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Determinant of Smoking Behavior in Students at the Health Sciences Faculty of Universitas Muhammadiyah Pontianak

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ABSTRACT

Introduction: Risk data for 2018 showed an increase in the number of smokers in the Indonesian population, with 33.8% of those over 15 years of age being predominantly male (62.9%). The increase in this number was followed by a rise in some smoking-related diseases such as hypertension, stroke, and other chronic diseases. There are many factors that affect smoking behavior..

Objective: The study aimed to find out the prevalence of smoking behavior in students as well as the determinants with smoke behaviour in students at the Health Sciences Faculty of Universitas Muhammadiyah Pontianak.

Method: The research uses quantitative research as well as observational analytical design with a cross sectional approach. The sample of this research was partly male students at the Faculty of Health Sciences a total of 64 with incidental sampling techniques. Data analysis using unvariate and bivariate analysis (uji Chi-Square).

Result: This study showed that there was a significant correlation between the role of parents, the influence of peers, the impact of advertising and smoking behavior on students of Universitas Muhammadiyah Pontianak (p value < 0.05) with the prevalence of students who smoke 45.3%.

Conclusion: Continuous health promotion and implementation of the No Smoking Area (KTR) in the campus environment are needed.

Keywords: Determinants; Prevalence; Smoking; Students

INTRODUCTION

In everyday life, many people smoke in various public places, such as markets, offices, recreation areas, restaurants, and other public places, even in their own homes. However, smoking habits are not only limited to men but also to women, teenagers, and even children. Currently, conventional cigarettes are still very popular among the public. Around 4000 types of dangerous chemicals are contained in conventional cigarette smoke, including nicotine, carbon monoxide, nitrogen oxide, tar, and other dangerous substances (1).

Smoking habits are a major health problem in many countries, and it cannot be denied that the number of smokers throughout the world is very large. Data from various sources shows that there are around 1.3 billion people worldwide who smoke, with more than 942 million men and 175 million women aged 15 years and over (2). Compared to other causes of death, such as drug and alcohol abuse, accidents, and HIV (human immunodeficiency virus), smoking has a significantly higher death rate.

The percentage of smokers over 15 years old was 33.8% in 2018, according to data from Riskesdas, indicating an increase in smoking habits among Indonesians. Fifty-two percent of men and eight percent of women were smokers, respectively. Rising smoking-related illnesses like hypertension (3), stroke, and other chronic diseases are coinciding with this rise in smokers (4). While some individuals believe that smoking calms them down and eases their troubles, they are unaware of the negative effects smoking can have on their health, particularly on their lungs. Smoking habits affect a large number of individuals in our nation, particularly youths, who need to be given significant attention. The harmful effects of smoking affect not only those who smoke actively but also others in the vicinity.

A number of factors, including the influence of friends who smoke and make them feel more manly than nonsmokers, the lack of parental involvement in children's development, the affordability of cigarettes for teenagers and adults, particularly students, the influence of advertising, and the lack of strict policies prohibiting smoking on campus or designating a smoking-free area, are some of the factors that drive students to smoke (5). Among the encouraging elements are peers. They are related to one another and consequently have an influence on one another because they are of the same age.

Teenagers who smoke see themselves as independent individuals, and they perform better and receive support from their peers. This encompasses the phases of teenage smoking behavior as well. This is also consistent with studies done by earlier researchers, who discovered that many commercials are associated with smoking and that people who smoke do in fact get encouragement for it (6). People are influenced by social media and television commercials for cigarettes. Cigarette firms typically display advertisements for their products. Naturally, this may lead to a rise in the prevalence of smoking (7). Students should be very sensitive to societal occurrences. Nonetheless, smoking has become a widespread occurrence among students.

Pontianak Muhammadiyah University, one of the private universities in the Pontianak metropolitan region, has a large student body, which increases the likelihood of smoking behavior. According to preliminary findings, many students continue to smoke on campus. Smoking activities on campus can generate a terrible image as well as have a negative impact on the health of the campus environment. The purpose of this study was to determine the prevalence of smoking behavior and the factors that influence it among students at Muhammadiyah University's Faculty of Health Sciences in Pontianak.

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METHODS

This study employs quantitative research methods, including an observational analytical design and a cross-sectional approach. The sample for this study was 64 male students from the Faculty of Health Sciences at Universitas Muhammadiyah Pontianak, selected using an incidental sampling technique. The data was analyzed using univariate and bivariate methods (Chi-Square test).

