

Did admissions caused by respiratory infections and asthma decrease during the COVID-19 pandemic?

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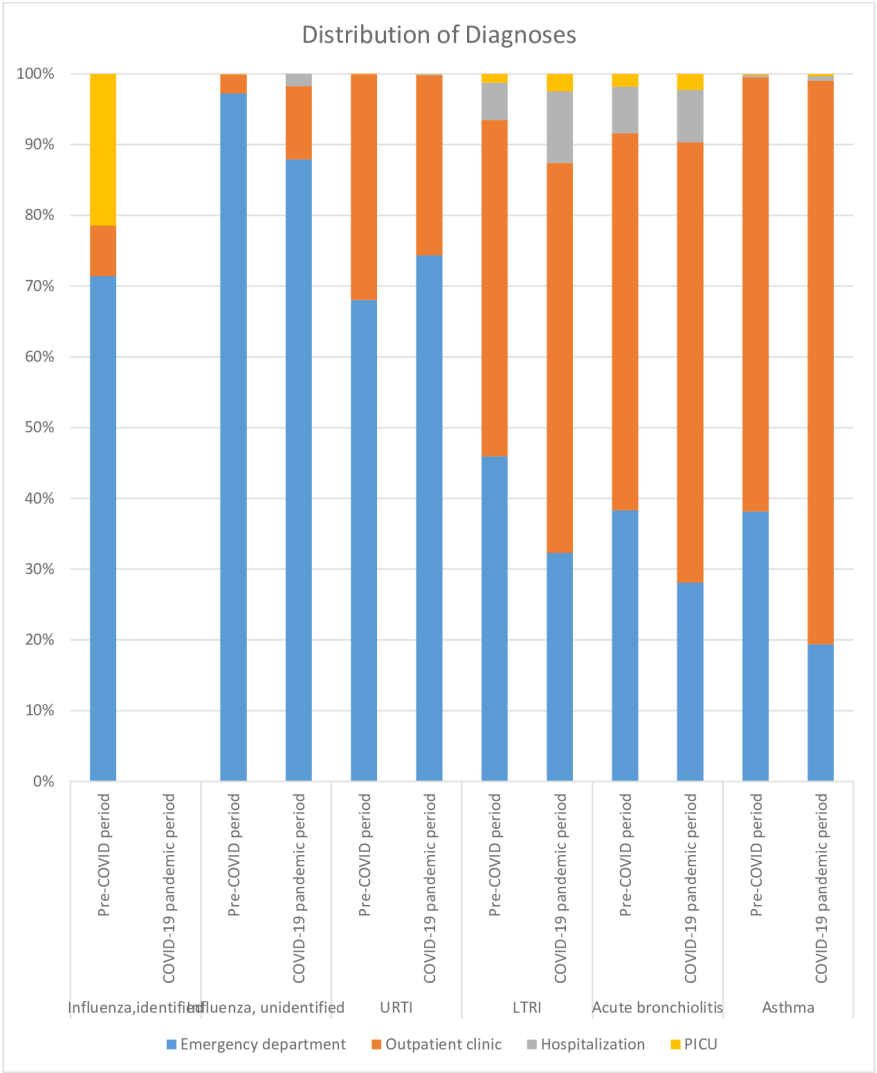
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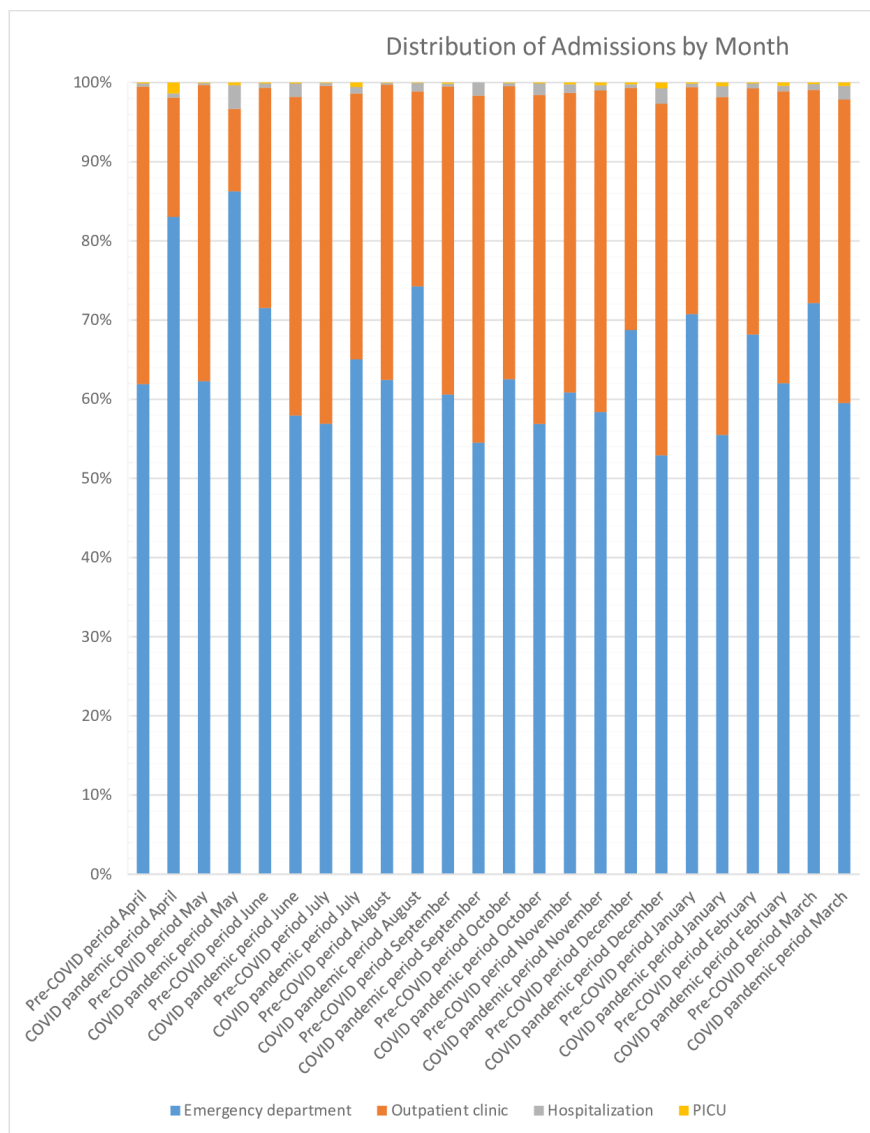
Abstract

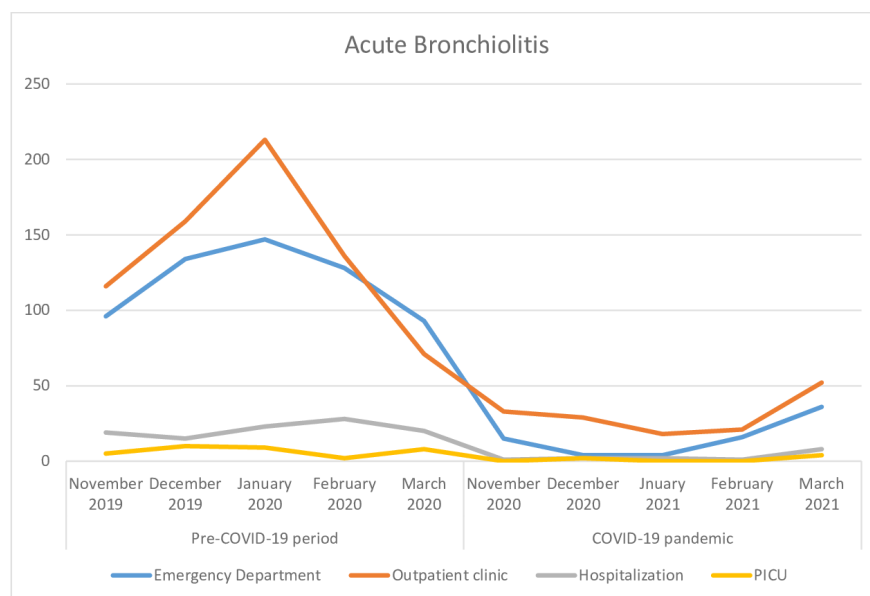
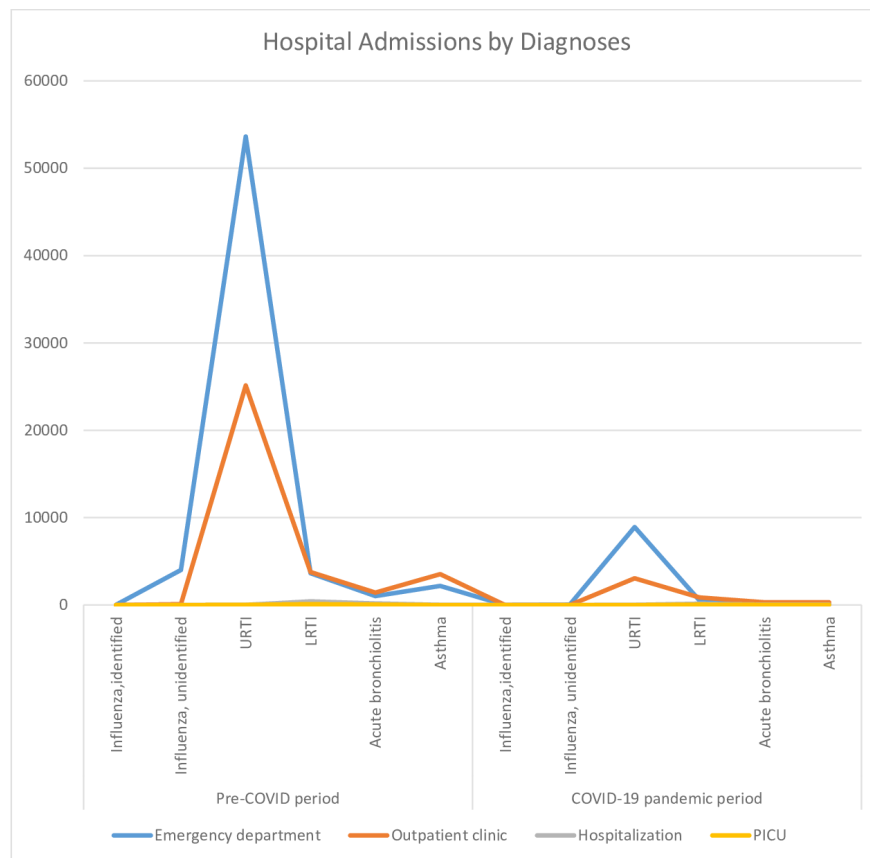
Background: COVID-19 outbreak lead to nationwide lockdown on the March 16th, 2020 in Turkey. We aimed to quantitatively determine the change in frequency of upper and lower respiratory tract infections and asthma in pediatric population associated with COVID-19. Methods: The electronic medical record data of pediatric population admitted to the emergency department (ED), outpatient and inpatient clinics and pediatric intensive care unit (PICU) were analyzed with the diagnosis of Influenza, upper and lower respiratory tract infections (URTI, LRTI) acute bronchiolitis and asthma. The data of the first year of the pandemic was compared with the previous year. Results: In total 112496 admissions were made between April 1, 2019 and March 31, 2021 in our hospital. A decline was observed in ED admissions (-73%) and outpatient clinic (-70%) visits, hospitalizations (-41.5%) and PICU admissions (-42%). The admissions with the diagnosis of Influenza and URTI had a decline from 4.26% to 0.37% ($p=0.0001$), and from 81.54% to 75.62% ($p=0.0001$), respectively. An increase was observed in the LRTI, acute bronchiolitis and asthma (from 8.22% to 10.01% ($p=0.0001$), from 2.76% to 3.07% ($p=0.027$) and from 5.96% to 14% ($p=0.0001$), respectively). Conclusions: A dramatic decrease was observed in the number of admissions to ED and inpatient clinics and outpatient clinic visits and PICU admissions, and, when the rates of admissions were compared, the general rate of admissions to ED showed a decrease while inpatient, outpatient clinics and PICU admissions demonstrated an increase during the pandemic.

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