

Evaluation of the clinical characteristics of suspected or confirmed cases of COVID-19 during home care with isolation: A new retrospective analysis based on O2O

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Abstract

Summary Background The recent outbreak of the novel coronavirus in December 2019 (COVID-19) has activated top-level response nationwide. We developed a new treatment model based on the online-to-offline (O2O) model for the home isolated patients, because in the early stages the medical staff were insufficient to cope with so many patients. **Methods** In this single-centered, retrospective study, we enrolled 48 confirmed/suspected COVID-19 patients who underwent home isolation in Wuhan between January 6 and January 31, 2020. By WeChat and online document editing all patients were treated with medical observation scale. The clinical indications such as Fever, Muscle soreness, Dyspnea and Lack of strength were collected with this system led by medical staff in management, medicine, nursing, rehabilitation and psychology. **Findings** The mean(SD) age of 48 patients was 39.08(13.88) years, 35(72.9%) were women. Compared with non-hospitalized patients, inpatients were older(≥ 80 years, 2.4% vs 33.3%, $P < 0.04$). All inpatients had fever, 50% inpatients had coughs and showed infiltration in both lungs at the time of diagnosis. 33.3% inpatients exhibited negative changes in their CT results at initial diagnosis. The body temperature of non-hospitalized patients with mild symptoms returned to normal by day 4-5. While dyspnea peaked on day 6 for non-hospitalized patients with mild symptoms, it persisted in hospitalized patients and exacerbated over time. The lack of strength and muscle soreness were both back to normal by day 4 for non-hospitalized patients. **Interpretation** Monitoring the trends of symptoms is more important for identifying severe cases. Excessive laboratory data and physical examination are not necessary for the evaluation of patients with mild symptoms. The system we developed is the first to convert the subjective symptoms of patients into objective scores. This type of O2O, subjective-to-objective strategy may be used in regions with similar highly infectious diseases to minimize the possibility of infection among medical staff.

Competing Interest Statement

The authors have declared no competing interest.

Funding Statement

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Author Declarations

All relevant ethical guidelines have been followed; any necessary IRB and/or ethics

committee approvals have been obtained and details of the IRB/oversight body are included in the manuscript.

Yes

All necessary patient/participant consent has been obtained and the appropriate institutional forms have been archived.

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