This research instrument uses a questionnaire that includes knowledge variables (consisting of 5 questions or statements covering the impact of smoking behavior, dangers of smoking, and smoking policies), the role of parents (consisting of 5 questions or statements covering smoking behavior habits in parents and parental education), peers (consisting of 5 questions or statements covering the impact of the social environment), advertising influence (consisting of 5 questions). This research has passed the ethical review of the Faculty of Health Sciences, Muhammadiyah University of Pontianak, Number: 003/KEPK-FIKES/UM PONTIANAK/ 2023.

HASIL

According to univariate analysis, the majority of respondents had good knowledge (90.6%), parents played a positive role (62.5%), and 82.8% were not influenced by their peers. Meanwhile, advertising is dominated by tobacco advertising, which has a low influence of 81.1%. Respondents smoked at a lower rate than smokers (54.7%). The univariate analysis yielded the following results:

Tabel 1. Analisis Univariat

Variable	n = 64	%
Knowledge		
Good	58	90.6
Less Good	6	9.4
Role of Parent		
Good	40	62.5
Less Good	24	37.5
Peer Influence		
Positive	53	82.8
Negative	11	17.2
Influence of Cigarette Advertising		
Low	52	81.1
High	12	18.8
Smoking Behavior		
Yes	35	54.7
No	29	45.3
Total	64	100.0

Soource: Primary Data, 2023

Table 2 below shows that the proportion of respondents with good knowledge tends to smoke more (66.7%) than those with less knowledge (44.8%). The Chi-Square test obtained a p score of 1.103 (> 0.05), meaning there is no significant relationship between knowledge and smoking behavior. In addition, table 2 also shows that there is a significant relationship between the role of parents (PR = 2.025), peers (PR = 3.435), the influence of advertising (PR = 3.808), and smoking behavior (p value < 0.05). Here's the result of the bivariate analysis:

Table 2. Bivariate Analysis

Variable	S	Smoking Behavior				
	N	No		zes .	p-value	PR
	n	%	n	%	_	
Knowledge						
Good	3	3.0	3	66.7	0.809	
Less Good	32	55.2	26	44.8		
Role of Parent						
Good	27	67.5	13	32.5	0.008	2.025
Less Good	8	33.3	16	66.7		
Peer Influence						
Positive	33	62,3	20	37.7	0.008	3.425
Negative	2	18.2	9	81.8		
Influence of Cigarette						
Advertising						
Low	33	63.5	19	36.5		
High	2	16.7	10	83.3	0.003	3.808

DISCUSSION

The findings of this study revealed that knowledge was not substantially associated with smoking habits. This study's findings are consistent with prior research, which found that knowledge did not significantly influence smoking behavior (8–10). Smoking behavior is influenced not only by knowledge but also by one's own intents and wants, among other factors (11).

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Interestingly, our study found that most respondents who had a high level of knowledge about smoking smoked more (12). There is no substantial link between knowledge and smoking behavior. This study provides insight into the reality that knowledge does not always lead to behavior. The research findings are inversely proportionate to Lawrence Green's behavior theory, which claims that knowledge is a predisposing element that determines behavior (13).

Knowledge about cigarettes is gained from those closest to them, and social support is provided to the individual so that someone is exposed to smoking habits (13). Universitas Muhammadiyah Pontianak has public legislation governing non-smoking zones (KTR) as well as an anti-smoking program, which benefits the academic community by increasing awareness and understanding. However, no punishments have been imposed on academics who break these guidelines thus far. Clear and harsh consequences are thus required for infractions in non-smoking places.

According to this study, there is a significant link between parental involvement and smoking behavior. The outcomes of this study are consistent with LW Green's hypothesis, which claims that parents (family) play a reinforcing role in shaping a person's behavior (13). Parents are role models for their children (14). This is consistent with an earlier study that found a link between parental involvement and teenage smoking behavior (15,16). Parents who smoke are in the early stages of smoking in their early and late teens, and quitting smoking reduces their susceptibility to smoking (17).

Parents play a variety of roles in preventing children from smoking, including setting household rules, caring for and educating children, serving as role models for children, and disciplining children who break smoking regulations (11). Sons of smokers are more likely to smoke (18). The primary risk of smoking initiation in adolescents is imitation of parental smoking behavior, and observation of parental smoking is linked to adolescent smoking and heavy smoking in early adulthood (17,19). Adolescents whose parents smoke are more likely to smoke (20).

