



Health Belief Model of Smoking Behavior Model as Effort on Tobacco Control Policy within Students in Public Junior High School (SMP Negeri 1) Palu

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Abstract

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BACKGROUND: Smoking is among adults and is also frequently found in young smokers. In the world and Indonesia, the trend of smoking tends to increase and this trend does not only happen in adults but also in adolescents.

AIM: The purpose of this study was to determine the Health Belief Model of smoking behavior as a follow-up of tobacco control policies for junior high school students at SMP Negeri 1 Palu.

METHODS: The type of research was qualitative research with a case study approach. The informants in this study consisted of one key informant (the principal of SMP Negeri 1 Palu), the regular informant (five male students at SMP Negeri 1 Palu), and additional informants (two parents of students of SMP Negeri 1 Palu), the number of informants in this study was eight people. The data were collected through triangulation techniques, such as in-depth interviews, observation, and documentation using interview guidelines.

RESULTS: In the case of medical illness, these dimensions include acceptance of the diagnosis results, personal estimation of the presence of susceptibility (sensitivity), and susceptibility to disease in general (perceived susceptibility). The informant's statement explained that smoking could increase the seriousness of a disease, especially those who already have a history of previous illness (perceived severity). The benefits of quitting smoking, namely, that life will be healthier, reduce spending much money, and avoid disease (perceived benefits). Perceived barriers are perceived barriers to change or when individuals encounter barriers to taking these actions. A person's difficulty in quitting smoking is social factors and the surrounding environment. Adolescents seek a sense of comfort and attachment to peers and make adolescents have self-socialization, namely, putting pressure on themselves to adopt behaviors that they think are liked by others.

CONCLUSION: Social and environmental factors have a significant influence on adolescent behavior; this is influenced because they want to join in seeing their friends in doing a smoking behavior, such as wanting to be seen that he can also do this, wanting to look slang in the eyes of his friends, incitement from friends to engage in smoking behavior.

Introduction

Smoking behavior is one of the world's biggest health concerns. The increase in cigarette consumption has an impact on the higher burden of disease due to smoking and increased mortality due to smoking [1], [2]. In 2030, it is estimated that the death rate of smokers in the world will reach 10 million people, and 70% of them come from the developing countries [3]. In addition, cigarettes also cause a very heavy burden on economies around the world [4]. The World Health Organization (WHO) estimates that, globally, smoking causes over US\$500 billion in economic damage each year [2].

Indonesia is one of 193 countries that have signed a commitment to realize the Sustainable Development Goals (SDGs) [5]. The SDGs are a long-term global agenda, consisting of 17 goals and 169 targets that will become a reference for world development over the next 15 years [6]. As a global

agenda with aspirations for a future vision, linking tobacco control for the younger generation with the 17 SDGs goals becomes very logical. The relationship between these goals with tobacco control focuses not only on the third goal of health but also on other goals. The younger generation is the link that can link all development goals and has a central position in all human development efforts.

Control strategies in overcoming problems related to smoking have been prepared by the World Health Organization (WHO). However, there are still many people who smoke. The act of smoking can cause diseases that can lead to death [7]. Ironically, this smoking habit, especially in Indonesia, seems to have become entrenched, even though many smokers are aware and admit that there is a danger that smoking can trigger cancer in their bodies [8]. Nevertheless, they still do not want to quit smoking because it is too late for them to quit [9]. Smoking is not only done by adults but also not infrequently we find that smokers are children

at a young age [10]. They are familiar with cigarettes from various sources in their environment. Starting from this introduction, the children tried the smoking behavior. Smoking habits that start when children are seen from various perspectives are detrimental, both for themselves and those around them [11].

Furthermore, the promotion of healthy behavior cannot be done just like that because the factors that influence the behavior itself must be known. Many studies reveal that health beliefs affect an individual's healthy behavior. Health belief is a factor that can influence individual health in two ways, namely, by influencing their behavior and by influencing their psychological system [12].

A countermeasure is needed based on the adverse effects of smoking on health and the economy. To combat the global tobacco use epidemic, the WHO in the Framework Convention on Tobacco Control (FTCT) has developed a strategy used by member countries in controlling the tobacco epidemic. In the first strategy, monitoring tobacco use, and prevention policies, the tobacco control system uses indicators in the form of the prevalence of tobacco use, the impact of implementing tobacco control policies, and advertising, promotion, and development of the tobacco industry in the fourth strategy [13]. Warn about the dangers of tobacco or alert the public to the dangers of tobacco in this strategy experience in various countries shows that health messages in the form of images are effective in making the public, especially tobacco users, aware of the dangers of tobacco use, and encourage them to quit smoking [14].

According to the Indonesian Central Statistics Agency of 2018, the percentage of smoking in the population aged 15 years by province (percent), the data presented show that there is an increase in the prevalence of smokers aged 15 years in Central Sulawesi, namely, in 2015 by 32.56%, in 2016 by 31.88%, in 2017, it was 32.18%, and in 2018, it increased by 35.57%. Central Sulawesi exceeds the national prevalence of 35.57% [15].

