Pharmacists providing care for patients with mental illness

Mental illness is a wide-encompassing term which includes mood, anxiety, behavioural and psychotic disorders, among others. This issue of The Translator demonstrates the pharmacist’s role in raising awareness and providing care for patients with mental illness.

- Clinical pharmacists improve outcomes in the mental health unit of a pediatric hospital
- Patients have positive view of mental health services delivered by community pharmacists
- Pharmacists deliver a collaborative health management program for patients with depression
- Depression and diabetes: Establishing the pharmacist’s role in detecting comorbidity in pregnant women

Clinical pharmacists improve outcomes in the mental health unit of a pediatric hospital


**Issue:** Mental illness affects 15% of Canadian youth, with some cases severe enough to warrant hospitalization. There is a reasonable amount of evidence regarding the benefit of clinical pharmacists in hospital settings and in mental health settings, however, the area of pediatric institutional mental health has not been extensively addressed. In particular, the role of the pharmacist as a member of the health care team has not been as well researched as the traditional approach of physician-requested consultations.

**Eighty-six percent of the clinical pharmacist’s recommendations were determined to have a positive effect on patient care.**

**A solution:** Clinical pharmacists working within the health care team have the opportunity to proactively evaluate medication use in an institutional setting. This study investigated the addition of a pharmacist to the interdisciplinary team on a mental health unit of a pediatric hospital with 17 beds. The clinical pharmacist was responsible for education, counselling, attending rounds, consultation, answering drug information questions, and identifying drug-related problems (DRPs) on the unit. They classified DRPs as actual or potential, and they made recommendations to the attending psychiatrist to resolve them. These recommendations were communicated verbally through the patient’s chart.
Clinical pharmacists improve outcomes in the mental health unit of a pediatric hospital (cont.)

During the observation period, the pharmacist made 48 recommendations for intervention, 98% of which were accepted by the patient’s psychiatrist. Eighty-six percent were determined to have a positive effect on patient care. The interventions were also believed by the majority of assessors to increase quality of care and avoid adverse effects. The total drug cost per patient-day decreased by 14% from the year before to the year after the pharmacist started on the unit. The decrease of $1.39/patient-day in the last 8 months of the year after the pharmacist started was statistically significant ($p=0.0019$).

Implications: The placement of a clinical pharmacist within the interdisciplinary team allowed him to provide regular service for the patients and staff on the unit. His proactive medication review as part of the team allowed the pharmacist to not only identify actual DRPs, but also potential DRPs so that they might be avoided altogether. The recommendations that were made in this study were shown to have a positive clinical and economic impact on the pediatric mental health unit and its patients. Limitations to this study included potential reporting bias and the retrospective nature of the economic analysis.

Background or research methods: This study was conducted at the IWK Health Centre, a tertiary care pediatric hospital in Halifax, NS, that admits patients up to 19 years old. For the four-week study period, a clinical pharmacist on the interdisciplinary team recorded all DRPs that were identified, and recommendations that were made as a result. The DRPs and recommendations were evaluated by a panel of expert assessors to determine their effect on patient care and potential to influence other health-related factors. A retrospective financial analysis was also performed to determine the cost effectiveness of the intervention by determining the per patient-day drug costs in the 12 months before the addition of a clinical pharmacist to the staff and for the 12 months after.

Financial Support: Funding provided by the Association of Faculties of Pharmacy of Canada/Apotex PACE Undergraduate Pharmacy Practice Research Award.

Patients have positive view of mental health services delivered by community pharmacists


Issue: It has been established that there are disparities in health care provision and access for patients with mental illness, and that such patients often experience poorer health outcomes. These disparities can be attributed to many factors, one of which is stigma, or negative attitudes directed towards an individual based on prejudice that is triggered by signs of illness. Frequently patients with severe and persistent mental illness take medications, which they receive from their community pharmacists. This provides pharmacists in the community with the opportunity to improve patients’ health outcomes and access to care. Little investigation has been done into the perspectives of patients with mental illness regarding community pharmacy services.

A solution: There are a number of services that may be provided in the community pharmacy to support patients with mental illness. Signs of illness such as atypical behaviour, medication-related adverse effects, and types of medication prescribed can propagate stigma, but can also be used by the community pharmacist to identify patients who may have unaddressed health needs. In this survey, pharmacists were ranked second to psychiatrists as the most commonly used and best source of information about psychotropic medications.

Pharmacy services and aspects of care that were identified as important by more than 90% of the survey respondents included respect, discussing medications, providing written information, resolving problems, and answering questions. For those services that were offered, the majority of patients were satisfied. The majority of the time, patients found services that were offered at their pharmacy important, valuing less those services that were not offered. Those that were perceived as important but that were not offered as frequently included discussion on stopping medications, information on how medications work, collaboration, managing side effects, and discussing patient response to medications. The strong correlation between pharmacy service frequency and its perceived importance suggests that less commonly available services would be highly valued if they were demonstrated more often (e.g., telephone follow-up). Of those surveyed, 23% reported experiencing stigma from pharmacists. This relatively low rate was similar to family physicians and other health providers and significantly lower than rates reported with employers, coworkers, family, and friends.

Implications: This survey implied that patients with mental illness generally perceive the services offered in a community pharmacy positively. With 93% of respondents indicating that they almost always...
frequent the same pharmacy, there is an opportunity for pharmacists to learn from these patients to better meet their health needs. Relative to other potential sources, pharmacists do not generally propagate the stigma of mental illness in their practice, supporting their reputation as trusted mental health professionals. Expectations of services were low and focused on the traditional role of the pharmacist, which may change as pharmacists embrace their expanded scope. This study was limited by its small sample, which may restrict the generalizability of the findings.