Parents can take action to avoid smoking behavior by disciplining children who engage in smoking. Actions that can be performed at the outset include advising youngsters who smoke. Parents serve as role models for their children's behavior since they grow up alongside them. Whether they realize it or not, parents' activities impact their children's smoking habits. Parents who do not smoke can directly minimize the prevalence of smoking in their children (19).

The findings of this research strengthen previous theories and research that state that peers are significantly related to adolescent behavior, including smoking behavior. The results of the bivariate analysis of this study showed a significant relationship (p value < 0.05). Peers are a reinforcing factor that influences a person's behavior (13). Adolescence and early adulthood are periods of life where peers are influenced (21).

Peers influence smoking behavior, as earlier studies have shown (22–24). The primary purpose of establishing friends with peers is to become a member of a social group (25). Individuals seek to mimic their peers' actions so that they appear to have the same ideals and behaviors. There is a worry of missing out socially if they do not follow what is popular among their peers. However, most youngsters nowadays have an incorrect understanding of social group approval. They believe that smoking is a social standard that must be fulfilled in order to be accepted. This phenomenon is known as the false consensus effect (26). In the future, efforts to prevent and control smoking behavior in the adolescent and young adult age groups will be through peer education, so it is hoped that a positive environment can support positive behavior as well.

This study discovered that there is a link between cigarette advertisement and smoking habit. According to behavioral theory, cigarette advertising is an enabler of health-related behavior (13). This is consistent with prior research, which discovered a link between the influence of cigarette advertisements and smoking behavior among teens in Madiun Regency. Cigarette advertising is designed to provide information while also enticing consumers to attempt or follow whatever is depicted in the advertisement, particularly late teens who are very interested in consuming advertised cigarette items. Aside from that, commercials frequently depict smoking as a symbol of masculinity, encouraging teenagers and adults to engage in this practice (21). This is also in accordance with research conducted by researchers: the more students who are exposed to cigarette advertisements by seeing, reading, and listening to cigarette advertisements, the higher the risk of smoking behavior.

Young adolescents who strongly identified with the models used in cigarette advertisements had higher smoking intentions post-exposure to the advertisements compared to younger adolescents who weakly identified with the models used in the advertisements; conversely, older adolescents who weakly identified with the models used in cigarette advertisements had stronger post-exposure smoking intentions compared with older adolescents who strongly identified with the models used in the advertisements (27). Cigarette advertisements on social media and various media need to be reviewed in their settings to limit exposure to teenagers.

CONCLUSION

This research found that 54.7% of Pontianak Muhammadiyah University students smoked. Significant determinants of smoking behavior include the role of parents, peers, and cigarette advertising, while knowledge is not significantly related.

SUGGESTION

Based on this research, health promotion is needed by involving family (parents) and peers, limiting cigarette advertising, and regulating cigarette sales. It is necessary to implement a no-smoking area (KTR) so that it can create a clean and healthy campus environment.

