Pharmacist Telemonitoring of Antidepressant Use: Effects on Pharmacist–Patient Collaboration

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ABSTRACT

Objective: To explore the impact of telephone-based education and monitoring by community pharmacists on multiple outcomes of pharmacist–patient collaboration.

Design: A randomized, controlled, unblinded, mixed experimental design.

Setting: Eight Wisconsin community pharmacies within a large managed care organization.

Patients: A total of 63 patients presenting new antidepressant prescriptions to their community pharmacies.

Interventions: Patients were randomized to receive either three monthly telephone calls from pharmacists providing pharmacist-guided education and monitoring (PGEM) or usual pharmacist's care. Usual care is defined as that education and monitoring which pharmacists may typically provide patients at the study pharmacies.

Main Outcome Measures: Patient's frequency of feedback with the pharmacist, antidepressant knowledge, antidepressant beliefs, antidepressant adherence at 3 and 6 months, improvement in depression symptoms, and orientation toward treatment progress.

Results: Of the 60 patients who completed the study, 28 received PGEM and 32 received usual pharmacist's care. Results showed that PGEM had a significant and positive effect on patient feedback, knowledge, medication beliefs, and perceptions of progress. There were no significant group differences in patient adherence or symptoms at 3 months; however, PGEM patients who completed the protocol missed fewer doses than did the usual care group at 6 months ($P \leq .05$).

Conclusion: Antidepressant telemonitoring by community pharmacists can significantly and positively affect patient feedback and collaboration with pharmacists. Longer-term studies with larger samples are needed to assess the generalizability of findings. Future research also needs to explore additional ways to improve clinical outcomes.

Keywords: Antidepressant, community and ambulatory pharmacy, telephone monitoring, counseling, adherence, outcomes.

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Depression is a serious and common mental disorder with a lifetime risk of 10% to 25% of women and 5% to 12% of men.[1] While antidepressant medications are relatively effective for depression symptoms, a high rate of nonadherence occurs with these medications, and more than one third of patients discontinue their medication within the first 3 months of treatment.[2] Premature discontinuation contributes to a high relapse rate and poor treatment outcomes.[3–5]

Inadequate provider–patient communication is believed to play a major role in the development of poor antidepressant outcomes.[2,6–8] In a national study, fewer than 20% of the 1,001 participating patients indicated having been told about common antidepressant adverse effects such as sexual problems and insomnia.[6] In another study, only 34% of patients indicated that they were told about the need to continue their antidepressant for at least 6 months, and almost one half of those who experienced adverse effects did not discuss them with their physician or pharmacist.[7] As might be expected, patients who discussed treatment duration and/or medication concerns with their providers were more likely to adhere to their antidepressant regimens than those who did not have such discussions.[7,8] Studies also indicate that case managers, nurses, and master's-level therapists can improve outcomes by calling patients to provide educational reinforcement and to discuss antidepressant adverse effects, treatment responses, and adherence.[9–12]

Several studies indicate that pharmacist monitoring of other psychiatric medications can reduce adverse effects and rehospitalizations.[13–15] However, only two published studies have reported on pharmacists' role in antidepressant education and monitoring.[16,17] The first study involved a prospective evaluation of the impact of clinic-based pharmacists who provided a combination of services for new antidepressant users, including office visits, telephone calls, e-mail communications to prescribers with recommendations and issues, and weekly pharmacist–prescriber discussions.[16] The interventions had no impact on patient adherence at 3 months, but significant improvement in adherence at 6 months, greater medication switches and satisfaction with care at 6 months, and fewer visits to prescribers at 12 months after study enrollment were observed. One limitation of this study was that it required office visits and was labor intensive, making it difficult to implement in community pharmacy practice. A second limitation was that it emphasized traditional biomedical roles and did not determine whether the intervention actually improved patient knowledge, antidepressant beliefs, patient feedback regarding adverse effects, or patient perceptions of treatment progress.

The second study explored the role of community pharmacists in antidepressant education and monitoring.[17] In a prospective field study of 100 antidepressant users, Bultman and Svarstad[17] found that antidepressant monitoring by community pharmacists was significantly associated with greater patient satisfaction with antidepressants and adherence. Unfortunately, the effects of antidepressant monitoring on patient feedback or patient orientation toward treatment progress were not assessed in this study. Another limitation of this study was that it did not use an experimental design, making it difficult to test the relationships hypothesized in Svarstad and Bultman's Health Collaboration Model (HCM).[18] In the HCM, quality medication education and collaborative monitoring by health care providers is posited to result in improved cognitive, behavioral, and clinical outcomes, including better patient comprehension and recall of the regimen, more positive beliefs about the medication and its effects, more frequent patient feedback regarding adherence and adverse effects, greater adherence to the prescribed regimen, and better clinical outcomes.

Several well-controlled studies across multiple disease states have shown that community pharmacists can have a significant impact on patient knowledge about their illness and treatment,[19] medication adherence,[20–22] and clinical outcomes.[19,21–24] Two studies[21,22] were also important in showing that educational and monitoring studies could be both brief and effective. However, we found no experimental studies exploring these specific relationships and findings among antidepressant users.

AT A GLANCE

Synopsis: Feedback to community pharmacists was significantly greater from patients who received pharmacist-guided education and monitoring (PGEM) for antidepressant use than from those who received pharmacist's usual care. To assess a relatively simple medication monitoring tool—one 90-minute pharmacist training session and three pharmacist–patient telephone calls—a total of 60 patients in eight community pharmacies were monitored during their first 3 months of antidepressant use. Patients who received telemonitoring demonstrated significantly better knowledge, medication beliefs, and perceptions of progress than did patients who received usual care. The feedback provided to pharmacists by PGEM patients increased collaboration and enabled pharmacists to provide education and guidance tailored to individual patient needs.

Analysis: *Although antidepressant medications are relatively effective for relief of depression symptoms, a high rate of nonadherence and nonpersistence occurs with these medications, and more than one third of patients discontinue use within the first 3 months of therapy. The role of community pharmacists in increasing patient adherence and persistence with antidepressant therapy has not been explored by using brief intervention techniques in an experimental design. A simple pharmacist intervention can have significant positive effects on several outcomes measures.*