Adolescents' Smokers Knowledge Level of Dental and Oral Health

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Abstract

Smoking is a very popular habit, especially for adolescents, to show self-actualization. This situation also shows the need for guidance on awareness and good knowledge about maintaining a healthy body, not to mention dental and oral health as a whole and continuously, through the prevention of smoking behavior as dental and oral health influence the overall health. The aim of this study is to describe smoking in adolescents based on the knowledge level of dental and oral health in East Boroko Village, Manado, Indonesia. The type of research is descriptive research with a survey method. The sample in this study was a total population of 30 adolescent smokers. The data collection technique used primary data. The data was obtained directly by filling out the questionnaire, sending a google form questionnaire link to each respondent, contacting and cross-checking with respondents. The results show overall respondents' level of knowledge is mostly poor as many as 16 people (53.3%) out of 30 people Meanwhile, the age group of respondents with poor knowledge level is the most in the 15-16 year age group as many as 10 (62.5%) people. Most adolescents do not know the impact of smoking on dental and oral health. In conclusion, the teenage smokers in East Boroko Village are lack of dental and oral health knowledge. Future work should address the causes of adolescents to become a smoker in order to provide precise solution.

Keywords: adolescent, dental and oral health, knowledge, smoking

1. Introduction

Smoking is familiar to everyone in general and a very popular habit to show one's self-actualization. Smoking can cause a crucial effect on overall health. Dental and oral parts are interdependent organs in humans. The teeth are one part of the body that serves to chew, speak and maintain the shape of the face. Thus, it is important to maintain dental and oral health early so that dental health can sustain in the oral cavity (Al-qahtani et al., 2020; Gangadi et al., 2021). Maintaining dental and oral health from an early age will be able to improve overall health status.

One of the ways to improve dental and oral health is by taking notice of habits from adolescence. Adolescence is a transition period between children and adults, and the group relationships are very close. They are in a period of developing their identity (Pfeifer & Berkman, 2018). The bad habit that often occurs in adolescents is smoking. Smoking can cause not only long-term damage to both the health of the body but also the oral cavity (Mubeen et al., 2013). Smokers have less awareness of oral health compared to non – smokers (Puranik et al., 2013). The task of a teenager who should have started to study seriously for their future will be disrupted by the smoking habit, which can undermine the image of students.

The urgency of guidance for adolescents is that the phenomenon of smoking is something very unfortunate and should be watched out for, because half of the active smokers nowadays are adolescents (Hu et al., 2020). Smoking habits must be ceased to improve the degree of dental and oral health so that the life order of adolescents is in positive behavior to develop themselves. The ability to determine needs, concerns, and perspectives increases in the adolescent years (Fuligni, 2019). Adolescents who have a character in an effort to improve their image or get recognition from parents or peers are prone to doing negative things. This situation also shows the need for guidance on awareness and good knowledge about maintaining a healthy body as a whole and continuously through the prevention of smoking behavior which can also affect dental and oral health. Dental and oral health needs to be maintained from an early age to create a younger generation, especially adolescents who are more confident, and able to develop a positive lifestyle.

The WHO (World Health Organization) report on The Global Tobacco Epidemic 2017, that the prevalence of teenage tobacco users in Indonesia currently reaches 12.7%. The prevalence of young smoking currently reaches 11.5% (WHO, 2017). The results of Riset Kesehatan Dasar (Basic Health Research) 2018 also stated that there is an increase in the prevalence of smoking. The prevalence of smoking at the age of 10-18 years has increased from 7.2% in 2013 to 9.1% in 2018 (Kementrian Kesehatan RI, 2018). Therefore, controlling the problem of smoking

should target children and adolescents which should be based on data on the causal factors that play the most important role in influencing children to decide on a smoking habit so that the efforts made are in accordance with their needs and carried out effectively and efficiently (Fuligni, 2019).

A study on adolescent knowledge about the influence of smoking on dental and oral health in the community in Lotang Salo village, Panca Rijang district, Sidenreng Rappang district in 2018 shows that the level of knowledge of adolescents is quite good (Supriatna & Angki, 2018). Research at SMK Negeri 3 Tahuna was also conducted, i.e. the knowledge of adolescents about the dangers of smoking shows that the students have good knowledge 91% of the respondents (Vitra A. Pontolawokang, 2012). Meanwhile, the research of adolescents smoking behavior in Jayapura shows that the smoking respondents have the higher knowledge of smoking effect than those non-smoker respodents, although it is not statiscally significant (Herawati et al., 2017). However, the level of knowledge is not described. Survey scale/level is important to help people getting informative results. Studies with item-specific scales provides higher measurement quality (DeCastellarnau, 2018).

The aim of this study is to map the smoking habit of adolescents based on their knowledge level upon dental and oral health in East Boroko Village, Manado. The level is divided into good, fair and poor to show the quality of the knowledge.

2. Method

2.1 Research Design

This study was undertaken by a descriptive study with a survey method aimed at describing smoking in adolescents based on the level of dental and oral health knowledge in East Boroko Village, North Bolaang Mongondow Regency, Indonesia.

The variable in this study was the mono variable, i.e. smoking in adolescents based on the dental and oral health knowledge level. The population was 30 teenage smokers and the sample in this study was 30 adolescent smokers in total.

2.2 Data Collection

The data collection technique used primary data, i.e. the data that is obtained directly by filling out questionnaires, collected 30 respondents' phone numbers using a chat media application, contacted 30 respondents online and explained the purpose of the study as well as sent a google form questionnaire link to each respondent. Subsequently, we contacted and checked back the questionnaire response to ensure that all the respondents filled out the form correctly. This research was carried out after having an ethical clearance. The ethical clearance approval of this research is obtained from Health Research Ethics Committee Poltekkes Kemenkes Manado number KEPK.01/07/184/2021.

