



Dental and Oral Maintenance Behavior Adolescents Aged 12–15 Years During COVID-19

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Abstract. *During the COVID-19 pandemic, dental health maintenance activities were slightly hampered because there were rules for maintaining social distance or social distancing to break the chain of transmission of COVID-19. Maintenance Oral health of children and adolescents is very important. Oral health is very important for building the immune system, especially during the COVID-19 period. The high prevalence of dental and oral diseases can be caused by many factors, one of which is the inconsistent behavior of dental and oral health maintenance. The Riskesdas results 2018, stated that the number of dental and oral problems in Indonesia reached 57.6% and the number of children experiencing dental and oral problems reached 93%. Aim: To find out the behavior of maintaining dental and oral health in adolescents aged 12–15 years during COVID-19 at the Pondok Pesantren MTS Ma'ahid Kudus. Methods: This type of research is descriptive observational using a cross sectional approach. The sampling technique in this study used a probability sampling technique, namely the proportionate stratified random sampling technique. The number of samples in this study amounted to 80 people. Result: The behavior of maintaining dental and oral health of adolescents aged 12–15 years mostly has behavior in the good category as many as 44 people (55.0) and moderate behavior as many as 30 people (37.5) and 6 people (7.5) less behavior. Adolescent students have a good level of behavior in maintaining oral and dental health during the COVID-19 period, namely 44 people (55.0%).*

Keywords: COVID-19 · Behavior · Teenagers, Islamic boarding school

1 Introduction

Coronavirus Disease-2019 (COVID-19) is one of the main pathogens that attacks the human respiratory system. Outbreaks of Coronavirus (CoV) including severe acute respiratory syndrome (SARS)-CoV and Middle East respiratory syndrome (MERS)-CoV have previously been characterized as agents that pose a major public health threat. In

December 2019, a COVID-19 patient was identified with an initial diagnosis of pneumonia of unknown etiology. These patients were epidemiologically associated with a wholesale market of seafood and wet animals in Wuhan, Hubei, China. The main pathogenesis of COVID-19 infection as a virus that targets the respiratory system is severe pneumonia, RNA anemia and acute cardiac injury [1]. In response to the threat of Coronavirus Disease-2019 (COVID-19), central and local governments around the world have asked to stay at home, and require business closures to increase social distancing or Large-Scale Social Restrictions (PSBB) and reduce risks of transmission. Social distancing during the 2009 H1N1 swine flu pandemic was effective in reducing infections, indirect evidence from one region suggests that this response was most pronounced in households with higher socioeconomic levels [2].

Dental and oral health is part of body health that cannot be separated from each other because it will affect the overall health of the body [3]. According to the 2018 Basic Health Research (Riskesdas) data, the number of dental and oral problems in Indonesia reached 57.6% and the number of children experiencing dental and oral problems according to Riskesdas 2018 reached 93%. This is due to many factors including the behavior of maintaining dental and oral health that is still not consistent or permanent as a lasting behavior [4].

According to Budiharto, dental and oral health is related to behavior. The behavior of maintaining good oral and dental health will greatly function in ensuring the health status of each person. Therefore, the behavior of maintaining dental and oral health that is not good must be changed. The environment plays a very important role in shaping one's behavior, in addition to the innate aspect [5]. The easiest way to achieve health behavior is to maintain dental and oral health, but there are still many people who do not understand how to maintain dental and oral health, especially during childhood and adolescence [6]. Adolescence is a period of transition from childhood to adulthood by looking for the most suitable lifestyle for him and this is often done through trial and error methods and in adolescents biological and sociological changes occur [7]. The purpose of this study was to determine the behavior of maintaining dental health and mouth in adolescents aged 12–15 years during COVID-19.

2 Method

This type of research is descriptive observational using a cross sectional approach. The sampling technique in this study used a probability sampling technique, namely the proportionate stratified random sampling technique. The number of samples in this study amounted to 80 people. The reliability and validity test of the questionnaire based on Cronbach's Alpha and the value of the correlation coefficient.

