

Relationship of Anxiety Level with Covid-19 Prevention Behavior in Asthma PATIENTS

Sri Buana Tungga Dewi¹, Rosalina²
^{1,2}Universitas Ngudi Waluyo

Article

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Abstract

The public's anxiety in dealing with COVID-19 has created new psychological problems. The Covid-19 is a disease outbreak caused by a viral infection that is easily transmitted and the symptoms vary widely. Symptoms of Covid-19 will be more severe in someone who has a congenital or comorbid disease such as asthma. This viral infection attacks the respiratory tract, and if an asthma sufferer is exposed to Covid-19, it will make asthma symptom worse, such as wheezing, coughing, and difficulty breathing. To find out the relationship between anxiety levels and Covid-19 prevention behavior in asthmatics at Kebondalem Public health Care. The research design used a descriptive correlative with a cross sectional approach and as a measuring tool for data collection using a questionnaire. The population in this study were all asthma sufferers who had been recorded in 2019-2020 at the Kebondalem Public Health Care with the age of 21-50 years as many as 45 people. The sampling technique used was total sampling. Data analysis using Chi Square. There is a relationship between anxiety levels and preventive behavior, covid-19 in asthma at Kebondalem Public Health Care with p value of $0,014 < 0,05$ there is a relationship between anxiety levels and Covid-19 prevention behavior in asmatics at Kebondalem Public Health Care for asmatics to improve preventive behavior against the Covid-19 outbreak to minimize the spread of covid-19

Abstract

Kecemasan masyarakat dalam menghadapi covid- 19 menimbulkan masalah psikologis baru. Covid-19 adalah wabah penyakit yang disebabkan oleh infeksi virus yang mudah menular dan gejalanya sangat bervariasi. Gejala covid-19 akan bertambah berat pada seseorang yang mempunyai penyakit bawaan atau komorbid seperti asma. Infeksi virus inimenyerang bagian pernafasan, dan apabila penderita asma terkena covid-19 akan membuat gejala asma semakin buruk, seperti mengi, batuk, dan kesulitan bernafas. Untuk mengetahui hubungan tingkat kecemasan dengan perilaku pencegahan covid-19 pada penderita asma di Puskesmas Kebondalem. Desain penelitian menggunakan deskriptif kolerasi dengan pendekatan cross sectional dan alatukur yang digunakan

Corresponding author:

Rosalina

adisdyzi@gmail.com

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Universitas Ngudi Waluyo

untuk pengumpulan data adalah kuesioner. Populasi dalam penelitian ini adalah semua penderita asma yang sudah terdata pada tahun 2019-2020 di Puskesmas Kebondalem dengan usia 21-50 tahun sebanyak 45 orang. Teknik pengambilan menggunakan total sampling. Analisis data menggunakan Chi Square. 73 % penderita asma mengalami tingkat kecemasan berat, 89% perilaku pencegahan Covid-19 pada penderita asma baik. Hasil analisis uji Chi Square didapatkan p value $0,014 < 0,05$. Ada Hubungan tingkat kecemasan dengan perilaku pencegahan covid-19 pada penderita asma di Puskesmas Kebondalem. Penderita asma agar dapat meningkatkan perilaku pencegahan terhadap wabah covid-19 untuk meminimalisir penyebaran covid-19.

Introduction

Asthma is a chronic inflammatory disease of the respiratory tract that involves many inflammatory cells such as eosinophils, mast cells, leukotrienes and so on. Chronic inflammation associated with airway hyperresponsiveness that causes recurrent episodes of wheezing, shortness of breath, chest tightness and coughing at night, this event is usually characterized by airway obstruction that can be spontaneous or with medication. (Wijaya & Toyib, 2018).

Asthma triggers are allergens, stress, work environment, weather changes, and respiratory infections (Hostiadi, 2015). Infection in the respiratory tract is one of the factors that trigger asthma, one of the factors that causes infection in the respiratory tract at this time is Covid-19.

Asthma in Indonesia is still at a fairly high rate. The prevalence of asthma in Indonesia is 2.4% with the highest incidence in women at 2.5% (Risksedas, 2019). The highest prevalence of asthma is in DIY at 4.5% and Central Java province has a prevalence of 1.8% (Kemenkes RI, 2019).

