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Efforts to Increase Adolescent Awareness about the Hazards of Smoking Through Interactive Education and Discussion in Indonesia

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ABSTRACT The period of adolescence is when childhood ends and adulthood begins. The adolescent age group, which is typically associated with the start of puberty, spans the ages of 12 and up. Adolescence is generally considered a period of good health. However, risky behaviors such as the use of harmful substances, poor diet or early sexual activity are topics that often arise. The method used in this community service activity is health education counseling. The counseling was accompanied by a question-and-answer discussion about the dangers of smoking. A total of 80 students of SMPN 2 Palang took part in community service activities. before counseling, the students' knowledge about the dangers of smoking was mostly good (40%), the students' attitudes towards smoking hazard behavior were all very negative (100%), and more than half of the students had never heard of the dangers of smoking (52.5%). Community service activities have a positive impact, namely increasing knowledge of the dangers of smoking. Furthermore, there is an increase in students who do not agree with smoking behavior. In general, there is a general decrease in smoking behavior after counseling.

INDEX TERMS Adolescent, Smoking, Awareness, Education

I. INTRODUCTION

Adolescence is a period marked by the transition from childhood to adulthood. In general, the adolescent age group ranges between the ages of 12–18 years, often associated with the onset of puberty. Puberty is a biological phenomenon triggered by an increase in adrenal and gonadal hormones, including the development of secondary sexual characteristics and changes in muscle and fat. In addition, adolescence is also a period associated with increased risk behavior as well as increased emotional reactivity. These conditions coincide with changes in the social and school environment [1].

Adolescence is generally considered a period of good health. However, risky behaviors such as the use of harmful substances, poor diet or early sexual activity are topics that often arise. Risk behavior itself is understood as behavior with unintended consequences that go hand in hand with damage and loss. This risky behavior is understood to be directly or indirectly related to health and well-being. The fact that is often obtained is that risky behavior generally appears or begins during adolescence [2]. Risk behaviors in adolescents include smoking, anti-social behavior, alcohol consumption, and early sexual intercourse [2], [3].

Previous research data showed that out of 1087 students in the UK, 50% were grouped into risky behavior groups and 18% had high risk behaviors [4]. Whereas, a study of 368 students in Sidrap Regency in Indonesia revealed that 2.4 percent had engaged in sexual activity, 27.4 percent smoked, 11.7 percent used alcoholic beverages, 2.7 percent used drugs, 6.5 percent had encountered acts of violence, and all respondents were severely sedentary [5].

According to the Tobacco Facts Book published by the Tobacco Control and Support Center-IAKMI in 2014, the proportion of smoking tobacco consumption among people aged 15–64 is greater than chewing tobacco. In 2013, 33.4 percent of the population consumed tobacco products, while only 2.9 percent consumed chewing tobacco. The high proportion of tobacco consumption may indicate an increase in the number of smokers in Indonesia. Ironically, most smokers aged 15 years or older were recorded to have started smoking at the ages of children and adolescents. A significant upward trend is seen in those who start smoking at the age of 5, with a range of 5–14 years. In 1995, 9.6 percent of the population aged 5-14 years started trying to smoke. In 2001, this number rose to 9.9 percent, then continued to increase to

19.2 percent in 2010. This condition is certainly worrying, considering that children aged 5–14 years should still be under parental supervision. Meanwhile, the proportion of new smokers who smoked tobacco at the age of more than 20 years showed a downward trend. The figure fell from 35.9 percent in 1995 to 24.3 percent in 2013. In fact, at that age, a person can decide whether to smoke or not [6].

The results of research conducted by Titik Sumiatin and colleagues in 2019 showed that one of the indicators in the Healthy Indonesia Program through the Family Approach (PIS-PK) which has a negative effect on the role of the family is the indicator of the family's freedom from smoking behavior. Because the facts in the field show that although the family has received health education about the dangers of smoking and the family understands the dangers of smoking, most of the families have not been able to quit smoking behavior [7].

According to Komasari and Helmi (2000), the factors that cause smoking behavior in adolescents are psychological satisfaction, parents' permissive attitude towards adolescent smoking behavior, and the influence of peers. How is smoking behavior transmitted? One that can be used to explain this phenomenon is Bandura's theory of social cognitive learning. This theory states that individual behavior is caused by environmental, individual, and cognitive influences. Smoking behavior is not merely a process of imitation and positive reinforcement from family and peers, but also considering the consequences of smoking behavior. The same is true for peer groups. Peers have a very meaningful role for adolescents because during this period, adolescents begin to separate themselves from their parents and begin to join peer groups. The need to be accepted often makes teenagers do whatever it takes to be accepted by their group and free from being called "cowards" and "sissies". Furthermore, when viewed from the stages of smoking behavior, peers and family are the first to introduce or try smoking, and then it continues and develops into tobacco dependency or smoking dependence. At this point, smoking is something that makes you feel good on the inside, not just something that shows you are a man [8].

Various studies have shown that the more often a person smokes, the higher the chance of developing COPD. It is estimated that 38.7 percent of COPD patients are current smokers. Starting from the entry of toxic substances from cigarettes that are inhaled into the respiratory tract. These toxic substances cause inflammation of the lungs. This inflammation continues for a long time, resulting in damaged lung tissue, narrowed airways, and excessive mucus production. This condition will cause difficulty breathing and shortness of breath. The amount of mucus production in the respiratory tract will cause a chronic cough accompanied by phlegm. Usually, the cough experienced will last a long time because the body is trying to relieve the blocked airway due to the mucus. If left unchecked, permanent damage will be experienced by the lungs, which eventually will not function

properly. Secondhand smoke also has a risk of this disease. And the process is almost the same as for active smokers.

