

# The Level of Anxiety of the Students of Dental Professional Program When Facing Patients During the COVID-19 Pandemic at Dental Hospital (RSGM) UNIMUS

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## ABSTRACT

Background: Health workers, including dentists, experience anxiety caused by discomfort when wearing personal protective equipment, lack of understanding of the long-term spread of Covid-19 in individuals who have been exposed, and fear of exposure to the SARS-CoV-2 virus so that it is at risk of transmitting it to family and people around them. Aim: Aim to determine the picture of students' anxiety levels in the dental profession program when facing patients during the Covid-19 pandemic at UNIMUS HOSPITAL. Methods: The research was quantitative with a descriptive research design and used survey techniques. The population of this study was all students of the dental profession study program at UNIMUS HOSPITAL, totaling 96 people. The technique used in determining the sample in this study was the total sampling technique. The variable in this study was anxiety—data collection instruments through questionnaires. In the study, data analysis using univariate analysis techniques. Results: The students of the professional dentist program obtained anxiety levels, namely normal or not experiencing anxiety, as many as 91 people (94.8%), while mild distress was three people (3.1%), and moderate anxiety was two people (2.1%). Conclusion: The results showed that the level of anxiety in the students of the dental profession program is average mainly or do not experience anxiety because they have been able to adapt and the severity of the Covid-19 pandemic has decreased and made health protocol efforts.

**Keywords:** Anxiety Level, Professional Student, Dentist, Covid-19

## 1. INTRODUCTION

A dentist's risk in performing dental treatment can be categorized into moderate to high criteria (WHO, 2020). The classification is based on these factors: contact with patients, contact with infected medical instruments, ventilation, air disinfection, contact with, and contact with liquids such as aerosols, blood, and saliva (Alsaegh, et al, 2021).

According to the Indonesian Dental Association (PDGI), 39 dentists died due to the Coronavirus. On February 5, 2021, there were a total of 396 dentists who were infected with the Coronavirus, including 199 dentists from Health Centers, 92 dentists from hospitals, 36 dentists from clinics, 35 independent dental practitioners, and 13 dentists from educational institutions as well as medical faculty (PDGI, 2021). According to the data,

health workers who are exposed to Covid-19 showed that there was a fairly high number of infected people and risk of death, including dentists. Dentist is a profession that is at high risk of getting infected by Covid-19 due to the contact with saliva, blood, inhalation of airborne particles or aerosols produced during dental procedures (Aulia, et al, 2021).

Based on a study that conducted by Lai, et al, in 2020, during the Coronavirus pandemic, the prevalence of anxiety, depression and symptoms of stress were experienced by health workers in China, with the number of (50.4%) people experienced depression, (44, 6%) people experienced anxiety, (34.0%) people experienced insomnia and (71.5%) people experienced distress. The results of the study by (Irawati, et al, 2021) showed that 57 respondents (33.3%) with the age of 26-35 years did not experience anxiety, while (47.4%) female health workers experienced mild anxiety, and (42.1%) of married health workers also experienced mild anxiety. As it is stated in the data, it is explained that the high data on health workers, including dentists, occurred because health workers were at the forefront to provide care to patients exposed to the Coronavirus, so that workers in the health sector could be infected by the virus. Hospital is a service facility in the health sector and is the front line in stopping the transmission of the Coronavirus as it is a center for health services (Kemenkes RI, 2020).

The results of previous studies explain that there are a number of aspects that cause concern for students of the dental profession program. A student of the dental profession program is one of the health workers whose job is providing health services to people, especially in dental and oral health. This has been an important role in the quality of services and provides services in the health sector that have morals, ethics, authority and justice that is constantly being improved and as a basic aspect of the service system in the health sector. The factor that causes anxiety includes the fact that dental professional program students have to face each stage to graduate. They are also required to face and deal with patients directly so they should study hard and be brave to take the right action (Rini, et al, 2016). According to the International Accounting Standards Committee (IASC), health workers including dentists experience anxiety that is caused by the feeling of discomfort when they have to wear the personal protective equipment, the lack of understanding about the long-term spread of Covid-19 in individuals who have been exposed, and the fear of being exposed to the SARS- CoV-2 virus that results in the risk of transmitting it to family and people around them (Fadli, et al, 2020).

The results of the study by Rodolfo, et al, in 2020 showed that officers in the health sector who functioned as the front line showed mental health outcomes such as anxiety and depression because they had a risk of being infected with the Coronavirus. The high risk of transmission when carrying out work can cause increased concern for doctors, including students of the dental profession program at service facilities in the health sector, which can influence the doctors' health and performance, resulting in less optimal health services to the community. Based on this explanation, health workers must prepare themselves to face challenges and stress when they serve the patients, and this of course have an impact on mental health (Amaliya, 2021).