Covid-19 or Coronavirus disease is a disease that has spread widely throughout the world. The disease is caused by a virus called severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2). This virus attacks the respiratory tract

for sufferers. This disease can be transmitted in many ways, such as through splashes of people who cough, sneeze, or direct contact with splashes when talking, and through surrounding objects (WHO, 2020).

Covid-19 is a type of RNA virus, which is classified as a family of corona viruses that can cause respiratory system infections. Respiratory viral infections such as Covid-19 can make asthma symptoms worse. According to Charles L. Fishman, a pulmonologist in New York, the risk of asthmatics if exposed to Covid-19 is that it can make asthma symptoms worse, such as wheezing, coughing, and difficulty breathing. Therefore, asthmatics must be more alert to the Covid-19 virus and can take preventive behavior to avoid the virus. The occurrence of the Covid-19 pandemic can cause asthma sufferers to experience anxiety, which can result in asthma recurrence.

Behavior Prevention of the transmission of covid-19 must be done to prevent the spread of this disease. According to Sulaeman and Supriadi (2020). In addition to providing the community with knowledge about Covid-19, knowledge about transmission prevention behavior also needs to be given to the community. Preventive behavior can be done by washing hands with running water and soap, wearing masks when outside the house, and implementing physical distancing by



avoiding crowds. Prevention of transmission of Covid-19 in asthmatics is done to prevent asthma symptoms from getting worse.

Asthma is one of the comorbidities that need to be watched out for. The more cases of COVID-19, the greater the risk of contracting COVID-19. This will cause anxiety in asthmatics because if infected with COVID-19 symptoms that arise can include symptoms of severe respiratory problems or even death. Prevention of transmission of Covid-19 is done to avoid being infected with the virus.

Method

This research is a quantitative research method, with a descriptive correlative research design with cross sectional approach. The population in this study were all asthmatics who were recorded in 2019-2020 at the Kebondalem Public Health care with the age of 21-50 years, as many as 45 people. The sampling technique used total sampling. The number of samples studied in this study were 45 people. The measuring instrument used in this study is a questionnaire consisting of 20 questions that have been tested for validity and reliability with a validity value = 0.444 and a reliability value = 0.890. With data collection carried out on August 9-12 2021.

Result and Discussion

Table 1. Frequency Distribution of Anxiety Levels in Asthma Patients in Kebondalem Public Health care

Anxiety Levels	frequency	%
mild anxiety	0	0
moderate anxiety	12	27
severe anxiety	33	73
Total	45	100

Table 1 shows that most of the respondents, as many as 33 (73%) experienced high anxiety, and 12 respondents (27%) experienced moderate anxiety. This result is in accordance with

previous research conducted by Nofianti (2020). The results of the study showed that the anxiety level of asthma patients during the COVID-19 pandemic in the Mendawai Health Center work area experienced the most moderate anxiety with a percentage of 40%.

Anxiety is an emotional response and subjective individual judgment that is influenced by the subconscious and has not been clearly identified as a causative factor Pieter et al (2011). Anxiety can interfere with the work of the oxytocin hormone, which is a hormone that can affect behavior and emotional responses that build calm, trust and psychological stability so that if the oxytocin hormone is disturbed, a person will experience anxiety (Putra, et al 2018). Symptoms of anxiety can be seen from 3 aspects, cognitive, physiological aspects and behavioral aspects. The cognitive component will affect a person's perspective, become insecure, there are feelings of excessive worry and fear. while the physical component generally gives rise to complaints such as palpitations, headaches, muscle tension, abdominal problems and so on. Behavioral components that appear in anxiety include sweating, wringing fingers, walking back and forth.

