

# Covid-19 Awareness for Baiturrahmah Padang Bachelor of Dental Medicine Students

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## ABSTRACT

Coronavirus, or SARS-CoV2, is one of the main pathogens that attack the human respiratory system. The coronavirus disease caused by SARS COV2 represents the causative agent of a potentially fatal disease of global public health concern. West Sumatra is in the top 10 provinces that contributed the most COVID-19 cases in Indonesia. 1stAccording to the official website of the Health Padang City Service on September 22, 2020, 2385 confirmed COVID-19 people, 1426 people recovered from COVID-19, and 53 people died. The high incidence of positive cases of Covid-19 in Padang is due to a lack of public knowledge and adherence to government-mandated health practices. Dental care places have a risk of COVID-19 infection due to aerosols generated during procedures, handling of sharp objects, and the proximity of dentists to patients. Dentistry students must have an awareness of deep knowledge, a better understanding, and must be updated with the practice of adapting to identify possible COVID-19 infections. The aim is to increase awareness about COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang. This type of research is called descriptive research. The target population of this study was undergraduate dentistry students in 2017, 2018, and 2019, with a sample of 175 people. This research was conducted online in the city of Padang using Google Forms Media for distributing questionnaires. When the research was carried out in September 2020, The results showed that as many as 99.4% of respondents had good knowledge awareness about COVID-19, 0.6% awareness of bad knowledge, 97.7% of respondents got the first information about COVID-19 through the media, 56% of respondents got the latest Covid information via the internet, only 11.4% of respondents are taking Covid-19 courses, and 5.1% are still taking courses until now. The method of data analysis in this study used the SPSS program with univariate and bivariate analysis. The processed data is presented in table form.

**Keywords:** Awareness, COVID-19 and Undergraduate Dentistry Students

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## INTRODUCTION

In early 2020, the world was shocked by a virus that has spread to several countries, the new sars-cov-2 virus, which causes a disease called COVID-19.<sup>1</sup> Corona most likely originates from zoonoses, namely the transmission of infection from animals to humans, then shows human-to-human transmission through droplets containing the COVID-19 virus.<sup>2</sup> The etiology of COVID-19 belongs to the genus betacoronavirus. Coronavirus itself is a virus that originates from the subfamily Orthocoronavirinae in the family *Coronaviridae* and the order *Nidovirales*<sup>19,20</sup>. Phylogenetics shows that this virus belongs to the same subgenus as the Severe Acute Respiratory Illness (SARS) coronavirus.<sup>3</sup> The virus is mainly transmitted by respiratory droplets and direct or indirect contact. Droplet transmission occurs when a person is within 1 m. Transmission Indirect contact through surfaces that can transmit the virus, such as a stethoscope used on an infected person.<sup>4</sup> Signs and symptoms appear within two to 14 days of exposure. Common symptoms include fever, cough, shortness of breath, or difficulty breathing. Other symptoms include fatigue, body aches, chills, sore throat, loss of smell and taste, diarrhea, and severe vomiting.<sup>5</sup> On April 10, 2020, WHO noted the coronavirus had affected 212 countries, with a total of 1,439,516 positive cases of COVID-19 and 85,711 deaths. On March 2, 2020, two positive cases of COVID-19 were first announced on television in Indonesia. Indonesia itself started with Covid-19 confirmation patients at an event in Jakarta where the patient was in contact with a foreign national (WNA) from Japan. After the meeting, the patient complained of a fever, cough, and shortness of breath. For 3 consecutive months from December to October 2020, West Sumatra is in the top 10 provinces that contributed the most COVID-19 cases in Indonesia<sup>18</sup>.<sup>1st</sup> According to the official website of the Health Padang City Service on September 22, 2020, 2385 confirmed COVID-19 people, 1426 people recovered from COVID-19, and 53