3 Result

Table 1 shows the distribution of the characteristics of the research respondents based on overall oral and dental health maintenance behavior. As many as 55% of students aged 12–15 years have good behavior in maintaining dental and oral health during COVID-19. The reliability and validity test of the questionnaire based on Cronbach's Alpha and the

Table 1. Distribution of research respondent’s characteristic based on oral health maintenance behavior

Behavior	Frequency (%)
Good	44 (55, 0)
Moderate	30 (37, 5)
Less	6 (7, 5)
Total	80 (100)

Table 2. Frequency of dental and oral health maintenance behavior by age.

Age	Behavior	Frequency (n)	Percent (%)
12	Good	8	40,0
	Modarate	10	50,0
	Less	2	10,0
	Total	20	100
13	Good	10	50,0
	Modarate	8	40,0
	Less	2	10,0
	Total	20	100
14	Good	14	70,0
	Modarate	8	20,0
	Less	2	10,0
	Total	20	100
15	Good	12	60,0
	Modarate	8	40,0
	Less	0	00,0
	Total	20	100

value of the correlation coefficient. Table 1 shows the distribution of the characteristics of the research respondents based on overall oral and dental health maintenance behavior. As many as 55% of students aged 12–15 years have good behavior.

Table 1 Respondents aged 12–15 years, mostly have behavior in the good category as many as 44 people (55.0) and moderate behavior as many as 30 people (37.5) and those who behave less are 6 people (7, 5).

Table 2 shows that most of the respondents aged 12 years have behavior in the sufficient category as many as 10 people (50.0) and good behavior as many as 8 people (40.0) and 2 people behave less well (10.0). Respondents aged 13 years mostly had behavior in the good category as many as 10 people (50.0) and enough behavior as many

Table 3. Distribution of Characteristics Respondent

Gender	Frequency (%)
Male	28 (35, 0)
Famale	52 (65, 0)
Total	80 (100)

as 8 people (40.0) and 2 people behaved less (10.0). Age 14 years mostly have behavior in good category as many as 14 people (70.0) and sufficient behavior as many as 4 people (20.0) and 2 people behave less (10.0). Age 15 years mostly have behavior in the good category as many as 12 people (60.0) and good behavior as many as 8 people (40.0) and none of them have less behavior.

Table 3 shows that most of the respondents in this study were women with 52 children (65.0), while the least respondents were men with 28 children (35.0).

The results of this study indicate that respondents aged 12–15 years have the highest level of good behavior, namely 44 (55.0) %. This is in line with Koesoemawati's research (2020) which states that adolescents have a good role in maintaining dental health and preventing COVID-19 during the COVID-19 pandemic [8]. This is because the maintenance of dental health is important as an effort to maintain general health. The goal is to avoid the possibility of damage and disturbances to the teeth and all soft tissues in the oral cavity because the oral cavity is the gateway for germs to enter, therefore it is important for everyone to maintain oral hygiene and health and the role of adolescents as the young generation is very large and important. Adolescents are expected to be agents of change.

Based on research data, it shows that 80 respondents aged 12–15 years old mostly have dental and oral health maintenance behavior during the COVID-19 period in the good category as many as 44 people (55%). Good behavior in maintaining dental and oral health during the COVID-19 period shows that adolescents aged 12–15 years old are aware of the importance of maintaining dental and oral health during the COVID-19 period. This can also be caused by predisposing factors that can support the maintenance of oral health at MTS Ma'ahid Kudus which has been carried out such as dental and oral health counseling from the local Puskesmas. So it can be concluded that the students of MTS Ma'ahid Kudus have good behavior because of good predisposing factors such as getting counseling about dental and oral health. So it can be concluded that the students of MTS Ma'ahid Kudus have good behavior because of good predisposing factors such as getting counseling about dental and oral health.

Adolescents with less behavior are 6 people (7.5%) because they don't understand about knowledge and good behavior in maintaining dental and oral health during the COVID-19 period. Such as research in Finland and America which shows that knowledge, attitudes and actions affect the frequency of brushing teeth, oral hygiene, and periodontitis. Knowledge or cognitive is a very important domain for the formation of one's behavior. Knowledge of dental health will underlie attitudes that affect a person's behavior in maintaining dental and oral hygiene [9].

4 Conclusion

Based on the results of the analysis that has been carried out, it can be concluded that the teenage students of MTS Maahid Kudus aged 12–15 years had the highest level of good behavior in maintaining oral and dental health during the COVID-19 period, namely 44 people (55.0%). Then enough behavior as many as 30 people (37.5) and 6 people (7.5) who behave less.

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