The purpose of this study was to describe the level of anxiety that occurs within students in the dental profession program when they were dealing with patients during the Covid-19 pandemic at the Unimus Hospital.

## 2. METHODS

This research is a quantitative study. It was done by implementing a descriptive research design and using survey techniques. The population of this study were all students of the dental profession study program at RSGM Unimus with a total of 96 people. The research subjects included were students of the dental profession study program at RSGM Unimus who met the inclusion criteria. In this study, the total sampling technique was used as the total population was already known and there were less than 100 people. Thus, the number of samples in this study was 96 people.

In this study there was only one single variable, that is anxiety. This data or information was obtained from the results of the answers to the questionnaires that were filled by the respondents and the data on the number of active students in the dental profession program of Unimus Hospital. The univariate analysis techniques. Univariate analysis was performed by using Ms. Excel and SPSS.

## 3. RESULTS

### 3.1. The Distribution of Respondents' Answers on Anxiety

*Table 1. The Distribution of Respondents' Answers on Anxiety*

| Anxiety | Answers |      |       |      |           |      |       |      |
|---------|---------|------|-------|------|-----------|------|-------|------|
|         | Always  |      | Often |      | Sometimes |      | Never |      |
|         | F       | %    | F     | %    | F         | %    | F     | %    |
| P1      | 1       | 1,0  | 14    | 14,6 | 59        | 61,5 | 22    | 22,9 |
| P2      | 1       | 1,0  | 9     | 9,4  | 29        | 30,2 | 57    | 59,4 |
| P3      | 0       | 0    | 7     | 7,3  | 18        | 18,8 | 71    | 74,0 |
| P4      | 1       | 1,0  | 9     | 9,4  | 61        | 63,5 | 25    | 26,0 |
| P5      | 25      | 26,0 | 35    | 36,5 | 31        | 32,3 | 5     | 5,2  |
| P6      | 0       | 0    | 3     | 3,1  | 37        | 38,5 | 56    | 58,3 |
| P7      | 3       | 3,1  | 8     | 8,3  | 39        | 40,6 | 46    | 47,9 |
| P8      | 3       | 3,1  | 9     | 9,4  | 50        | 52,1 | 34    | 35,4 |
| P9      | 32      | 33,3 | 38    | 39,6 | 22        | 22,9 | 4     | 4,2  |
| P10     | 0       | 0    | 3     | 3,1  | 45        | 46,9 | 48    | 50,0 |
| P11     | 0       | 0    | 8     | 8,3  | 38        | 39,6 | 50    | 52,1 |
| P12     | 0       | 0    | 1     | 1,0  | 20        | 20,8 | 75    | 78,1 |
| P13     | 64      | 66,7 | 19    | 19,8 | 7         | 7,3  | 6     | 6,3  |
| P14     | 0       | 0    | 4     | 4,2  | 25        | 26,0 | 67    | 69,8 |
| P15     | 2       | 2,1  | 7     | 7,3  | 38        | 39,6 | 49    | 51,0 |
| P16     | 0       | 0    | 2     | 2,1  | 29        | 30,2 | 65    | 67,7 |
| P17     | 19      | 19,8 | 21    | 21,9 | 25        | 26,0 | 31    | 32,3 |
| P18     | 0       | 0    | 4     | 4,2  | 21        | 21,9 | 71    | 74,0 |
| P19     | 31      | 32,3 | 33    | 34,4 | 19        | 19,8 | 13    | 13,5 |
| P20     | 1       | 1,0  | 2     | 2,1  | 43        | 44,8 | 50    | 52,1 |

Based on the study, there were 20 statements in the questionnaire that were given to the respondents, with 15 positive statements and 5 other statements at number 5, 9, 13, 17 and 19. Positive statement is a statement which states that the respondent does not feel anxious, worried or depressed, while the negative statement is a statement where the respondent feels anxiety. The results showed that the respondents who answered "never" were as many as 75 people (78.1%). Statement number 12 "I feel like I'm going to faint or feel like that" where the statement was a positive statement, therefore from the results of the answers it could be seen that the majority of respondents did not feel anxious, worried or depressed.

