A Survey of Practitioner's Knowledge of Psychiatric Medication Costs

Deepak Rajpoot, M.D.¹, Albert B. Poje, Ph.D.¹, Larry Carver, M.D.¹, Jyoti Rajpoot, B.S.²,

Ravi Rajpoot, B.S.³, Vikram Panwar, M.B.B.S.⁴, Amanda Foster, B.S.⁵,

Angela Mayorga, M.D.¹, Lisa Shenkman, M.D.¹

¹University of Kansas Medical Center and Hospital, Kansas City, KS

²Touro College of Osteopathic Medicine, New York, NY

³Loma Linda University School of Medicine, Loma Linda, CA

⁴Kansas City VA Medical Center, Kansas City, MO

⁵Kansas City University of Medicine and Biosciences, Kansas City, MO

Abstract

Introduction. Escalating medical costs continue to be an issue facing contemporary medicine. One factor contributing to this escalation may be physicians' knowledge of medication costs. As physicians increasingly face opportunities to treat a variety of symptoms and conditions in a single patient, including co-morbid psychiatric disorders or complications, accurate knowledge of medication costs becomes increasingly important.

Methods. Resident and attending physicians (N = 16) across the disciplines of internal medicine, psychiatry, and combined internal medicine/psychiatry from a large, mid-western medical school were surveyed on the costs of several medications that are used to manage physical and psychiatric symptoms.

Results. Differences were found in the perceived estimated cost of medications among practitioners particularly with specialty internal medicine training as compared to those with additional psychiatric training/experience. Trends also were noted across practitioners with psychiatric and internal medicine/psychiatry training.

Conclusions. The breadth of training and experience can affect accuracy in estimating anticipated costs of medication regimens.

KS J Med 2013; 6(3):89-93.

Introduction

The major factors contributing to high and rapidly growing health care costs remain an important issue facing the modern practice of medicine.¹ Some factors contribute to the high level of spending, others drive growth, and some play a role in both. Provider knowledge of various treatments is paramount in curbing these expenses.

Physicians have inadequate knowledge of medication costs.² Furthermore, medical schools generally do not teach costs of treatments to students. This information is learned most often during practice contributing to rising medical treatment expenditures.³ With healthcare costs climbing, physicians should have an understanding about the general costs of the medications that they prescribe. To implement cost-saving changes, the deficiency must be recognized.⁴

Until recently, most schools included little information on financial factors in medical education, such as insurance coverage and how treatment costs affect patients' behavior. Once recognized, schools can have a positive impact on prescribing patterns by providing information regarding commonly used prescriptions. Okie⁵ reported an interactive teaching conference with distribution of a pocket guide listing the average wholesale prices of over 100 medications commonly used in primary care. Appropriately, this intervention was associated with some change in prescribing habits. Without such interventions and insights, physicians may practice with little sense of how to make the most costeffective choices for patients.¹

Given the scope of issues treated and patients served, some physicians may be more inclined to appreciate financial aspects of recommended care provided they are educated on the general costs of medications being prescribed. Internists and psychiatrists may be susceptible to making errors in the estimation of medication costs despite ample opportunity to manage a variety of issues (psychiatric or otherwise).⁶

In the light of the ever-growing role of psychiatrists in general medical care (e.g., consultation services) and areas of combined specialization (e.g., dual training in internal medicine and psychiatry), further assessment regarding the knowledge of medication costs has an incrementally important role in psychiatry. Given these factors, the present study examined this knowledge of psychiatric medication costs by practitioners and residents from the areas of internal medicine, psychiatry, and combined internal medicine/psychiatry.

Methods

This study was approved by the Institutional Review Board at the University of Kansas Medical Center.

<u>Participants</u>. Sixteen anonymous respondents were comprised from a sample of 1) psychiatry residents, 2) attending psychiatrists, 3) internal medicine residents, 4) attending internists, 5) residents in internal medicine/psychiatry, and 6) attending physicians with board eligibility/certification in internal medicine and psychiatry. Residents were at various years of training across programs. Attending physicians varied in age and level of experience.

Procedures. The participants were given a 17-question survey administered through SurveyMonkey® (an internet survev website). The questionnaire was divided into six groups as defined in the subject selection section. The responses for each group were compiled collectively and compared to the true cost of medications, as referenced from national pharmacies. Participants completed the survey over a two-week period (6 psychiatry residents. attending 1 psychiatrist, 2 attending physicians with board eligibility/certification in internal medicine and psychiatry, 2 internal medicine/psychiatry residents, 3 internal medicine residents, and 2 attending internists).

The survey assessed estimated cost of a variety of commonly-used psychiatric including: medications tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), serotoninnorepinephrine reuptake inhibitors (SNRIs), and atypical antipsychotics at varying doses (Lexapro[®], Abilify[®], Welbutrin[®], Celexa[®], Cymbalta[®], Effexor[®], Prozac[®], Remeron[®], Pamelor[®], Tofranil[®], Paxil[®], and Xanax[®]). All medications were referred to as "generic" to blind expectations concerning medication costs. Dosages ranged from "5 mg" to "75 mg" under the prescribed duration of "a month" when participants were asked to anticipate prescription costs. Perceived costs were compared against actual costs averaged from six local pharmacies.

