Effectiveness assessment of patient-centered measures for chronic disease management during COVID-19 epidemic

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Purpose The disruption of routine treatment, including the interruption of medication, might be deteriorating chronic conditions during disasters such as the COVID-19 epidemic. This study aims to assess the effectiveness of patientcentered measures for patients with chronic diseases during the COVID-19 epidemic. Method This was a crosssectional study to analyze the effectiveness of chronic disease prescriptions issued by hospital-based clinicians, prescription refilling rate, the utilization rate of reservation for picking-up medicine, and the rate of returning to the hospital for refilling prescriptions as scheduled at a tertiary care hospital in Taiwan by using chi-square test. The enrolled outpatients received managed care from January to June of 2019 and 2020. The SAS (v8.2) statistical software was used for analysis. Results The percentage of chronic disease prescriptions issued by physicians out of a total number of outpatient visits increased to 66.0% significantly, and the rate of patients who returned to the hospital to refill chronic disease prescriptions decreased to 52.4%. The utilization rate of reservation service for prescription refills increased significantly from 3.9% to 10.5%. There is a significant difference in age groups and specialties visited by patients who made prescription refill reservations. The top five specialties are cardiovascular medicine, metabolic diseases, and endocrinology, neurology, urology, orthopedics, and rehabilitation. The specialties with the highest increase in reservation rate are psychiatry, gastroenterology, gynecology and pediatrics, and rheumatology. Discussion Most of the chronic disease continuous prescription users are the elderly, but the elderly are at high risk of severe COVID-19. Adopted patient-centered measures for preparedness to go out with medication such as outdoor drug dispensing counters, walk- or drive-through pharmacies and online reservations for prescription refilling were effective, which can help elderly with the stable chronic disease obtain medication on schedule and reduce the risk of coronavirus exposure. National Health Insurance Administration should add the prescription refilling records to health insurance cards for further evaluating medicine adherence when prescriptions are revised.

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