

TITLE: THE EFFECT OF DENTAL ANXIETY LEVELS DURING THE COVID-19 PANDEMIC ON PATIENT VISITS AT DENTAL AND ORAL CLINICS OF KIMIA FARMA KALIBOKOR PHARMACY SURABAYA

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ABSTRACT

Dental *anxiety* is a fear of something caused by the anticipation of danger and is a signal that helps individuals to prepare for action in the face of threats. The spread of Covid-19 has the potential to trigger anxiety disorders in the community. Patient visit data at the Dental and Oral Clinic of Kimia Farma Kalibokor Pharmacy Surabaya showed a decrease in the number of patient visits during the Covid-19 pandemic. This study aims to find out the influence of dental anxiety levels during the Covid-19 pandemic on patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy. Study respondents were patients who came to visit periodically as many as 121 people were taken with simple random sampling. The study was conducted at the dental and oral clinic of Kimia Farma Kalibokor Surabaya pharmacy from December 2020 to March 2021. The data analysis technique used is the Chi-square test. The results showed that most respondents were not anxious and visited accordingly. Chi-square test results are P value 0.854 so it can be concluded that there is no influence between the level of dental anxiety during the Covid-19 pandemic and patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy.

Keywords: Dental Anxiety Levels, Patient Visits, Covid-19 Pandemic Period

INTRODUCTION

According to the World Health Organization (WHO), Covid-19 is an infectious disease caused by a newly discovered type of coronavirus. The new virus and the disease it causes were unknown before the start of the outbreak in Wuhan, China, in December 2019. Covid-19 is now a pandemic that occurs in many countries around the world. In December 2019, a number of patients with the mysterious pneumonia were reported for the first time in Wuhan, China. The virus is named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and can move quickly from human to human through direct contact (Liu et al., 2020).

The Government of Indonesia based on Law No. 24 of 2007 on Disaster Management, establishes the status of non-natural disasters submitted by the National Disaster Management Agency (BNPB, 2020). The Covid-19 pandemic has had various impacts in terms of human life. One of them is in terms of psychological can make people experience excessive anxiety. (Kaya and Dharmawan, 2020). Anxiety is a fear of something caused by the anticipation of danger and is a signal that helps individuals to prepare for action in the face of threats. The influence of demands, competition, and disasters that occur in life can have an impact on physical health and psychology. One of the psychological effects is *anxiety* or anxiety. Dental *anxiety* is a common response that a person will experience before dental care (Zakiah Balqis, Sulistyani and Yuniarly, 2019).

The Covid-19 pandemic has had a significant impact on health services. During pandemic times, health systems are faced with maintaining a balance between meeting pandemic management needs and the fulfillment of essential health services. Data from the Ministry of Health of the Republic of Indonesia shows a decrease in the number of inspection visits and health services since the pandemic conditions were announced (Hervina and Nasutianto, 2020). The policy of countering the spread of Covid-19 in Indonesia has affected various aspects of one of them health. The implementation of large-scale social restrictions has the potential to trigger the occurrence of anxiety disorders, depression, and stress in the community. (Olszewska & Rzymiski, 2020).

The level of anxiety of patients in Malangiwan Health Center is mostly mild anxiety as many as 18 respondents, anxiety is a common feeling that can be felt by everyone when dealing with a threatening situation. Moreover, the current situation, many respondents who experience mild anxiety can be affected by several things, including information about Covid-19 and health workers who always remind about health protocols that must be adhered to when going to health services (Sari & Utami, 2020).

Kimia Farma pharmacy is one of the state-owned enterprises of the Republic of Indonesia (SOE) engaged in the business of providing services and health care products. Kimia Farma Kalibokor Surabaya pharmacy dental clinic is a provider of dental and oral health services for the community. Based on data on the number of patient visits at the Dental Clinic of Kimia Farma Kalibokor Pharmacy Surabaya in September 2019 to February 2020 as many as 1,579 patients. The number of patients in March 2020 to August 2020 was 508 people. The average number of patients before the Covid-19 pandemic was 263.16 and during the Covid-19 pandemic had an average number of patients of 84.66. Based on the Description it was concluded that there was a decrease in the number of patients before Covid-19 and at the time of Covid-19. The goal in the study was to know the influence of dental anxiety levels during the Covid-19 pandemic on patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy.

METHOD

The type of research used in this research is analytical research with cross-sectional methods. Cross-sectional research is a study that studies the correlation between exposure or risk factors (independent) with consequences or effects (dependents), with data collection done simultaneously at one time between risk factors and their effects (point time approach). The population in this study was patients who came to visit the dental clinic Kimia Farma kalibokor for the past year with an average of 174 people., researchers used the Slovin sample formula to find out the number of samples with the number of 121 respondents who came to visit periodically diambil with the simple random sampling, 81 of whom were female patients and 40 male patients. This study was conducted at the Pharmacy Kimia Farma Kalibokor Surabaya, in December 2020 to March 2021.