REFERENCES

- 1. Putra, Handriko, Kurniawaty. Pengaruh Efek Paparan Asap Rokok Elektrik Dibandingkan Paparan Asap Rokok Konvensional Terhadap Gambaran Histopatologi Paru Mencit Jantan (Mus Musculus). J Major. 2019;8(1):90–4.
- 2. Salsabila, Indraswari, Sujatmiko. Gambaran Kebiasaan Merokok Di Indonesia Berdasarkan Indonesia Family Life Survay. Med Technol Public Heal J. 2022;7(1).
- 3. Sari N, Yuliana D, Agata N, Febriawati H. Faktor Karakteristik Responden Yang Berhubungan Dengan Manajemen Pengendalian Hipertensi. J Keperawatan [Internet]. 2023;15(1):69–76. Available from: http://journal2.stikeskendal.ac.id/index.php/keperawatan/article/view/117/512
- 4. Boseke, Sulaemana Tucunan. Determinan Perilaku Merokok Kepala Keluarga di Kelurahan Woloan 1 Utara Kecamatan Tomohon Barat Kota Tomohon. Kesehat Masy. 2019;8(7):319–27.
- 5. Ulfa, Samingan, Suwarto. Perilaku Merokok Pada Mahasiswa Di Universitas Respati Indonesia. J Bid Ilmu Kesehat. 2017;9(1):563–70.
- 6. Winarsih. Hubungan Antara Pengaruh Keluarga, Teman, Dan Iklan Terhadap Perilaku Merokok Pada Siswa Laki-Laki Di SMP Negeri 19 Samarinda. Kesehat Masy. 2016;34.
- 7. Fadila, Widati, Fattah. Perbandingan Pengaruh Iklan Rokok Terhadap Perilaku Merokok Remaja Di Daerah Kota dan Desa Kabupaten Pamekasan. Med Technol Public Heal J. 2022;5(2):198–208.
- 8. Budiyati G, Sari D, Suryati S. Pengetahuan, Sikap Dan Perilaku Merokok Pada Remaja. J Ilm Permas J Ilm STIKES Kendal. 2021;11(1):11–8.
- 9. Julaecha J, Wuryandari A. Pengetahuan dan Sikap tentang Perilaku Merokok pada Remaja. J Akad Baiturrahim Jambi. 2021;10(2):313–8.
- 10. Xu X, Liu L, Sharma M, Zhao Y. Smoking-related knowledge, attitudes, behaviors, smoking cessation idea and education level among young adult male smokers in Chongqing, China. Int J Env Res Public Heal. 2015;15(2):2135–49.
- 11. Susanto A, Hartono H, Nurhaeni D, Kartono D. The Role of Parents to Prevent Early Adolescents Smoking Behavior: A Qualitative Study on Adolescents in Tegal City, Indonesia. Sys Rev Pharm. 2020;11(7):71–5.
- 12. Jaime E, Shensa A, Barnett T, Cook R, Primack B. Knowledge, Attitudes, and Normative Beliefs as Predictors of Hookah Smoking Initiation: A Longitudinal Study of University Students. Nicotine Tob Res. 2014;16(6):647–654.
- 13. Green L, Kreuter M. Health Planning, Promotion. 1999. 30–32 p.
- 14. Rahmawati Y, Raudatussalamah R. Perilaku Merokok Pada Pelajar: Peran Orang Tua Dalam Pengasuhan. Psikobuletin Bul Ilm Psikol. 2020;1(1):20 28.
- 15. Rongalaha A, Blandina O, Salamor J. Hubungan Peran Orang Tua Terhadap Perilaku Merokok Remaja Di Desa Kupa Kupa Kecamatan Tobelo Selatan. LELEANI J Keperawatan dan Kesehat Masy Progr Stud Keperawatan. 2021;1(2):70–7.
- 16. Badri I, Hayat N, Rahmadeni A. Hubungan Peran Orang Tua Dengan Perilaku Merokok Pada Remaja Di Wilayah Kerja Puskesmas Galang. J Keperawatan Muhammadiyah. 2021;6(4):56–60.
- 17. Paavola M, Vartiainen E, Puska P. Smoking cessation between teenage years and adulthood. Heal Educ Res. 2001;16(1):49–57.
- 18. Alves J, et al. The role of parental smoking on adolescent smoking and its social patterning: a cross-sectional survey in six European cities. J Public health Res. 2017;39(2):339–346.
- 19. Yang S, Lynch J, Schulenberg J, et al. Emergence of socioeconomic inequalities in smoking and overweight and obesity in early adulthood: the National Longitudinal Study of Adolescent Health. Am J Public Heal. 2008;98(3):468–477.
- 20. Wilkinson A, Shete S, Prokhorov A. The moderating role of parental smoking on their children's attitudes toward smoking among a predominantly minority sample: a cross-sectional analysis. Subst Abus Treat Prev Policy. 2008;14(3):18.
- 21. Tianingrum N, Nurjannah U. Pengaruh Teman Sebaya Terhadap Perilaku Kenakalan Remaja Sekolah Di

- Samarinda. J Dunia Kesmas. 2019;8(4):275–82.
- 22. Scalici F, Schulz P. Parents' and peers' normative influence on adolescents' smoking: results from a Swiss-Italian sample of middle schools students. Subst Abus Treat Prev Policy. 2017;12(5).
- 23. Mpousiou D, Lamprou D, Toumpis M, Andritsou M, Karathanasi A, et a. No Title. Eur Respir J. 2018;52:PA4568.
- 24. Nuha R. Peer Affects Smoking Behavior in Youth: A Meta-Analysis. In: International Conference On Public Health.
- 25. Komasari A, Helmi A. Faktor-Faktor Penyebab Perilaku Merokok pada Remaja. J Psikol. 2000;1:33–47.
- 26. Yarnell L, Brown H, Pasch K. Classroom Norms and Individual Smoking Behavior in Middle School. Am J Heal Behav. 2012;36:12–9.
- 27. Shadel W, Tharp-Taylor S, Fryer C. How does exposure to cigarette advertising contribute to smoking in adolescents? The role of the developing self-concept and identification with advertising models. Addict Behav. 2009;34(11):932–7.