

Investigating the demographic characteristics, clinical and laboratory findings in children with corona virus hospitalized in medical centers of Ardabil province

Abstract

Background: Children of any age are susceptible to Covid-19. The severity of the clinical manifestations of Covid-19 in children is generally lower than in adult patients, but young children, especially infants, are vulnerable to infection. Despite the global spread, the epidemiologic and clinical patterns of covid-19, especially in children, are largely unclear. Therefore, this study was conducted with the aim of investigating demographic characteristics, clinical and laboratory findings in children with corona virus hospitalized in medical centers of Ardabil province.

Aim: Determination the demographic characteristics, clinical and laboratory findings in children with corona virus hospitalized in medical centers of Ardabil province

Materials and methods: This descriptive and analytical study was conducted in children under 18 years old who were infected with Corona and were admitted to medical centers in Ardabil province. The sampling method was the whole number from the database of patients with corona, and ۳۱۳ people were included in the study. The necessary information for the study, including demographic characteristics of the patients, background disease, clinical and laboratory findings, hospitalization status(hospitalization in ICU, hospitalization more than 5 days and less than 5 days), was extracted from the database of patients with corona and in the data collection form. it is registered. After completing the data collection, the data was refined and categorized in Excel software and analyzed using stata statistical software.

Results: The results of the study showed that the average age of the 313 children in the study was 12.39 years and most of the children were in the age range of 15 years and above. According to the results, 5.4% of children had an underlying disease. The most observed clinical symptoms in children respectively included

fever, weakness and lethargy, cough, headache and shortness of breath. According to the results, 25.2% of children were hospitalized for more than 5 days and 4.47% had a history of hospitalization in ICU. Based on the results, a significant relationship between age and hospitalization in ICU and hospitalization more than five days in children with covid-19 was observed ($P<0.05$). Also, there was a significant relationship between the history of the underlying disease and the status of hospitalization ($P<0.05$). There was a significant relationship between clinical symptoms such as cough, sore throat, and shortness of breath, and also blood factors such as D-DIMER, ALT, CRP, Creatinine and platelet count with hospitalization in ICU and hospitalization more than 5 days ($P<0.05$).

Conclusion: The frequency of hospitalization due to covid-19 was higher among children with older age, female gender. Clinical symptoms such as fever, weakness and lethargy and cough in children were recognized as the most common symptoms. In general, according to the findings of the present study, it can be concluded that the chance of being admitted to the ICU and the chance of being hospitalized more than 5 days, had a significant relationship with variables such as older age, having an underlying disease, clinical symptoms, and blood factors.

Keywords: children, covid-19, clinical and laboratory findings