Data visits of patients who visited the dental and oral clinic of Kimia Farma Kalibokor Surabaya pharmacy in September 2019 to August 2020 were obtained from the patient's medical records. The instruments in this study are in the form of anxiety questionnaire sheets with HARS (Hamilton Anxiety Rating Scale) anxiety measuring instruments and inform consent. The analytical technique used in this analysis is to use the chi-square statistical. Hypothesized in this study is H_0 There was no influence between the level of dental anxiety during the Covid-19 pandemic on patient visits when visiting dental and oral clinics Kimia Farma Kalibokor Surabaya pharmacy. While H_1 There is an influence between the level of dental anxiety during the Covid-19 pandemic on patient visits when visiting the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy. Researchers ensure the confidentiality of respondents in the manuscript or any type of study spread, this study is declared ethically feasible in accordance with 7 (seven) WHO Standards 2011 issued by the health research committee of the Health Polytechnic of the Ministry of Health Surabaya No.EA / 644 / KEPK-Poltekkes_Sby / V / 2021.

RESULT

Anxiety levels from a total of 121 patients who were respondents to the study. Dental anxiety levels of respondents are categorized into 4 types, namely not anxious, mild anxiety, moderate anxiety, severe anxiety obtained the following levels of anxiety:

Table 1 Frequency Distribution of Respondent Anxiety Level Categories

Anxiety Level	Percentage	Frequency	Percentage(%)
No Anxious	99	81	81.8
Light	18	14	9.9
Medium	4	3	3.3
Weight	0	0	0
Total		121	100%

The results of the study conducted at the dental and oral clinic of Kimia Farma Kalibokor Pharmacy Surabaya with the number of respondents as many as 121 people showed that most of the respondents who had answered the study questionnaire, included in the category of not anxious by 82% as many as 99 people.

Patient visits are obtained from secondary data in the patient's medical records in the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy. Patient visits that come in accordance with the number of visits that must be done are categorized accordingly, while patient visits that come not in accordance with the number of visits that must be done are categorized in inappropriate.

Table 2 Frequency Distribution of Number of Visits to Respondents at Dental and Oral Clinic Of Kimia Farma Kalibokor Pharmacy Surabaya

Number of Visits	Percentage	Frequency (%)
Corresponding	72	59.5
Not Suitable	49	40.5
Total		121

Based on table 2 it is known that most respondents made visits in accordance with scheduled visits, which amounted to 59.5% of 72 people.

The data was analyzed with *chi-square* tests to find out the effect of *dental* anxiety levels on patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy.

Table 3 *Chi-Square* Test Results the effect of *dental* anxiety levels on patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy.

Anxiety Level	Patient Visits		N P Value
	According	Not According	
Not anxious	60	39	121 0,854
Light	10	8	
Keep	2	2	
Heavy	0	0	

Based on table 3 that patients are not anxious as many as 60 people make appropriate visits and 39 people visit inappropriately, mild anxiety as many as 10 people make appropriate visits and 8 people visit inappropriately, moderate anxiety as many as 2 people make appropriate visits and 2 people visit inappropriately. Hasil analysis obtained *asympt.sig (p)* indicates the value of 0.854.

DISCUSSION

Based on an analysis of data that has been done on respondents for *dental* anxiety level variables are known to be the most commonly known respondents with non-anxious categories. In the results of the study conducted at the University of Jember Hospital, it was known that there were 86 patients who did dental care as many as 49 respondents (56.98%) of these patients experienced anxiety (Bachri *et al.*, 2017). The level of anxiety of patients in Malangjiwan Health Center is mostly mild anxiety as many as 18 respondents, anxiety is a common feeling that can be felt by everyone when dealing with a threatening situation. Moreover, the current situation, many respondents who experience mild anxiety can be affected by several things, including information about Covid-19 and health workers who always remind about health protocols that must be adhered to when going to health services (Sari & Utami, 2020).

The policy of countering the spread of Covid-19 in Indonesia has affected various aspects of one of them health. The implementation of large-scale social restrictions has the potential to trigger the occurrence of anxiety disorders, depression, and stress in the community. (Olszewska & Rzymiski, 2020). The anxiety felt by patients in health services during this pandemic is if they contract Covid-19 from health workers or other visitors. The perceived anxiety is natural but for the implementation of health services in dental and oral clinics Kimia Farma Kalibokor Surabaya pharmacy is in accordance with government directives so that patients feel safe from Covid-19. *Dental anxiety* is a physiological state of the body in the face of certain situations, but anxiety can also turn into a disorder when excessive and not comparable to the situation. The patient's anxiety when going to do dental care measures can have a negative impact in dental care procedures. In addition, *dental* anxiety and fear can affect the performance and success of dental care (Kurniawati & Amalia, 2019). One that affects anxiety is that highly educated people can access the correct information so that they can calm themselves down. In addition, people with higher education can also be more careful in making decisions by

considering various perspectives (Panonsih *et al.*, 2020). A person who has a relatively high education provision becomes a provision to understand the procedures for visiting public places and health services in the midst of the Covid-19 pandemic, namely complying with health protocols set by the government (Gravidarum *et al.*, 2020).