Nicotine content in cigarettes can also cause addiction and addiction, even though the addictive effects that appear are as severe as the addictive effects of heroin and cocaine. Based on research conducted by the WHO, when we inhale a cigarette, within 7 seconds, the nicotine content will enter your brain. Furthermore, nicotine will stimulate the dopaminergic system in the brain, which will produce feelings of pleasure, reduce stress and anger, and make you feel calm. Because of this pleasant effect, many people eventually become addicted to cigarettes, even though cigarettes have many bad effects on health.

Several things that can be done to reduce or stop smoking behavior include providing knowledge from an early age to teenagers, both at risk and not (especially those who are still in junior high school and elementary school), so that knowledge is truly rooted in the mindset of our generation's brain, and that smoking is a futile act that harms from various angles. In addition, conducting approaches and discussions are also effective steps to dig deeper into the perceptions of what is in the minds of teenagers about the behavior and dangers of smoking.

II. METHOD

The method used in this community service activity is health education counseling. The counseling was accompanied by a question-and-answer discussion about the dangers of smoking. Implementing activities are lecturers, students, the health promotion team at Sumurgung Health Center, Kecamatan Palang, and the person in charge of the UKS Program at SMPN 2 Palang. The material is given by the lecturer with the help of a moderator by the students. The activity was carried out for 1 day, divided into 2 to adjust the size of the room so that it could still implement health protocols while maintaining a distance. Each session lasted 2 hours and was attended by 40 students. The interval between session one and session two is 30 minutes to clean the room. The media and tools used in this community service activity are laptops, LCDs, sound systems, and modules.

III. RESULT

A total of 80 students of SMPN 2 Palang took part in community service activities, with characteristics according to the data in [TABLE 1](#). [TABLE 2](#) shows that before counseling, the students' knowledge about the dangers of smoking was mostly good (40%), the students' attitudes towards smoking hazard behavior were all very negative (100%), and more than half of the students had never heard of the dangers of smoking (52.5%). Students' knowledge about the dangers of smoking increased with most of them being good (70%), none being lacking or very little. Students' attitudes towards smoking behavior were all stated as very negative (100%), and more than half of the students still smoked (53.5%).

TABLE 1
Characteristics of community service participants

Variable	Frequency	%
Ages		
13 years	34	42.5
14 years	44	55
15 years	2	2.5
Sex		
Female	36	45
Male	44	55

TABLE 2
Characteristics of community service participants

Knowledge, attitudes, and behavior of students before counseling	Jumlah N=80	%
Knowledge		
- Very Good	9	11.25
- Good	32	40
- Less	28	35
- Worst	11	13.75
Attitude		
- Very Good	80	100
- Good	0	0
- Less	0	0
- Worst	0	0
Behaviour		
- Have done	42	52.5
- Never done	38	4.5
Knowledge, attitudes, and behavior of students after counseling		
Knowledge		
- Very Good	24	30
- Good	56	70
- Less	0	0
- Worst	0	0
Attitude		
- Very Good	80	100
- Good	0	0
- Less	0	0
- Worst	0	0
Behaviour		
- Have done	37	46.25
- Never done	43	53.5

Community service activities carried out by conducting counseling and role-playing succeeded in increasing students' knowledge about the dangers of smoking. The attitude of students before and after the counseling was very negative. The number of students who smoke after counseling has decreased. Knowledge is the result of "knowing", and this occurs after the individual has sensed a certain object. Sensing of objects occurs through the five human senses, namely sight, hearing, smell, taste, and touch. Most of human knowledge is obtained through the eyes and ears [9].

One of the nurse's roles is as a health education provider. Nurses provide health information or education with the aim of increasing health knowledge among the public. Good knowledge can help people improve skills and reduce bad behavior, and good and appropriate attitudes can improve coping mechanisms because strong and good coping mechanisms can prevent negative behavior. [10]. Students' knowledge of the dangers of smoking increased after counseling about the dangers of smoking by means of lectures, questions and answers, and roleplay. This proves that counseling about the dangers of smoking is effective and efficient and has an effect on increasing students' knowledge in a short period of time. The packaging and provision of attractive materials, delivery methods, and language of delivery that are in accordance with the level of education and the age of the participants have an effect on increasing student knowledge.

An attitude is a statement of evaluation of an object, person, or event [10]. Students' attitudes towards smoking behavior are student statements about the phenomenon of smoking behavior that often occurs around them. The attitude of students towards smoking before and after counseling was very negative. The meaning of a very negative attitude in this case is that, according to students, smoking behavior is a negative behavior. They are aware that smoking is bad behavior and should not be done as much as possible. But there are still students who have the opposite attitude and behavior.

Smoking habits in adolescents are influenced by the environment around parents who smoke, peers, personality, and information media demonstrating smoking. Peers have a very meaningful role for teenagers because teenagers spend more time with their peers and have a high level of curiosity. People find it hard to quit smoking because of what's in cigarettes. Nicotine dependence and psychological factors that make you feel like you're missing out on something if you stop smoking make it hard to quit [11].

IV. CONCLUSION

Community service activities have a positive impact, namely increasing knowledge of the dangers of smoking. Furthermore, there is an increase in students who do not agree with smoking behavior. In general, there is a general decrease in smoking behavior after counseling.

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