3. Results

East Boroko Village, North Bolaang Mongondow Regency is one of the regencies in North Sulawesi Province, Indonesia. The area of East Boroko Village is 0.6 km2 with a population of 2,094 people, of which 1,053 are male and 1,041 are female. The boundaries of East Boroko village are North bordering North Boroko village, South bordering Bigo Village, West bordering Boroko Village, and East bordering Kuala Village (Website Desa Kementrian Komunikasi dan Informatika RI, 2020).

The initial survey on 25 to 26 April 2021 on 10 adolescents in East Boroko Village, Bolaang Mongondow Regency conducted by interview shows all the respondents admitted that they smoke because of a friend's invitation and do not know the bad effects of smoking on dental and oral health since the age of 15.

3.1 Respondent Based on Age

Table 1 shows the respondents based on age. Based on the results of respondents by age group, it is noticed that the largest age group is in the 17-18 year age group as many as 16 (53.3%) respondents. While the least in the age group 19 years as many as 2 (6.7%) respondents.

Table 1: Respondent based on age

Age	Total Respondents	Percentage
15 – 16	12	40 %
17 – 18	16	53.3 %
19	2	6.7 %
Total	30	100 %

3.2 Respondent Based on Knowledge Level

Table 2 shows the respondent based on their knowledge level which is grouped into three-level, i.e. good, fair and poor. According to the level of categorization, the most respondents' knowledge level was in the poor level as many as 16 (53.3%) respondents, while the least in the good level was 14 (46.7%) respondents.

Table 2.: Respondent based on knowledge level

Knowledge Level	Total Respondents	Percentage
Good	14	46.7 %
Fair	0	0 %
Poor	16	53.3 %
Total	30	100 %

3.3 Age of Respondent Based on Knowledge Level

Table 3 reveals the age group of respondents with the category of poor knowledge level is the most in the 15-16 year age group as many as 10 (62.5%) respondents, and the second is in the 17-18 year age group as many as 6 (37.5%) respondents, while the 19 years old, there are no respondents in the category of poor knowledge level.

Table 3: Age of respondent of knowledge level

Level \ Age	15 – 16	17 – 18	19
Good	2	10	2
Fair	0	0	0
Poor	10	6	0
Total	12	16	2

4. Discussion

Clean and healthy living behavior is a basic need for public health status. Health is very principal for everyone, including dental and oral health. Poor dental and oral health can disturb the comfort of working activity and decrease study interest (Utami & Prasepti, 2019). Dental and oral health problems most often occur in school-age adolescents. A study found that school-age adolescents suffer from poor oral health more than those who have

good oral health and 50 million school hours are lost because of poor oral health (Haque et al., 2016). One of the things that become attention is that smoking behavior. The dangers of smoking to the health of the body have been researched and proven by many people, the World Health Organization has warned that in the 2020-2030 decade tobacco will kill 10 million people per year, 70% of which occur in developing countries (Jha & Peto, 2014).

Regarding the results of this study, the most data are the age group 17-18 years as many as 16 people with a percentage of 53.3% of the total respondents studied, and the most age of having poor dental and oral health knowledge is the age group of 15 – 16 years old. The age of 15-19 years is the age of middle adolescence, in this age group, the adolescents have the characteristics of starting to develop behavioral maturity, learning to control themselves, and setting early decisions according to their goals (Jaworska & MacQueen, 2015). Adolescents are also easily influenced by the surrounding environment, the existence of habits, and assumptions that a smoker is considered strong, steady and even macho. Whereas, the smoking habit can have bad consequences for health, especially dental and oral health. Therefore adolescents must be equipped with good knowledge about their lives for the sake of their health.

The best health is the key to a long, active, and enjoyable life. Even, health is actually a wealth that people can retain (Ali et al., 2017). There is a relationship between mother's knowledge and the habit of children's dental and oral health, where a mother with good knowledge is more aware of the importance of dental and oral health of the children (Moses & Arunachalam, 2018; Shetty et al., 2016). The role of parents in fostering children's character is very much needed, as the parents play a major role in both preventive and treatment of the children. Parents are the closest ones for children to continue to carry out positive behavior, in this case, dental and oral health behavior as general health development. Parents should also pay attention to the consumption of nutritious food as dental pain is associated with the intake of unhealthy food (Nicksic et al., 2018). Because good nutritional status will improve the health and behavior (Kadir, 2019).

Health development includes preventive and promotive efforts to increase the community's ability to carry out health efforts independently (Kumar & Preetha, 2012). Research at SD Negeri Banda Aceh by Liza, et al (2020), on knowledge, attitudes, and actions of parents towards dental and oral health is in a good category (Liza & Diba, 2020). So it is expected that parents need to improve their dental and oral health behavior even better. This shows that parents are the main characters at home who play a role in supporting the maintenance of dental and oral health without neglecting the personal health in terms of this, is the children. There is an influence of dental and oral health maintenance behavior on the OHIS status of Samin Surosentiko residents, Blora Regency (Saptiwi et al., 2019). Health education must always be instilled in the form of health education. Based on the research by Dewi, et al (2021) on dental health education and oral health at Ki Merogan Islamic boarding school Palembang, the education proved that it has a positive influence on increasing knowledge and dental health attitudes of the students in the long-term (Dewi et al., 2021).

An attempt to increase knowledge about dental and oral health, especially positive behavior, can be implemented by performing education about dental health, especially for adolescents. Research on 15 – 16 years old students was conducted in Finland resulting in the conclusion that knowledge influences behavior directly. Good knowledge about dental and oral health is a principal to act for overall health. Parents can further increase their role in dental and oral health, especially doing supervision (Bozorgmehr et al., 2013).

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