Pharmacy-Related Health Disparities Experienced by Non–English-Speaking Patients: Impact of Pharmaceutical Care

Sarah M. Westberg and Todd D. Sorensen

ABSTRACT

Objectives: To identify the availability of foreign language services in pharmacies near a medical clinic serving a large immigrant population and determine whether the type of observed drug therapy problems differed between English- and non–English-speaking patients at this clinic.

Setting: A community health care center in a diverse neighborhood of Minneapolis, Minnesota.

Participants: 40 pharmacies near the clinic and in the surrounding Minneapolis–St. Paul area known to provide services to patients in languages in addition to English and 91 clinic patients, including 38 for whom English was not their primary language, seen for full pharmaceutical care assessments.

Interventions: Comprehensive drug therapy assessments were conducted for English- and non–English-speaking patients (with assistance from interpreters) in a primary care setting secondary to physician referral. Patient-specific data and the results of the pharmacist's assessment were recorded in a patient management database.

Main Outcome Measures: Language services provided by area pharmacies, frequency of drug therapy problems in English- and non–English-speaking patients, and the status of patient's medication conditions before and after provision of pharmaceutical care.

Results: Of the six primary languages other than English (Vietnamese, Hmong, Laotian, Somali, Spanish, and Cambodian) spoken by clinic patients, written or verbal information was available for five languages in one or more area pharmacies. The clinic pharmacist completed comprehensive assessments for 91 patients via 230 patient encounters, identifying 186 drug therapy problems. Problems related to adherence were significantly more prevalent in non–English-speaking patients compared with English-speaking patients (31% versus 12%). In all 91 patients, the percentage achieving desired drug therapy outcomes improved by 24% after a pharmacist joined the team of clinic providers.

Conclusion: Despite the availability of clinic-based interpreters and foreign language services in pharmacies, adherence-related problems are significantly more common in non–English-speaking patients. Pharmacists committed to providing pharmaceutical care must consider the impact of language barriers when working to optimize drug therapy outcomes.

Keywords: Pharmaceutical care, culture, English as second language, patient care, health outcomes, community and ambulatory patients, community health center, Asian American patients, Hispanic patients.

J Am Pharm Assoc. 2005;45:48–54.

Received May 13, 2004, and in revised form May 19, 2004. Accepted for publication June 4, 2004.

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Disclosure: The authors declare no conflicts of interest or financial interests in any product or service mentioned in this article, including grants, employment, gifts, stock holdings, or honoraria.

Acknowledgments: To Michael Frakes, PharmD, for support with the patient management database.

Previously presented at the American Pharmacists Association Annual Meeting, Seattle, Wash., March 26–30, 2004.

Multiple studies have been published during the past decade assessing the impact of pharmaceutical care on patient health outcomes. In many instances, pharmaceutical care has been shown to provide improvement in patient outcomes and an overall decrease in health care costs.[1–5] However, this research has not specifically addressed individuals of ethnic/racial minorities, particularly the growing population of recent immigrants.

Currently, immigrants make up 10.4% of the population of the United States, an increase from 4.7% in 1970. Further, an estimated 1.2 million immigrants arrive in the United States each year. Many of these individuals do not speak English, and one third of this population is estimated to lack health insurance.[6] According to the U.S. Bureau of the Census, 17.9% of the total American population spoke a language other than English in their homes in 2000.[7]

In the U.S. health care system, language is a major barrier to providing adequate health care to patients who are unable to speak or read English.[8,9] In one focus group study, Chinese and Vietnamese American patients with limited English proficiency were particularly concerned with the quality of interpreter services at their medical appointments, and they did not want to use family members for interpreters.[10] This research illuminates the fact that both providers and patients are aware of the language barrier and the challenges associated with overcoming it. However, language is not the only barrier in providing care to diverse populations. Many ethnic groups frequently use traditional herbal products or traditional healing practices, often before they seek care from Western medical providers.[10,11] The contents of the herbal products may be unknown to health care providers, creating the possibility of drug interactions or adverse reactions.[11] Citing an example of the potential clash between culture-specific health practices and Western medicine, some Asian populations have been shown to be frequently unable to safely practice self-care with nonprescription medications.[12]

Pharmaceutical care is the practice in which a pharmacist is responsible for all of a patient's drug-related needs, ensuring that the patient's drug therapy is appropriately indicated, effective, safe, and convenient. The pharmacist identifies, resolves, and prevents drug therapy problems (DTPs) for the purpose of achieving optimal patient outcomes.[13] Pharmaceutical care is a patient-centered process, dependent on the delivery of care to meet each patient's needs. For pharmaceutical care to become a model of pharmacy practice for *all* patient populations, pharmacy needs to gain a better understanding of the many factors and challenges that can complicate the provision of pharmaceutical care to patients of different cultures and/or who speak other languages.

Research has described some of the expectations of ethnically diverse, low-income patients with respect to their relationships with their physicians.[14] Unfortunately, similar studies regarding pharmacist–patient relationships are not available. Pharmacists who provide services to diverse populations must be aware of and take into consideration the cultural health beliefs, language needs, or other unique aspects involved in providing care to patients from diverse groups. The profession needs to fully understand the cultural as well as the medical needs of patients to care for them effectively. In addition to the individual relationships built between practitioner and patient, pharmacists must be aware of what health-related differences, if any, may be encountered in patients from other cultures, including those for whom English is not their primary language. Unmet, or even unidentified, needs may be present in these patients.

AT A GLANCE

Synopsis: Adherence-related drug therapy problems (DTPs) observed among 91 patients assessed in this study were more prevalent among non–English-speaking patients than among those for whom English was their primary language. A survey of area pharmacies showed that many had either personnel or computer software capable of providing instructions in several languages, including five of the six primary languages other than English of the clinic patients. Yet more than one half of the adherence-related DTPs among non–English-speaking patients were attributed to not understanding instructions, compared with 14% of DTPs among English-speaking patients. Patient outcomes improved by 22% in the non–English-speaking patients and by 25% in English-speaking patients after a pharmacist joined the clinic's health care team, providing full pharmaceutical care assessments and working to optimize drug therapy outcomes.

Analysis: *Language barriers pose significant challenges to pharmacists who provide pharmaceutical care to non–English-speaking patients. This study indicates that drug therapy outcomes can be improved significantly with the provision of pharmaceutical care. With the increasing number of patients in the United States—and other countries—for whom English or other native tongues are not their primary language, pharmacists need to know how to overcome language barriers and effectively make use of available resources so that optimal health outcomes can be achieved in all patients.*

Background and Setting

The site of this project was a federally qualified health center (FQHC), where a wide range of services are provided to a diverse population of cultural and ethnic groups. The Community–University Health Care Center (CUHCC) is located in the Phillips neighborhood of Minneapolis, Minnesota, where a diverse immigrant population resides. In addition to offering a pro