of smoking or other losses incurred so that it is easy to avoid smoking. But for smokers, smoking is not just a matter of behavior but there is a belief that they believe that smoking has benefits for them. This makes even though there are many negative things that can be obtained from smoking, they are still reluctant to leave it because they feel they still need it. There are emotional and social needs that they get from smoking such as relieving stress, increasing self-confidence, and making it easier for them to socialize because the majority of their environment is smokers. This perspective makes it difficult for them to have a negative attitude about smoking because they feel they are benefiting from this behavior. The more positive their attitude towards smoking, the lower their desire to quit smoking (Jackson et al., 2020; Saleem et al., 2023; Vogel et al., 2021).

In addition, the social norms that exist in society also determine the attitude they have about smoking. When the social norms that develop in the environment where they live view that smoking is not a good thing, then their attitude will tend to be negative about smoking and it will be very easy for them to choose to quit smoking. Besides that, the negative norms towards smoking will also be very supportive to strengthen commitment during the smoking cessation process, so that the success of quitting smoking will also be higher. In contrast, when the surrounding environment has a positive perspective about smoking because there are many smokers, the attitude about smoking in that person will also be positive. This condition will also trigger their small desire to quit smoking (Amin et al., 2020; Jackson et al., 2020).

Relationship of Knowledge of the Cigarettes Dangers with Intention To Quit Smoking

The results showed a significant relationship between knowledge of cigarette dangers and the intention to quit smoking with a correlation value of 0.391. This is proof that when someone wants to change his behavior, he must know this matter so that he can make a good assessment regarding the pros and cons of this behavior. Knowledge makes a person able to assess the benefits and losses arising from a behavior so that with good knowledge it will be easier for someone to do or not to do that behavior (Lorensia et al., 2021; Upadhyay et al., 2019; Vogel et al., 2021).

Knowledge about the dangers of smoking will make someone more aware of the dangers that can be caused when smoking so that they will tend to avoid or try to stop smoking behavior. Good knowledge about the dangers of smoking will increase the ability to decide to change behavior by quitting smoking. Good knowledge will increase motivation and commitment to quit smoking because of the judgment that smoking is harmful to health. So to increase the success of smoking cessation programs, interventions are needed to increase knowledge regarding the dangers of smoking. With efforts to increase knowledge, it is hoped that assessments related to smoking behavior will also change so that it will increase the intention to quit smoking and the success of the program (Lee et al., 2022; Li et al., 2019).

CONCLUSION

The results showed that attitudes about cigarettes and knowledge of smoking dangers had a fairly strong correlation with the intention to quit smoking with correlation values of 0.434 and 0.391. Attitudes about cigarettes variable have a stronger influence on intention to quit smoking than knowledge of cigarette dangers from the results of a linear regression test

ISSN: 2614-3488 (print); 2614-3496 (online) Vol.7 No.1. October 2023. Page.163-168

with a Beta value of 0.311. This shows that to increase the success of the smoking cessation program for adolescents in Nganjuk District, interventions are needed to increase negative attitudes and knowledge of the dangers of smoking either through the formation of smoking policies or health promotion related to the dangers of smoking more massively and periodically.

ACKNOWLEDGMENTS

Thank you to The Union through C-STRADA for providing funding for this research. In addition, thanks to the student respondents in Nganjuk Regency who have agreed to be involved in this research.

CONFLICTS OF INTEREST

There is no conflict of interest in this research. The results of this research will be submitted to the Nganjuk District Health Office as a reference for Academic Papers to make policies related to tobacco control.