### 3.2. The Distribution of Respondents' Anxiety Level

Table 2. The Distribution of Respondents' Anxiety Level

| Anxiety          | F  | %    | Mean  | Std. Deviasi | P      |
|------------------|----|------|-------|--------------|--------|
| Severe anxiety   | 0  | 0    |       |              |        |
| Moderate anxiety | 2  | 2,1  | 22,55 | 13,33        | 0,069* |
| Mild anxiety     | 3  | 3,1  |       |              |        |
| Normal           | 91 | 94,8 |       |              |        |
| <b>Total</b>     | 96 | 100  |       |              |        |

Table 2 shows that the respondents of this study were 96 people with the majority of the dental profession program students not experiencing anxiety were 91 people (94.8%), students with mild anxiety were 3 people (3.1%), while students with moderate anxiety were as many as 2 people (2.1%). Furthermore, the distribution of anxiety levels of students in the dental profession program had a mean of 22.55.

### 3.3. The Distribution of Anxiety Level Based on Age

Table 3. The Distribution of Anxiety Levels by Age

| Age          | Anxiety |   |          |     |      |     |        |      | Total |      |
|--------------|---------|---|----------|-----|------|-----|--------|------|-------|------|
|              | Severe  |   | Moderate |     | Mild |     | Normal |      | N     | %    |
|              | N       | % | N        | %   | N    | %   | N      | %    |       |      |
| ≤ 25 y.o     | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 79     | 82,3 | 84    | 87,5 |
| >25 y.o      | 0       | 0 | 0        | 0   | 0    | 0   | 12     | 12,5 | 12    | 12,5 |
| <b>Total</b> | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 91     | 94,8 | 96    | 100  |

Based on the results of the study, it was found that the distribution of anxiety levels based on age is shown in table 3. Table 3 shows that most of the respondents' ages were 25 years as many as 84 people (87.5%) with the most anxiety level experienced by respondents was normal or not experiencing anxiety as many as 79 people (82.3%).

### 3.4. The Distribution of Anxiety Levels Based on Gender

Table 4. The Distribution of Anxiety Levels by Gender

| Gender       | Anxiety |   |          |     |      |     |        |      | Total |      |
|--------------|---------|---|----------|-----|------|-----|--------|------|-------|------|
|              | Severe  |   | Moderate |     | Mild |     | Normal |      | N     | %    |
|              | N       | % | N        | %   | N    | %   | N      | %    |       |      |
| Male         | 0       | 0 | 1        | 1,0 | 0    | 0   | 20     | 20,8 | 21    | 21,9 |
| Female       | 0       | 0 | 1        | 1,0 | 3    | 3,1 | 71     | 74,4 | 75    | 78,1 |
| <b>Total</b> | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 91     | 94,8 | 96    | 100  |

Based on table 4, the distribution of anxiety levels by gender showed that most of them were women with a total of 75 people (78.1%) and the most experienced level of anxiety was normal or not experiencing anxiety with the number of 71 people (74.0%).

### 3.5. The Distribution of Anxiety Levels Based on Education Level

Table 5. The Distribution of Anxiety Levels Based on Education Level

| Class        | Anxiety |   |          |     |      |     |        |      | Total |      |
|--------------|---------|---|----------|-----|------|-----|--------|------|-------|------|
|              | Severe  |   | Moderate |     | Mild |     | Normal |      | N     | %    |
|              | N       | % | N        | %   | N    | %   | N      | %    |       |      |
| Class 3      | 0       | 0 | 2        | 2,1 | 2    | 2,1 | 37     | 38,5 | 41    | 42,7 |
| Class 4      | 0       | 0 | 0        | 0   | 0    | 0   | 15     | 15,6 | 15    | 15,6 |
| Class 5      | 0       | 0 | 0        | 0   | 1    | 1,0 | 39     | 40,6 | 40    | 41,7 |
| <b>Total</b> | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 91     | 94,8 | 96    | 100  |

In accordance with table 5, the distribution of anxiety levels based on education level shows that most of them were class 3 with the number of 41 people (42.7%) not experiencing anxiety or 37 people (38.5%) feeling normal.

### 3.6. The Distribution of Anxiety Levels Based on Marital Status

Table 6. The Distribution of Anxiety Levels Based on Marital Status

| Marital Status | Anxiety |   |          |     |      |     |        |      | Total |      |
|----------------|---------|---|----------|-----|------|-----|--------|------|-------|------|
|                | Severe  |   | Moderate |     | Mild |     | Normal |      | N     | %    |
|                | N       | % | N        | %   | N    | %   | N      | %    |       |      |
| Unmarried      | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 84     | 87,5 | 89    | 92,7 |
| Married        | 0       | 0 | 0        | 0   | 0    | 0   | 7      | 7,3  | 7     | 7,3  |
| <b>Total</b>   | 0       | 0 | 2        | 2,1 | 3    | 3,1 | 91     | 94,8 | 96    | 100  |

Based on table 6, the distribution of anxiety levels based on marital status shows that most of the respondents were unmarried with a total of 89 people (92.7%), and the most experienced level of anxiety was normal or not experiencing anxiety as many as 84 people (87.5%).

