Clinical Characteristics and Clusters Analysis of 1009 COVID-19 Patients in Taiwan: A Registry Study

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Abstract

Rationale, aims and objectives: The purpose of this study is to describe the symptoms and clusters characteristics of COVID-19 patients in Taiwan. Method: The Central Epidemic Command Center (CECC) from Taiwan CDC daily press release publications were extracted for patient demographic information (age, gender, case type and cluster) and the symptoms exhibited by the patients before diagnosis were collected. Results: A total of 1030 COVID-19 cases were reported in Taiwan up until the end of March 2021, of which 1009 patients had symptoms available. Of available patient data, 633 patients (62.74%) were symptomatic and 376 patients (37.26%) were asymptomatic, as classified in our study based on the published list of potential symptoms of COVID-19 by WHO. The most prevalent symptoms of our patients were coughing (29.33%), fever (26.56%) and nasal symptoms (20.22%). Our regression analysis found when the first detected patient of the cluster had a subjective sensation of feeling feverish, the number of infected cases in the cluster increased by 4.59 cases. Similarly, patients who experienced a slightly elevated body temperature or fever were associated with an increase of 2.37 and 0.35 cases in each cluster, respectively. Furthermore, increasing one new COVID-19 test per thousand population reduces 7.22 cases per cluster. Conclusions: The majority of reported cases in Taiwan were symptomatic. Symptoms which had the greatest number of patients overall were cough, fever, and nasal symptoms. It is our hope to help physicians to better diagnose current Taiwan COVID-19 patients, while aiding the government in stopping the spread of new cases.

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