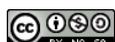
people died.<sup>6</sup> The high incidence of positive cases of Covid-19 in Padang is due to a lack of public knowledge and adherence to government-mandated health practices. Person-to-person transmission of the disease makes isolation of the patient an extremely important part. ViRus is widely present in salivary secretions and the nasopharynx of patients. Given the widespread spread of COVID-19 and reports of transmission to healthcare providers, dental professionals are at the highest risk for nosocomial infection and can become potential carriers of the disease. Four dental care places have a risk of COVID-19 infection due to aerosols generated during the procedure, handling of sharp objects, and the proximity of the dentist to the patient's oropharynx. The dental clinic has the potential to cause cross-contamination if precautions are not taken. With the development of understanding about the current COVID-19 disease, dentistry students must have a deep understanding of knowledge, a better understanding, and must be updated with the practice of adapting to identify possible COVID-19 infections. Based on this, researchers are interested in conducting research to find out the awareness of COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang.

## MATERIALS AND METHODS

This type of research is called just descriptive research. The population in this study was the total number of undergraduate students in 2017, 2018, and 2019 at the Baiturrahmah Faculty of Dentistry, Padang, with a sample of 175 people. This research was conducted online in the city of Padang using *Google Forms Media* for distributing questionnaires. When the research was carried out in September 2020,

### Sampling Method

The research instrument consisted of an awareness questionnaire containing questions consisting of the knowledge domain and the action domain about COVID-19.



## Procedure

Researchers create a Google form that contains a questionnaire. The questionnaires were sent to undergraduate students in the classes of 2017, 2018, and 2019 through links. The researcher gave students three days to fill out a Google form in 2017, 2018, and 2019. In classes in 2017, 2018, and 2019. after 3 days the researcher looked at the number of participants who filled out the questionnaire which found 175 people After the Google form is filled in, the researcher collects the Google form. Then the researcher performs data processing. Data processing is presented in the form of tables and percentages.

## Data analysis

The method of data analysis in this study used the SPSS 20 program with univariate and bivariate analysis. The processed data is presented in tabular form.

## RESULTS

This study aims to determine the awareness of COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang which was conducted on 175 research samples that met the inclusion and exclusion criteria. Based on the results of the collection and analysis of the data that has been obtained, the authors can conclude the research results in the following presentation. Student the biggest number of generations in 2018 were 78 people, based on the distribution of respondents depending on the generation gathered from 175 respondents (44.6 %). In 2017, the lowest number of respondents (26.8%) was 47, while in 2019, the number of respondents was 50. (28.6 %).

**Table 1. Frequency distribution (%) based on knowledge domain components**

Question	Correct answer	Wrong answer	p value
The origin of the disease COVID-19	173 (98.9%)	2 (1.1%)	>0.05
Epidemiology	173 (98.9%)	2 (1.1%)	>0.05

The etiology of the COVID-19 disease	153 (87.9%)	21 (12.1%)	>0.05
Transmission mode Disease	174 (99.4%)	1 (0.6%)	<0.05
Clinical features	169 (96.6%)	6 (3.4%)	<0.05
Diagnosis	173 (98.9%)	2 (1.1%)	<0.05
Prevention	174 (99.4%)	1 (0.6%)	<0.05
Treatment	174 (99.4%)	1 (0.6%)	<0.05
Pandemic	168 (96%)	7 (4%)	<0.05
Disaster management	174 (99.4%)	1 (0.6%)	<0.05

Based on table 1 above, out of 175 respondents about awareness of COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang, the number of students who answered correctly was 173 (98.9%). In this study, 173 students (98.9%) chose the correct answer. Questionnaire questions about the etiology of COVID-19 students were answered correctly by 87.9%. The choices in the answers to the questionnaire about the student's mode of transmission were 174 (99.4%) correct, the clinical picture was 169 (96.6%), the diagnosis of COVID 173 (98.9%), the prevention of 174 (99.4%), the pandemic 168 (96%), and disaster management 174 (99.4%).