Tabel 2. Frequency Distribution Covid-19 Prevention Behavior in Asthma Patients Kebondalem Village

Covid-19 Prevention Behavior	f	%
Not good	5	11.0
Good	40	89.0
Total	45	100

Table 2 shows that the majority of respondents, as many as 40 (89%) have a good level of preventive behavior, and as many as 5 (11%) respondents have a level of preventive behavior that is not good. This research is in line with that conducted by Purnamasari (2020) the results of the study show that as many as 95.8% of the Wonosobo people have good behavior, the behaviors shown



include compliance with using masks when leaving the house, frequently washing hands with soap or hand sanitizer, avoiding crowds, and implement physical distancing. Washing hands is one of the effective ways to kill bacteria, the COVID-19 virus is known to stick to body parts, especially hands that come into contact with objects that have been infected by droplets. According to the Ministry of Health, 75% of the transmission of the COVID-19 virus is through splashing saliva on objects (Ministry of Health, 2020).

In this study, some of the respondents washed their hands with soap after handling touched objects according to health protocols. In the face of the Covid-19 pandemic, preventive behavior can help prevent the transmission of this disease. Knowledge about prevention of transmission is important during the spread of COVID-19. Preventive behavior to prevent the transmission of COVID-19 that can be done is by diligently washing hands with soap and running water, wearing masks when leaving the house, and implementing physical distancing, avoiding crowds.

Table 3. Relationship of Anxiety Level with Covid-19 Prevention Behavior in Asthma Pasientin Kebondalem Village

Level of Anxiety	Prevention Behavior				Total		<i>p-value</i>
	Good		Not Good		f	%	
	f	%	f	%			
Moderate	8	66.7	4	33.3	12	100.0	0.014
Severe	32	96.9	1	3.0	33	100.0	
Total	40	88.9	5	11.1	45	100.0	

In table 3 it is found that respondents with moderate anxiety levels who have good preventive behavior are 8 (66.67%), respondents with severe anxiety levels who have good preventive behavior are 32 (96.97%), respondents with moderate anxiety levels who have 4 (33.33%) of the respondents with severe anxiety level who had unfavorable behavior prevention behaviors were 1 (3.03%). The results of the analysis show that the p value is 0.014 <0.05 so it can be concluded that there is a relationship between anxiety levels and behavior prevention of Covid-19 in asthmatics.

Preventive behavior is closely related to implementing health protocols. The health protocol is one of the efforts that must be carried out by all levels of society in order to minimize the spread and transmission of Covid-19. Suggested behavioral health protocols recommended by WHO in stopping the transmission of this disease, such as washing hands with soap or hand sanitizer, covering nose when sneezing

or covering mouth when coughing, hand awareness (preventing touching eyes, nose, and mouth), cleaning the home environment, and use a mask.

Based on the bivariate analysis table between the level of anxiety and preventive behavior, it can be seen that individuals who experience severe anxiety tend to have good preventive behavior, which can be seen in table 3. Of the total 33 respondents who experienced severe anxiety, 32 who have less preventive behavior. In addition, of the 12 respondents with moderate levels of anxiety, 8 of them had good preventive behavior and 4 respondents had less preventive behavior.

Based on these data, it can be said that the level of anxiety is related to the respondent's behavior. The higher the respondent's anxiety level, the better the COVID-19 prevention behavior will be of them had good COVID-19 prevention behavior. and while there is only 1 respondent



Asthma is a condition when the airways become swollen due to inflammation, bronchoconstriction and excess mucus production. Asthma can cause mild symptoms that can be immediately treated with the use of an inhaler or symptoms of difficulty breathing, chest pain, coughing that can interfere with daily activities. In some cases the condition can become more severe.

The Covid-19 pandemic is a situation that causes anxiety for asthmatics. Asthma attacks can cause mild to severe symptoms, especially when accompanied by COVID-19. This can cause anxiety for people with asthma. To prevent the spread of Covid-19, asthmatics make efforts by paying attention to the behavior of preventing the transmission of Covid-19. This anxiety is needed by humans to make them more alert to health threats.

Conclusion and Suggestions

The level of anxiety about the transmission of Covid-19 is related to the behavior of preventing the transmission of Covid-19 in asthmatics. By realizing that the symptoms that appear can be severe, preventive behavior will be better done. In an effort to prevent the transmission of COVID-19, the implementation of the 5 M is an absolute thing to do. 5 M consists of wearing a mask, washing hands, keeping a distance, avoiding crowds, and limiting mobility (interaction) not only important for people with asthma but for all people

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