

Assessment the impact of pharmaceutical care service delivered to females with anxiety and depression through community pharmacy during COVID-19

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Abstract

Background: The COVID-19 pandemic posed additional health, social and psychological challenge on females. Depression and anxiety are common psychological illnesses that females suffer from, as they are twice likely prone to suffer from them compared to men. The Medications Management Review (MMR) service is a service provided by a pharmacist to help patients manage their medications and illnesses.

Aim: The study aims to assess the effect of pharmacist-delivered MMR service on the anxiety and depression levels in females, their satisfaction with the services provided by the pharmacist, number and frequency of treatment-specific problems (TRPs), and to assess their overall satisfaction with the MMR service.

Methods: The study was designed as a single-blind randomized controlled clinical trial. Participants were randomly recruited from community pharmacies in Amman, Jordan. The study was conducted from February 2021 to May 2021 on females visiting community pharmacies. Participants were randomly assigned to two groups: control and intervention. Both groups were initially interviewed at a pharmacy and then followed up by telephone. All data were analyzed in SPSS version 25. A follow-up evaluation was performed for both groups after 3 months.

Result: A total of 150 participants were recruited to the study. A total of 324 TRPs were determined during the study period. The mean number of TRPs per patient was 2.16 ± 0.191 at baseline, the mean of anxiety score was 10.405 ± 1.96 (Borderline abnormal), and the mean of depression score was 11.29 ± 2.95 (Abnormal) at baseline. The most common TRPs reported by the patients were safety issues $n=75$ (23.21%) followed by drug efficacy $n=69$ (21.36%) and then inappropriate adherence $n=45$ (13.93%). Anxiety and Depression symptoms was assessed using the validated and published Hospital Anxiety and Depression Questionnaire and composed of statements relevant to either generalized anxiety or depression, the questionnaire composed of 14 items, seven reflecting anxiety and seven reflecting depression.[1]The Questionnaire is a valid measure shown to have a Cronbach's alpha of 0.82 for depression and 0.83 for anxiety. The questionnaire is composed of possible scores that ranged from 0 to 21 for depression and 0 to 21 for anxiety. Patients with a score above 8.0 on either subscale was categorized to screen for a possible disorder, and when the score is above 11.0, a disorder was probable. Patients with a score of less than 8.0 was considered normal; those with 8.0 to 10.0 were considered to have mild anxiety \ depression; patients with a score of 11.0 to 14.0 were considered to have moderate depression/anxiety; and patients with a score above 14.0 were considered to have severe depression/anxiety. Intervention group received MMR service by the pharmacist and were educated and counseled on their medications use. After 3 months a significant difference in the number of TRPs was found among intervention patients

in intervention group ($p < 0.001$) mean was (1.6857). The anxiety and depression scores were significantly improved in the intervention group post 3 months ($p < 0.003$, < 0.004) respectively. Conclusion: The MMR service conducted by pharmacist showed positive impact on decreasing the total number of TRPs, improving medication adherence and scale of anxiety and depression in females in Jordan. Future studies should allow longer time to assess the long-term effects of the MMR service delivered to patients with anxiety and depression.