The theory of the Health Belief Model is an individual's behavior that is influenced by the individual's perceptions and beliefs regardless of whether these perceptions and beliefs are following reality or not. In this case, it is very important to distinguish between objective and subjective health assessments. Objective assessment means that health is assessed from the point of view of health workers, while subjective assessment means that health is assessed from the individual's point of view based on their beliefs and beliefs; in reality, this subjective assessment is often found in the community (Priyoto, 2014).

Smoking behavior is considered detrimental from various perspectives. Smoking behavior is an activity carried out by individuals in the form of burning and smoking and can cause smoke inhaled by the people

around them [16]. Cigarettes are processed products of packaged tobacco, including cigars or other forms produced from *Nicotiana tabacum*, *Nicotiana rustica*, and other species or their synthesis containing nicotine and tar with or without additional ingredients [17].

The purpose of this study was to determine the Health Belief Model of smoking behavior as a follow-up of tobacco control policies for junior high school students at SMP Negeri 1 Palu.

Methods

This type of research was qualitative, using a case study approach. A case study was a study that explores a problem with precise boundaries, has in-depth data collection, and includes various sources of information. This research was limited by time and place, and the cases studied were in the form of programs, events, activities, or individuals. The informants in this study consisted of one key informant (the principal of SMP Negeri 1 Palu), the regular informant (five male students at SMP Negeri 1 Palu), and additional informants (two parents of students of SMP Negeri 1 Palu), the number of informants in this study was 8 people. It collected data through triangulation techniques, namely, in-depth interviews, observation, and documentation using interview guidelines.

The steps of data analysis in this study are (1) data reduction, (2) data presentation, (3) and conclusion drawing. In maintaining the validity of the data that have been collected, the researcher uses method triangulation and source triangulation. Method triangulation is carried out by comparing information from in-depth interviews recorded with observations through photo documentation at the research location and existing theories. Source triangulation is done by comparing the truth of key informant information with triangulated informants.

Results and Discussion

Based on the results of the study, the responses of students of SMP Negeri 1 Palu regarding susceptibility to diseases caused by smoking, namely smoking behavior can cause diseases such as cancer, shortness of breath, pregnancy, and fetal disorders. Informants only mention various diseases that are only listed on cigarette packages. Informants are afraid of the picture of disease on cigarette packages, but when they are addicted, they consider the picture normal. This habit can increase the seriousness of the disease because cigarettes contain harmful substances that can

cause disease, especially in people who already have a history of previous illnesses. However, the informants do not know specifically what substances are contained in cigarettes and only stated dangerous substances. They also stated that passive smoking is more dangerous than active smoking. Those students also stated several benefits of quitting smoking, such as avoiding and reducing disease. In this case, the informants also provide very limited answers, and they still do not know what benefits are obtained from quitting smoking.

Perceived Susceptibility Variables

Perceived susceptibility is the perceived susceptibility of personal risk or susceptibility construct. This refers to a person's subjective perception of the risk of his health condition. In the case of medical illness, these dimensions include acceptance of the diagnosis results, personal estimation of the presence of susceptibility (sensitivity), and susceptibility to disease in general [18]. This research was implemented at home using an online system with ordinary informants, namely, students of SMP Negeri 1 Palu, and additional informants, namely, parents of students. In contrast, interviews with key informants, namely, the principal, were conducted at SMP Negeri 1 Palu. This research took place on May 18, 2020–June 19, 2020, with in-depth interviews with ordinary informants, namely, students of SMP Negeri 1 Palu, key informants for the principal of SMP Negeri 1 Palu, and additional informants of parents of students of SMP Negeri 1 Palu.

Based on interviews conducted by researchers with ordinary informants regarding the informant's response when he found out he had suffered from a disease due to smoking, the informant stated that he would stop consuming cigarettes because it was clear that smoking causes disease. This is influenced because the informant has read references related to smoking-related diseases; this makes the informants stop smoking if they know that they have suffered from smoking-related diseases. However, the problem is when the informant has not suffered from a disease or has not felt any symptoms, the informant will continue to smoke because the informant thinks that he will not get disease due to smoking, but when he feels the symptoms of the disease that the informant has known caused by smoking, that is, where informants will try to stop smoking cigarettes.

Informants' knowledge in this matter is very lacking based on the results of triangulation of sources, and the provision of information is minimal. Informants do not know that cigarettes have a long term to feel symptoms and even get sick due to long-term smoking. This is also reinforced by parents' statements regarding parents' responses to smoking behavior in children,

and they disagree that their children smoke because smoking causes disease, and their children do not have an income, so they are afraid that their children will steal to buy cigarettes.

Smoking behavior is harmful to health [19]. Smoking irritates the throat and airways and is sometimes associated with loss of appetite, nausea, shortness of breath, and irregular heartbeats. It has even been known that smoking (cigarettes) causes chronic respiratory disease and often leads to death. Smokers have a high chance of developing lung, throat, and tongue cancer. In addition, smokers can also get emphysema and bronchitis. At the same time, the study results found that the informants would stop consuming cigarettes when they knew that cigarettes could cause a disease. This is also in line with the research results of Tantri *et al.* (2018), namely, the increase in smoking behavior impacts the higher burden of disease due to smoking and increased mortality [20].

