

Virtual pharmacist interventions on abuse of over-the-counter medications during COVID-19 versus traditional pharmacist interventions

Author links open overlay panel [Nadia Al Mazrouei](#) [Rana M. Ibrahim](#) [Ahmad Z. Al Meslamani](#) [Derar H. Abdel-Qader](#) [Osama Mohamed Ibrahim](#)

Received 27 November 2020, Accepted 7 February 2021, Available online 12 February 2021, Version of Record 11 May 2021.

Abstract

Objectives

This study aimed to investigate the frequency, nature, and clinical significance of pharmacist interventions on over-the-counter (OTC) medicines with abuse potential across community pharmacies with and without virtual care.

Methods

In this prospective observational study, a trained research team observed the dispensary teams of 12 community pharmacies in the United Arab Emirates (UAE), 6 of which were operating virtual pharmacy care. A standardized data collection form was used to include information about dispensing of OTC medicines and pharmacist interventions on those with abuse/misuse potential. The clinical significance of the interventions was evaluated by a multidisciplinary committee.

Results

The frequency of pharmacist interventions on OTC medicines with abuse potential across pharmacies with and without virtual services was 83.2% versus 91.0%, respectively, whereas the frequency of pharmacist interventions on OTC medicines with misuse potential across pharmacies with and without virtual services was 79.8% versus 41.2%, respectively. The proportions of clinically significant interventions across pharmacies with and without virtual services were 19.7% versus 10.5%, respectively. Cough medicines were dispensed significantly more across pharmacies with virtual care than across

pharmacies without virtual care (25.6% vs. 9.7%, respectively; $P = 0.04$). Asking the patient to seek the advice of an addiction specialist (adjusted odds ratio = 4.11; $P = 0.001$) versus refusing to sell the drug was more likely to be associated with pharmacies with virtual services than with pharmacies operating traditional pharmacy services.

Conclusion

Virtual pharmaceutical care is a potential approach to reduce the abuse/misuse of OTC medicines but needs some improvements regarding detection of these cases. The UAE is the first country in the region to implement and regulate virtual pharmacy practice.