**Table 2. Frequency distribution (%) based on action domain components**

Question	Frequency -n(%)	Number (n = 175)
The first source information COVID-19 disease	Friend	1 (0.6%)
	Family	3 (1.7%)
	Educational institutions	0 (0%)
	Media	171 (97.7%)
Latest sources information about COVID-19	Internet	98 (56.0%)
	News	53 (30.3%)
	WHO / IDA	13 (7.4%)
	Government website	4 (2.3%)
take a course about COVID-2019	Not	155 (88.6%)
	Yes	20 (11.4%)
still taking courses on covid to date	Not	166 (94.9%)
	Yes	9 (5.1%)

Based on table 2 above, out of 175 respondents about awareness of COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang, on the question of the source for the first time getting COVID-19 information, in the table above, it can be seen that students received information for the first time most through the media, 171 (97.7%). In the question of the latest source of information about COVID-19, many students got the latest information via the internet (56.0%). In the questionnaire questions about students who took courses on COVID-19, only 20 (11.4%) of students took part, whereas there are only 9 (5.1%) students who are still taking courses on COVID-19.

**Table 3. Knowledge mean ranges and frequency (%) of undergraduate students in different categories**

		The correct frequency response (n)	percentage (%)
Mean Range of Knowledge (Category)	Low	1	0.6%
	Good	174	99.4%
	Total	175	100 %

In this research, based on the average range of knowledge and the frequency of students in the good and low categories, it can be concluded in table 3 that undergraduate students at the Baiturrahmah faculty of dentistry have good knowledge of 99.4%.

**DISCUSSION**

This research confirms the need to know the latest awareness and appropriate knowledge about the COVID-19 disease among dentistry students. Given the widespread spread of SARS-CoV-2 and reports of transmission to healthcare providers, dental professionals are at the highest risk for nosocomial infection and may become potential carriers of the disease. Among health care professionals, almost a 90% chance

of infectivity is with dental professionals. This can have serious implications for dental practice. Dental care places have a risk of 2019-nCoV infection due to aerosols generated during the procedure, handling of sharp objects, and the proximity of the dentist to the patient's oropharynx area. If preventive measures are not taken, dental clinics have the potential to cause cross-contamination, so it is important to know the knowledge and awareness of students about COVID-19.

The results of research on awareness about COVID-19 among undergraduate dentistry students at the Baiturrahmah Faculty of Dentistry, Padang, based on table 1 of 175 undergraduate students from the dental faculty about the origin of the disease COVID-19 who answered correctly (98.9%) Meanwhile, Khasid et al.'s 2020 research in India answered correctly 64.5% of the time. this question, it can be concluded that dentistry students have good knowledge of the origin of COVID-19. In the epidemiological questions of COVID-19, students who answered correctly (98.9%) were higher than the research conducted by Khasid et al. in India in 2020 (77.3%) It can be concluded that students have good knowledge of the epidemiology of COVID-19, as the epidemiology of COVID-19 is already at the pandemic stage.

The questionnaire on the question about the etiology of the COVID-19 disease showed that many students who answered correctly were (87.9%). The proportion of respondents who correctly answered the etiology questions in this study was higher than in the research conducted in India in 2020, which amounted to 53.2% The number of respondents who answered correctly in this study was lower than in the study conducted in Nepal in 2020, where students who answered correctly about the etiology of COVID-19 were 95.6%. On the etiology question, Baiturrahmah dentistry students had good knowledge of etiology. COVID-19 originates from the SARS CoV2 virus. The results of research on the method of transmission of the COVID-19 disease among students who answered correctly amounted to 96.6%. 71% <sup>4</sup>. Another study was also carried out in Saudi Arabia in 2020. As many as 92% answered the transmission of COVID-19 through



droplets<sup>16</sup>. Most Baiturrahmah dental faculty students have good knowledge by knowing that the transmission of COVID-19 occurs through respiratory droplets.