## 4. DISCUSSION

### 4.1. The Anxiety Level of Dental Professional Program Based on Age

The results of research that was done toward 96 respondents showed that the respondents with the age of  $\leq 25$  years old were 84 people (87.5%), and the highest level of anxiety experienced by the respondents was normal or not experiencing anxiety with the number of 79 people (82.3%). It is different from the research that was conducted by Irawati, et al, in 2021, with a sample of 57 respondents which explained that at the age of 26-35 years, it was found that the majority of the results do not experience anxiety, with the number of 19 people (33.3%). Research according to (Fadli, 2020) stated that most of the age 30 years (39.1%) and age  $> 30$  years (26.1%) could experience mild anxiety. Age has an affect on the attitude of the individual. If the individuals have the stability and maturity in personality, it will potentially be more difficult to experience disturbances that are caused by stress, because it has a large adaptation process when the stress appears (Dewi, et al, 2020). The differences that occur in those studies are due to having different samples, research instruments, and the time of the study needed, thus it affects the results of the study because health workers have adapted psychologically to the Covid-19 pandemic.

### 4.2. The Anxiety Level of Dental Professional Program Based on Gender

The results of the research showed that from 96 respondents, most of the research respondents were female with a total of 75 people (78.1%) and the level of anxiety most experienced was normal or not experiencing anxiety. as many as 71 people (74.0%). Gender is one of the factors that can affect someone when the person experiences anxiety. Based on the previous study, it is explained that women have a high enough risk of experiencing anxiety (Wijayanti, et al, 2022). This study is different from the research that was done by (Irawati, et al, 2021), explaining that the majority of the samples were women by 87.7% (50 people) and the level of anxiety experienced by most of the respondents was mild anxiety 47.4% (27 people). It is possibly caused by the fact that health workers have fulfilled the need of personal protective equipment when they treat the patients, which results in the differences in the results of the study (Yaslina & Yunere, 2020).

### 4.3. The Anxiety Level of Dental Professional Program Based on Education Level

Based on the results of the study, the level of education shows that most of them are class 3 as many as 41 people (42.7%), with 37 respondents (38.5%) did not experience anxiety or felt normal. These results are different from the research that was conducted by where most of the samples, namely DIII, were 80.7% (46 people), and 47% of the respondents (27 people) experienced mild anxiety. The results of this study are not in line with previous research because students of the dental profession program have to study harder and under a lot of pressure, such as the requirements of each department, difficulties in finding patients and skills in performing treatments (Rini, 2016).

The level of education can cause health workers to experience anxiety. Based on the previous research, it explains that health workers with a higher level of education have the potential to be more stable in coping than health workers whose education level is lower.

Therefore, the higher the level of education, the easier it is to think rationally and to receive information (Malfasari, et al, 2018).

#### 4.4. The Anxiety Level of Dental Professional Program Based on Marital Status

The results of the study explains that most of the respondents were unmarried, with a total of 89 people (92.7%), and the most experienced level of anxiety was normal or not experiencing anxiety, with a total of 84 people (87.5%). The results of this study are not in line with previous research which stated that from 103 respondents, the majority of respondents with the number of 92 people were married, while respondents with moderate anxiety levels were 47 people (51.1%) (Wijayanti, et al, 2022). This happens because the married health workers have greater responsibilities. They pose a lot of workload and are afraid as they have a great potential to spread the Covid-19 virus to their families and people around them (Irawati, et al 2021).

### 5. CONCLUSION

Based on the analysis results and the discussion above, it can be concluded that, 1) The level of student anxiety is normal or not experiencing anxiety as many as 91 people (94.8%), while students with mild anxiety are 3 people (3.1%), and students with moderate anxiety are as much as 2 people (2.1%), 2) The level of the students' anxiety in the dental professional program is mostly normal or not experiencing anxiety as they have been able to adapt and the severity of the Covid-19 pandemic has decreased and health protocol is being carried out.

### 6. SUGGESTION

It is hoped that this research can be a source of information and evaluation regarding the anxiety level of the students in the dental profession program at RSGM Unimus during the process of providing services to the patients. The results of this study can be a source of learning for further researchers and can find the relationship between the factors that influence anxiety in students of the dental profession program.

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