**Background or research methods:** This study was a cross-sectional survey of 79 patients with mental illness (primarily psychotic, mood, and anxiety disorders) recruited from one of four outpatient mental health clinics in Halifax, NS. A focus group of four patients was conducted to determine the validity of the survey. All patients who were at least 19 years old, taking at least one psychotropic medication for a diagnosed mental illness, and visiting the clinic were invited to participate. Clinic staff informed participants of the surveys, which were completed on-site or at home and mailed in.

**Financial Support:** This was an unfunded Pharmacy Residency project.

### Pharmacists deliver a collaborative health management program for patients with depression


**Issue:** Depression is a mental illness growing in prevalence that has become the leading cause of disability in the world. It has a high rate of morbidity and mortality and profound social and economic impact, as it is associated with effects on physical function, high rates of suicidal thoughts and links to other chronic diseases. Depression often goes undiagnosed, and a large proportion of patients who do receive treatment do not adhere to therapy. Several approaches to treating depression have been investigated, but none specifically have had a pharmacist directing the care of the patient.

**A solution:** Pharmacists are in an accessible and knowledgeable position, making them excellent primary care providers. In this study, patients agreed to meet with a pharmacist care manager regularly in a face-to-face, scheduled, private consultation. Consultations occurred at least quarterly, or as frequently as once the same pharmacy, there is an opportunity for pharmacists to learn from these patients to better meet their health needs. Relative to other potential sources, pharmacists do not generally propagate the stigma of mental illness in their practice, supporting their reputation as trusted mental health professionals. Expectations of services were low and focused on the traditional role of the pharmacist, which may change as pharmacists embrace their expanded scope. This study was limited by its small sample, which may restrict the generalizability of the findings.

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Of the participants, 80% saw a decrease in symptom severity between their baseline visit and their latest follow-up. The mean self-assessment score was reduced from 11.5 (moderate severity) to 5.3 (mild severity) at follow-up. The annual mean medication costs and total health care costs per patient were greater at follow-up than at baseline, however, total costs were $873 lower than had been projected. Medical costs decreased by $475 per patient-year.

**Implications:** This study showed that pharmacists can have a marked impact in improving clinical outcomes for depressed patients. This practice model, using pharmacists as care managers and providing patient incentives, appeared to have a high appeal to patients, 82% of whom stayed enrolled in the program after a year. There were also some economic benefits to the project. It may have been limited by its variable length of follow-up and lack of a control group. Further research could be done to determine the impact of this type of employer-sponsored managed care program on workplace productivity.


**Background or research methods:** This project was a prospective study conducted by the American Pharmacists Association Foundation and delivered through two employers in Asheville, NC, USA, to 130 employees who were identified as having symptoms of depression and who were receiving prescription treatment. The majority of patients enrolled in the study were self-enrolled following promotion of the project. Patient data was included in the study analysis if they had documented pharmacy visits at baseline, one year and at two other times. Severity of depression symptoms was assessed using the validated PHQ-9 self-assessment tool, and was the primary outcome of the study. Economic data was analyzed for a subset of 48 patients.

**Financial Support:** Funding provided by Wyeth.
Issue: Meta-analyses have shown that diabetes and depression often go hand in hand—a patient’s risk of depression can be doubled by the presence of diabetes. As diabetes is a disease requiring much self-care and awareness on the patient’s part, including constant blood glucose monitoring, exercise, diet vigilance and routine consultations with healthcare professionals, the presence of a comorbid condition such as depression may negatively affect the patient’s ability to manage the disease, leading to complications of diabetes such as heart disease. It has also been shown that between 7 and 23% of women will experience depression during pregnancy, which can usually be attributed to hormonal level changes. For those pregnant women with type 2 or gestational diabetes, as well as untreated depression, the risks to the unborn fetus include macrosomia and preterm delivery.

A solution: Pharmacists are in a unique position as the most accessible frontline health care providers to help screen and refer patients who have the potential comorbidity of depression and diabetes for evaluation and possibly treatment.

Implications: Pharmacists are well positioned to screen pregnant patients with diabetes for depression, and can make a positive impact on the patients’ management of the comorbid conditions by educating on non-pharmacological and pharmacological interventions. The study may have been limited in that it was a descriptive, cross-sectional study without randomization, thus results cannot be extrapolated to another population. The sample size was small at 50 patients and limited to those with low income, as 90% of the patients received government assistance through Arkansas Medicaid. As well, 8 out of the 21 people deemed depressed by the Beck Depression Inventory 2nd Edition Scale (BDI-II) had a history of depression. It is also important to remember that the BDI-II system is for screening purposes only, and should not be used as a diagnostic tool.

Background or research methods: A pilot study surveying a cross-sectional convenience sample of 50 pregnant women with diabetes receiving prenatal care at University Women’s Clinic (UWC) was carried out in Little Rock, Arkansas, between June and August of 2007. Through screening using BDI-II, which was carried out by a pharmacist and student pharmacists, the study showed that of the 50 pregnant women with diabetes, 42% were deemed to have clinical depression. Among these patients, only 19% were receiving treatment, including counselling or antidepressant medication, for their depression.

Financial Support: No external funding was received for this study.