Perceived Severity Variable

Perceived severity is a perceived seriousness about the seriousness of a disease, including evaluation of clinical and medical consequences (for example, death, disability, and illness) and social consequences that may occur (such as effects on work, family life, and social relationships). Based on interviews conducted by researchers to ordinary informants regarding the responses of informants regarding whether smoking can increase the seriousness of the disease, the informant stated that smoking could increase the seriousness of the disease because in the cigarette, there are harmful substances that can cause disease and said especially if someone already has a history of a particular disease that can make a disease worse. The informant's statement explained that smoking could increase the seriousness of a disease, especially those who already have a history of previous illness.

This study is in line with the results of research by Tantri *et al.* (2018); the increase in smoking behavior impacts the higher burden of disease due to smoking and increased mortality because cigarettes contain many harmful substances that can cause various diseases [20]. The results of another study show that the number of current smokers in Indonesia remains high and that smoking increases the risk of all-cause mortality and this situation is expected to directly impact many health problems in the future [21].

Perceived benefits variable

Perceived benefits are perceived benefits, acceptance of one's susceptibility to a condition that is believed to cause seriousness (perceived threat)

encourages it to produce a force that supports behavior change. This depends on a person's belief in the effectiveness of the various available efforts in reducing the threat of disease or the perceived benefits of taking these health efforts. Based on interviews with informants in the lay category regarding the benefits of quitting smoking, namely living a healthier life, reducing spending a lot of money, and avoiding disease. As we know, changing behavior to be healthy will get many benefits, such as quitting smoking, you will feel healthier, prevent disease, protect surrounding people, and even the family from exposure to harmful cigarette smoke, and avoid spending money every day to buy cigarettes. In this case, it is also very important to have extensive knowledge regarding the benefits obtained when not smoking and find out what diseases are caused by smoking, especially those who have smoked, to encourage healthy behavior changes and avoid disease.

This study is in line with Fawzani and Triratnawati (2005) which states that former smokers admit that after smoking, they experience many changes, especially physical change, feeling their body become fatter than before due to the snacking factor [22]. Even though the food portions are mediocre, their weight increased from 49–50 kg to 60 kg. They feel healthy and have never again had the fever he felt while still smoking. To stop smoking, it is very important to feel healthier. They feel grateful that never been seriously ill from smoking. In addition, quitting smoking reduces the economic burden than when smoking. The results of other studies show that detrimental health effects of smoking such as chest pain and cough can be used as a motivating factor to quitting and this can be especially important to help current smokers who are planning to quit, as a large majority of them are willing to quit smoking sometime in the future [23].

Perceived barriers variable

Perceived barriers are perceived barriers to change or when individuals encounter barriers to taking these actions. Potential negative aspects of a health effort or perceived barriers may serve as barriers to recommending a behavior. Based on interviews conducted by researchers with ordinary informants, informants' responses regarding a person's difficulty in quitting smoking are social factors and the surrounding environment. If they make friends in an environment that smokes a lot, they will invite each other to smoke. Social and environmental factors have a significant influence on adolescent behavior; this is influenced because they want to join in seeing their friends in doing a smoking behavior, such as wanting to be seen that he can also do this, wanting to look slang in the eyes of his friends, incitement from friends to engage in smoking behavior. This is an obstacle to quitting smoking. Especially when someone is rarely at home, so they do not socialize with

their parents, always gather with friends so that their friends have much influenced their environment. So that adolescents seek a sense of comfort and attachment to peers and make adolescents have self-socialization, namely, putting pressure on themselves to adopt behaviors that they think are liked by others. This triggers a teenager to follow the behavior of other friends.

Smoking behavior in adolescents is related to developmental stages, especially in children because children have developmental stages in psychosocial factors [25]. They adjust to their smoking peers, peer pressure, self-appearance, curiosity, stress, boredom, wanting to look dashing, and rebellious can contribute to starting smoking and are very influential, namely, their peers. Free association of teenagers is very influential on the teenager's attitude when his peers smoke it will affect other friends and will consume cigarettes too because they want to look social, do not want to be defeated by their friends, and there is pressure from their peers. This is very influential, so it is challenging to stop smoking.

Conclusion

The conclusion of the study is based on four variables, namely: (1) Perceived susceptibility is the perceived susceptibility of personal risk. In the case of medical illness, these dimensions include acceptance of the diagnosis results, personal estimation of the presence of susceptibility (sensitivity), and susceptibility to disease in general. (2) Perceived severity is a perceived seriousness about the seriousness of a disease. The informant's statement explained that smoking could increase the seriousness of a disease, especially those who already have a history of previous illness. (3) Perceived benefits are perceived benefits, acceptance of one's susceptibility to a condition that is believed to cause seriousness (perceived threat) encourages it to produce a force that supports behavior change. The benefits of quitting smoking, namely, that life will be healthier, reduce spending much money, and avoid disease. (4) Perceived barriers are perceived barriers to change or when individuals encounter barriers to taking these actions. A person's difficulty in quitting smoking is social factors and the surrounding environment.

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