REFERENCES

- Amin, S., Dunn, A. G., & Laranjo, L. (2020). Social influence in the uptake and use of electronic cigarettes: a systematic review. *American Journal of Preventive Medicine*, 58(1), 129–141.
- Badan Pusat Statistik Jawa Timur. (2022). Percentage of People Aged 15 Years and Above Who are Smoking During a Month Prior to The Survey.
- Chao, D., Hashimoto, H., & Kondo, N. (2019). Social influence of e-cigarette smoking prevalence on smoking behaviours among high-school teenagers: Microsimulation experiments. *PloS One*, *14*(8), e0221557.
- Ditjen Kesehatan Masyarakat, R. K. R. (2020). Profil Kesehatan Indonesia Tahun 2020.
- Jackson, S. E., Proudfoot, H., Brown, J., East, K., Hitchman, S. C., & Shahab, L. (2020). Perceived non-smoking norms and motivation to stop smoking, quit attempts, and cessation: a cross-sectional study in England. *Scientific Reports*, 10(1), 10487.
- Kozhevnikova, T. N., Geppe, N. A., Osmanov, I. M., Gerasimenko, N. F., Mashukova, N. G., Il'enkova, N. A., Malakhov, A. B., Chepurnaia, M. M., Odinaeva, N. D., & Savvina, N. V. (2021). The problem of teenage tobacco smoking: yesterday, today, tomorrow. *Pediatrics. Consilium Medicum*, 2, 101–108.
- Lee, E.-H., Shin, S.-H., & Jeong, G.-C. (2022). Smoking awareness and intention to quit smoking in smoking female workers: secondary data analysis. *International Journal of Environmental Research and Public Health*, 19(5), 2841.
- Li, W. H. C., Ho, K. Y., Xia, V. W., Wang, M. P., Lam, K. K. W., Chan, S. S. C., & Lam, T. H. (2019). Helping hospitalized smokers in Hong Kong quit smoking by understanding their risk perception, behaviour, and attitudes related to smoking. *Journal of Advanced Nursing*, 75(10), 2167–2177. https://doi.org/https://doi.org/10.1111/jan.14084.
- Lorensia, A., Pratama, A. M., & Hersandio, R. (2021). Knowledge and attitudes on smoking cessation of e-cigarettes: A mixed-methods study of pharmacy students in surabaya, indonesia. *Journal of Preventive Medicine and Hygiene*, 62(4), E918.
- Ma, C., Xi, B., Li, Z., Wu, H., Zhao, M., Liang, Y., & Bovet, P. (2021). Prevalence and trends in tobacco use among adolescents aged 13–15 years in 143 countries, 1999–2018: findings from the Global Youth Tobacco Surveys. *The Lancet Child & Adolescent Health*, *5*(4), 245–255.

ISSN: 2614-3488 (print); 2614-3496 (online) Vol.7 No.1. October 2023. Page.163-168

Ng'ombe, J. N., Nedson, N. R., & Tembo, N. F. P. (2020). "Look at Me, I Plan to Quit Smoking": Bayesian Hierarchical Analysis of Adolescent Smokers' Intention to Quit Smoking. *Healthcare*, 8(2), 76.

- Organization, W. H. (2020). Summary results of the global youth tobacco survey in selected countries of the WHO European Region. World Health Organization. Regional Office for Europe.
- Saleem, M. A., Shafiq, A., Afzal, H., Khalid, A., & Nguyen, N. (2023). Addiction or social need: towards a model to predict smoking cessation intentions. *Journal of Social Marketing*, 13(2), 295–322.
- Siregar, S. F., Siregar, P. A., Apriliani, A., Siregar, R. E., & Hasanah, N. F. (2021). The Effect of Image Message Perception on Cigarette Background and The Intention to Stop Smoking Teenagers. *Communicare: Journal of Communication Studies*, 8(1), 41–50.
- Upadhyay, S., Lord, J., & Gakh, M. (2019). Health-information seeking and intention to quit smoking: do health beliefs have a mediating role? *Tobacco Use Insights*, 12, 1179173X19871310.
- Vogel, E. A., Ramo, D. E., Rubinstein, M. L., Delucchi, K. L., Darrow, S. M., Costello, C., & Prochaska, J. J. (2021). Effects of social media on adolescents' willingness and intention to use e-cigarettes: an experimental investigation. *Nicotine and Tobacco Research*, 23(4), 694–701.
- Zahrani, C. I., & Arcana, I. M. (2020). Determinan Perilaku Remaja Merokok Setiap Hari Di Indonesia. *Seminar Nasional Official Statistics*, 2020(1), 519–528.