

# Assessment of A new Strategy to Prevent Prescribing Errors Involving COVID-19 Patients in Community Pharmacies

## Article Information

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## Abstract

**Background:** Because COVID-19 patients are vulnerable to prescribing errors (PEs) and adverse drug events, designing and implementing a new approach to prevent prescribing errors (PEs) involving COVID-19 patients has become a priority in pharmacotherapy research. **Objectives:** To investigate whether using WhatsApp to deliver prescribing error (PE)-related clinical scenarios to community pharmacists could enhance their ability to detect PEs and conduct successful pharmaceutical interventions (PIs). **Methods:** In this

study, 110 community pharmacies were recruited from different regions across Jordan and equally allocated to 2 groups. Over the course of 4 weeks, WhatsApp was used to send PEs-related clinical case scenarios to the active group. The second group was controlled with no clinical scenarios. After completion of the 4-week phase, pharmacists from both groups were asked to document PEs in COVID-19 patients and their interventions using a data-collection form. **Results:** The incidence of PEs in COVID-19 patients documented in the active group (18.54%) was higher than that reported in the control group (3.09%) ( $P = .001$ ). Of the 6598 and 968 PIs conducted by participants working in the active and control group pharmacies, 6013 (91.13%) and 651 (67.25%) were accepted, respectively. The proportions of wrong drug (contraindication), wrong drug (unnecessary drug prescribed/no proof of its benefits), and omission of a drug between the active and control groups were 15.30% versus 7.21% ( $P = .001$ ), 11.85% versus 6.29% ( $P = .03$ ), and 17.78% versus 10.50% (0.01), respectively. Additionally, the proportions of lethal, serious, and significant errors were 0.74% versus 0.35% ( $P = .04$ ), 10.52% versus 2.57% (0.002), and 47.88% versus 9.57% (0.001), respectively. Addition of drug therapy interventions (AOR = 0.62; 95% CI, 0.21-0.84) and errors with significant clinical seriousness (AOR = 0.32; 95% CI, 0.16-0.64). Conclusions PEs involving COVID-19 patients in community settings are common and clinically significant. The intervention assessed in this study could be promising for designing a feasible and time-efficient interventional tool to encourage pharmacists' involvement in identifying and correcting PEs in light of COVID-19.