Questionnaire questions about the clinical picture of COVID-19 students who answered correctly (96.6%). This number is greater than research conducted in India, which answered correctly (54.8%). Students have good knowledge of the clinical picture of COVID-19 (Khasid et al. 2020). The clinical symptoms of COVID-19 vary depending on the degree of disease. The main symptoms are fever, cough, myalgia, shortness of breath, headache, diarrhea, nausea, and abdominal pain.

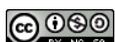
In the questionnaire questions about how to diagnose COVID-19, the number of Baiturrahmah dentistry students who answered correctly amounted to (98.9%). The same study was conducted in India, and the number of students who answered correctly was (33.9%) (Khasid, et al.). From this question, it can be concluded that Baiturrahmah Faculty of Dentistry students have good knowledge of the diagnosis of COVID-19. Prevention of COVID-19 is very important for students to know. In this question questionnaire, students have good knowledge because the number of students who answered correctly was 99.4%.

A similar study was also conducted on dentistry students in India who answered correctly (76.3%), while the research conducted in Nepal of students who chose the correct answer was 99.3%<sup>4</sup>. COVID-19 prevention can be done with the main prevention being limiting the mobilization of people at risk until the incubation period. Other precautions include increasing endurance through healthy food intake, increasing hand washing, using a mask if you are in a risky area, exercising, getting enough rest, eating food that has been cooked until it is cooked, and immediately going to the hospital if there is illness. In the knowledge domain, it can be concluded that Baiturrahmah Padang dentistry students have a good level of knowledge, which can be seen from the average knowledge in Table 3, which states that the average knowledge of students is good at 99.4%.

Students have good knowledge of the treatment of COVID-19 because the number of students who answered correctly was 99.4%. In the same study in India, students who answered correctly were (31.1%)<sup>4</sup>. Questionnaire questions about the COVID-19 pandemic Students have good knowledge. Students can answer correctly (96%), while in India as many as (32.7%) can answer correctly (Khasid, et al. 2020). Many students answered correctly (99.4%) in the questionnaire questions about disaster management. This is higher than the research conducted in India, which answered correctly (23.9%). It can be concluded from this research that FKG Baiturrahmah students have good knowledge of the disaster management of COVID-19 about promotions that focus on hand washing, social distancing, and information on the risk of COVID-19 transmission..

The results of the research in table 2 on the domain of action show that students get the first information about COVID-19 through the media (97.7%), followed by family (1.7%) and friends (0.6%). The same results from research conducted by Khasid et al in 2020 show that students get the most first-time information about COVID-19 through the media (76.1%)<sup>4</sup>. Students get the most up-to-date sources of information about COVID-19 in this study via the internet (56%), then in second place is news (30.3%), followed by WHO (7.4%), government (4%) and finally the website (2.3%). In table 2, it can be seen that most of the knowledge found by Baiturrahmah dentistry students is sourced from the Internet. This research is also supported by other research in India which states that most students get information from the internet.

In table 2, on the question of whether students take courses on COVID-19, as many as (88.5%) students do not take courses on COVID-19, while students who answer yes only (11.4%), and on the question of whether students are still taking courses on COVID-19, as many as (94.9%) students answered no, and only students who are still taking courses on COVID-19 to date (5.1%). The same study in India had different results. Students in India followed suit, 70.5% of courses, and are still attending until now (44.5%). In the domain of action, it can be



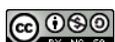
concluded that students have an awareness of COVID-19, although few have taken courses, and have good knowledge of COVID-19.

## CONCLUSION

Based on the research results, it was concluded that Baiturrahmah Padang Dentistry students at the undergraduate level had good knowledge about COVID-19. In the domain of action, students have awareness about COVID-19. Students get information about COVID-19 for the first time through the media, and get the latest information via the internet, and most students do not take courses on COVID-19.

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