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Overview of Clinical Symptoms of Pediatric Patients Infected with Coronavirus Disease 2019 (COVID-19) at Dr. M. Djamil General Hospital, Padang, Indonesia

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ABSTRACT

Introduction: COVID-19 is a disease caused by infection with a new coronavirus with the name SARS-CoV-2 and can be transmitted between humans. Transmission of COVID-19 occurs through droplets produced by infected people. Indonesia is a country affected by COVID-19, with cases reaching 2,203,108 cases. The number of cases in Indonesia also includes COVID-19 infections in children. This study aimed to present an overview of the clinical symptoms of pediatric patients infected with coronavirus disease 2019 at Dr. M. Djamil General Hospital, Padang, Indonesia. **Methods:** This study is a descriptive observational study. A total of 50 research subjects participated in this study. Observations of sociodemographic data and observations of clinical data were carried out in this study. Univariate data analysis was performed to present the distribution of frequencies and percentages of each variable. **Results:** The majority of clinical symptoms of pediatric COVID-19 patients are fever. Apart from fever symptoms, the majority of clinical symptoms of child COVID-19 patients have symptoms of runny nose, shortness of breath, nausea and vomiting, and diarrhea. **Conclusion:** Fever is a clinical symptom of the 2019 coronavirus disease (COVID-19) infection in children at Dr. M. Djamil Hospital, Padang, Indonesia.

1. Introduction

In 2019 in China (Wuhan), a new disease was discovered, which was reported by the World Health Organization (WHO). The disease is known as Coronavirus disease 2019 (COVID-19). COVID-19 is a disease caused by infection with a new coronavirus with the name SARS-CoV-2 and can be transmitted between humans. Transmission of COVID-19 occurs through droplets produced by infected people. The ease of transmission of COVID-19 has caused cases of COVID-19 to continue to increase. The increase in COVID-19 cases took place quickly. In July 2021, the total number of COVID-19 cases in the world reached 181,930,736 cases from 224 countries reporting new

cases, including Indonesia. Indonesia is a country affected by COVID-19, with cases reaching 2,203,108 cases. The number of cases in Indonesia also includes COVID-19 infections in children. In 2020, the number of confirmed cases of COVID-19 children reached 37,706 cases.¹⁻⁵

Several risk factors that can increase the transmission of COVID-19 to children include age, gender, comorbidities, and environmental factors. Age is associated with the immunity of children who have not yet fully formed when they were small. Gender is associated with hormones that are owned by women, which can increase their immunity. Comorbid or comorbid diseases in children can increase the risk of being infected with COVID-19, such as genetic disorders, autoimmune disorders, cerebral palsy, tuberculosis, malnutrition, malignancy, meningitis, and respiratory disorders. In addition, environmental

factors can also increase the transmission of COVID-19 to children, such as close contact with parents, playmates and living in places that report local transmission. The results of the study stated that the most clinical symptoms of COVID-19 in Indonesian children were coughing (57.4%), followed by fatigue (39.7%), fever (36.8%), and shortness of breath (22.1%).⁶⁻¹⁰ This study aimed to present an overview of the clinical symptoms of pediatric patients infected with coronavirus disease 2019 at Dr. M. Djamil General Hospital, Padang, Indonesia.

2. Methods

This study is a descriptive observational study. This study uses secondary data obtained from medical record data at the medical records installation of Dr. M. Djamil General Hospital, Padang, Indonesia. A total of 50 research subjects participated in this study, and the research subjects met the inclusion criteria. The inclusion criteria in this study were pediatric patients aged 0-17 years who were diagnosed with COVID-19 infection and who were treated at Dr. M. Djamil

General Hospital, Padang, Indonesia, for the period January - December 2021 and have complete medical record data. This study was approved by the medical and health research ethics committee at Dr. M. Djamil General Hospital, Padang, Indonesia. Observations on sociodemographic data as well as observations on clinical data, were carried out in this study. Univariate data analysis was performed to present the distribution of frequencies and percentages of each variable. Data analysis was carried out using SPSS version 25.

3. Results and Discussion

Table 1 presents the clinical picture of COVID-19 in children. The majority of clinical symptoms of pediatric COVID-19 patients are fever. Apart from fever symptoms, the majority of clinical symptoms of child COVID-19 patients have symptoms of runny nose, shortness of breath, nausea and vomiting, and diarrhea.

Table 1. Overview of clinical symptoms of COVID-19 in children.

No.	Clinical symptoms	Frequency	Percentage
1.	Fever	14	28
2.	Cough and cold	12	24
3.	Shortness of breath	10	20
4.	Nausea-vomiting	6	12
5.	Diarrhea	5	10
6.	Headache	1	2
7.	Fatigue	1	2
8.	Sore throat	1	2

Several studies state that the clinical symptoms of COVID-19 are sore throat, cough, fever, rhinorrhea, headache, malaise, shortness of breath, and muscle aches.¹¹⁻¹⁴ The results of other studies state that the most clinical symptoms of COVID-19 in Indonesian children are cough (57.4%), followed by fatigue (39.7%), fever (36.8%), and shortness of breath (22.1%). Other research states that the symptoms experienced are cough (21%), fever (17.7%), sore throat (5.4%), shortness of breath (3.8%), anosmia (0.5%), and diarrhea (0.4%).⁷ Based on other studies, the most common clinical symptoms of COVID-19 in children are fever 68% followed by cough (41%), sore throat (29%), cold (27%), headache (16%), diarrhea (12

&, nausea/vomiting (7%) 8. Other studies also state that fever is the most common symptom, namely 25.5%, followed by cough (24.5%), runny nose (19.3%), headache (15.7%), sore throat (15.7%), anosmia/ageusia (7.7%), shortness of breath (6.6%), anorexia (3.8%), and nausea/vomiting (3.5%).¹⁵⁻¹⁸

Information about the clinical symptoms experienced by COVID-19 patients is very important for the public and health workers to know. This can increase alertness if you find symptoms that lead to COVID-19 so that you can receive fast and appropriate treatment for the symptoms you are experiencing. Awareness of COVID-19 can help prevent severe symptoms from occurring in patients and can

suppress the increasingly widespread of COVID-19.^{19,20}

4. Conclusion

Fever is a clinical symptom of the 2019 coronavirus disease (COVID-19) infection in children at Dr. M. Djamil General Hospital, Padang, Indonesia.

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