Data analysis. Data were averaged and compiled to examine potential group differences in perception of psychiatric medication costs.

Results

Average group differences were reviewed to estimate perception of medication costs. The perceived cost of Tofranil[®] among individuals with internal

medicine training suggested a higher perceived cost of this medication in clinical practice relative to practitioners in psychiatry. Practitioners with internal medicine training estimated Paxil[®] and Celexa[®] to be relatively more expensive compared to practitioners with psychiatry training. Abilify[®] was estimated to be less expensive in this group compared to

psychiatry practitioners who estimated this medication to be more costly. These effects are described in Figure 1. Providers with combined training (e.g., internal medicine and psychiatry) tended to be more accurate in estimating psychiatric medication costs than physicians with primarily internal medicine training.



Figure 1. Summary of estimated medication costs across disciplines.

Discussion

Although the study sample is small, the resultant data suggested that differences exist in perception of medication costs that vary with relation to medical training and expertise. Examination of results suggested differences among groups of practitioners (psychiatry, internal medicine. and combined internal medicine/psychiatry) across a range of training levels. This was driven by a tendency for Tofranil[®] (a TCA primarily used for depression and chronic pain) to be rated as more expensive among physicians with only internal medicine training relative to physicians with training in psychiatry or combined internal medicine/psychiatry training. Additionally, trends were appreciable for Paxil[®], Celexa[®], and Abilify[®] across providers, suggesting that physicians with internal medicine view Paxil[®] and Celexa[®] as expensive, while viewing Abilify[®] as inexpensive relative to their colleagues in psychiatry. In noting these differences in estimated medication costs across providers, our findings were consistent with previous studies.

Hoffman et al.¹ examined physicians' and pharmacists' knowledge of nonsteroidal anti-inflammatory drugs (NSAIDs). They reported that although physicians overwhelmingly viewed cost as important factor prescribing an in medication (81% of respondents), only 75% of physicians correctly estimated the price of half of the medications surveyed; 65% of medication costs were underestimated. In this light, Hoffman and colleagues¹ concluded that practitioners could benefit from further knowledge to improve accuracy and avoid under-estimation of medication costs.

Our work extended this study, as prior research has not targeted the costs of psychiatric medications. In this study, overand under-estimation of psychiatric medication costs occurred in particular among non-psychiatry specialists. Additionally, providers with combined training tended to be slightly more accurate across the medications surveyed.

There are many possible causes for the differences in provider response. One primary reason may be familiarity with these medications. Physicians with training in both internal medicine and psychiatry may have greater opportunity to learn about medications that can have applications across disciplines (e.g., managing pain, depression, and aiding sleep) due to the clinical issues that are faced. Greater exposure to medication costs can affect prescription patterns.

Recently, Cooke⁴ commented that when providers are made aware of such issues, they are quick to learn and respond to the costs of medications. Similar observations have been noted across clinical and training settings.⁵ These observations demonstrate that physicians can benefit from this type of education at any level of training. However, given a relative lack of education on

References

¹ Hoffman J, Barefield FA, Ramamurthy S. A survey of physician knowledge of drug

medication costs provided in medical schools,³ alongside the responsiveness physicians have to such education,⁴⁻⁵ increasing this insight in a wide range of medical environments may be beneficial.

Increased training should yield cost reductions in healthcare by preventing underestimation of medication costs in the first place.¹ If providers have greater exposure and knowledge of medication costs, they will be in a better position to consider treatment costs when caring for a diverse patient population. Given the increasing treatment of psychiatric issues in general medicine, educating students and practitioners on psychiatric medical costs will become more important.

Another consideration is the increasing concerning to information access medication. The present survey was administered with no constraints in regards to use of standard references. As society modernizes and access to information is increasingly more available, a majority of practitioners and residents could access programs, reliably and easily, that give drug information via a variety of handheld applications, computer devices. and programs. In many cases, manufacturing/ pricing information can be provided for each medication which is generally accurate and used frequently by residents and medical providers as a cost reference while prescribing. It is unclear if any of our participants utilized this information while completing the survey.

Medical schools, residency programs, attending physicians, private and practitioners seek up-to-date should information concerning medicine costs in the best interest of patient care and potential reduction healthcare of in costs.

costs. J Pain Symptom Manage 1995; 10(6):432-435. PMID: 7561225.

- ² Korn HM, Reichert S, Simon T, Halm EA. Improving physicians' knowledge of the costs of common medications and willingness to consider costs when prescribing. J Gen Intern Med 2003; 18(1):31-37. PMID: 12534761.
- ³ Doebbeling CC, Pitkin AK, Malis R, Yates WR. Combined internal medicinepsychiatry and family medicine-psychiatry training programs, 1999-2000: Program directors' perspectives. Acad Med 2001; 76(12):1247-1252. PMID: 11739052.
- ⁴ Cooke M. Cost consciousness in patient care - What is medical education's

responsibility? N Engl J Med 2010; 362(14):1253-1255. PMID: 20357275.

- ⁵ Okie S. Teaching physicians the price of care. The New York Times. 2010. Accessed at: http://www.nytimes.com/2010/05/04/health/04cost.html?pagewante d=all.
- ⁶ Raynes NV. Involving residents in quality specification. Ageing Soc 1988; 18(1):65-78.

Keywords: drug costs, psychiatry, internal medicine