According to the American Psychiatric Association, the spread of the corona virus outbreak is so fast that many people experience anxiety that has an impact on physical and mental health (Kimball *et al.*, 2020). The word anxiety or what is called anxiety is an unpleasant emotional state, in the form of psychophysiological responses that arise in anticipation of an unreal or imaginary danger, apparently caused by an intrapsychic conflict that is not directly realized (Gumantan *et al.*, 2020). Dental anxiety is a very extreme condition and many people have a level of dental anxiety, especially if they have never experienced or underwent dental treatment before (Kurniawati and Amalia, 2019). HARS is a measurement of anxiety based on psychic and somatic anxiety. According to the HARS scale there are 14 symptoms that appear in individuals who experience anxiety. The 14 symptoms of HARS are anxiety, tension, fear, sleep disturbances, impaired intelligence, depressed mood, somatic (muscular) symptoms, somatic (sensory) symptoms, cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, urogenital symptoms, autonomic symptoms, and behavior. Each item observed was given 5 levels of score between 0 to 4. The HARS scale has been proven to have high enough validity and reliability to measure anxiety in research (Saputro and Fazris, 2017). This is supported based on the results of respondents' answers on questionnaire sheets that have been given in this study, that most respondents feel not anxious. In this study it can be seen that most of the education respondents are college graduates. Respondents who feel not anxious will not hesitate to make dental treatment visits.

Based on the data analysis that has been carried out on the respondents, it is known that the most frequent patient visits are respondents who have visits according to the schedule. The level of compliance in patient visits from Sari & Utami's (2020) research results showed that most respondents were obedient in carrying out dental treatment during the pandemic period from August to October 2020. Some of the services provided at the dental and oral clinics of Kimia Farma pharmacies Kalibokor Surabaya, namely conservation, scaling, exodontia, prosthodontia, orthodontia, and endodontics. The action that is mostly given at the dental and oral clinic of the Kalibokor Pharmacy Pharmacy Surabaya is endodontic treatment. A patient visit is the arrival of a patient to a health service place to get the services available at that place. Dental care patient visits can be said to be successful if the patient is able to follow the treatment from the initial visit to the final visit is completed (Gempur, 2018). Compliance is the extent to which a person's behavior is in accordance with the provisions, the respondent's compliance in conducting dental treatment visits during a pandemic is supported by motivation, information about health protocols and also the need for dental treatment by health workers (Sari & Utami, 2020). Patient visits during the Covid-19 pandemic can be caused by a person's dental anxiety level. People with mild anxiety levels or do not have anxiety allow someone to come for treatment according to the schedule of visits. Vice versa, people with severe anxiety levels allow someone to come for treatment not according to the visit schedule. Based on the results of data analysis, it shows that there is no influence between the level of dental anxiety during the Covid-19 pandemic on patient visits at the dental clinic and the mouth of the Kimia Farma Kalibokor Surabaya pharmacy. The results showed that there was no effect of the level of dental anxiety during the Covid-19 pandemic on patient visits at the dental clinic and oral pharmacy of Kimia Farma Kalibokor Surabaya, this was in accordance with the results of the study (Gravidarum *et al.*, 2020) that there was no effect of COVID-19 pandemic anxiety on immunization visits, 83.30% of respondents had a positive attitude towards visits. A person's attitude can encourage him to do something that feels good for him. Anxiety is also a certain regularity in terms of feelings (affects), thoughts (cognitive), and the predisposition of one's actions (conation) to the surrounding environment. A visit to a health service is a manifestation of a person's interest in getting good health services.

Most respondents did not experience anxiety when visiting the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy during the Covid-19 pandemic, and analysis of the data showed that the majority of respondents' visits to the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacies were in accordance with scheduled visits. The decrease in the number of patients during the Covid-19 pandemic was not caused by the level of dental anxiety during the Covid-19 pandemic. Possible causes of the decrease in the number of patients during the Covid-19 pandemic are the existence of various other factors that affect patient visits to health care places including knowledge, distance of home with the location of health services, family support, facilities and infrastructure supporting health services, patient attitudes and behavior, education or economy (Juniardi, 2020).

CONCLUSION

The level of *dental* anxiety during the Covid-19 pandemic in the dental and oral clinics of Kimia Farma Kalibokor Pharmacy Surabaya is known to be the most widely known category of not anxious. Patient visits in the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy are known to be the most numerous respondents with appropriate category visits. There was no effect on the level of *dental* anxiety during the Covid-19 pandemic on patient visits at the dental and oral clinics of Kimia Farma Kalibokor Surabaya pharmacy..

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