

# The Hispanic pharmacist: Value beyond a common language

SAGE Open Medicine  
3: 2050312115581250  
© The Author(s) 2015  
Reprints and permissions:  
sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/2050312115581250  
smo.sagepub.com  


Gabriela C Cipriano<sup>1</sup> and Carlota O Andrews<sup>2</sup>

## Abstract

**Objective:** To highlight the added value of bilingual Hispanic pharmacists in the care of Hispanic patients by sharing their patients' language and culture.

**Summary:** Inability to speak and/or write in the patients' native language severely impairs our best efforts to deliver good health care. This is a widely recognized cause of non-compliance or less than favorable possible health outcomes in Hispanic patients. What has received less attention, however, is that the ability to speak Spanish alone may not remove completely the barrier for non-compliance among Hispanics. Bilingual Spanish–English pharmacists do not have the language barrier, but if they do not recognize and accept cultural differences, their impact in their patients' response may still be limited.

**Conclusion:** It is time to recognize the added value of Hispanic pharmacists to Hispanic patients' health outcomes. Understanding and sharing a culture allows the pharmacist to make medication education and interventions relevant to the patient and spark interest in their own health care. Thus, in caring for the health of our patients, cultural barriers may be more challenging to conquer than language barriers; deep appreciation and acceptance of our patients' belief system cannot be acquired by just reading about it, having a computerized program, or hiring an interpreter.

## Keywords

Hispanics, Latinos, pharmacists, communications, patient outcome, health care disparities

Date received: 16 June 2014; accepted: 13 March 2015

## Introduction

Although some scholars make ideological and political distinctions between the terms “Hispanic” and “Latino,” these are often used interchangeably to refer to individuals of Cuban, Mexican, Puerto Rican, and South or Central American descent. In this article, the authors will use the term Hispanic. In 2010, 16% of the population in the United States self-identified as Hispanic, and their presence continues to grow at a rate surpassing the growth of any other ethnic group.<sup>1</sup> It is estimated that by 2050, nearly 133 million people will be Hispanics, that is, about one in three US residents will be either first-generation Hispanics or of Hispanic descent.<sup>2</sup>

As of 2011, over 27.7 million adults ( $\geq 20$  years old) in the United States spoke only Spanish at home, and 51.5% of them reported speaking English either “not well” or “not at all.”<sup>3</sup> In this context, clinicians may not be well prepared to serve this underserved and quickly enlarging minority population. Furthermore, language competency is not the only barrier to communication; possessing cultural competency, or having the ability to understand the patients' culture and

belief system, is equally important. This article will examine how cultural competency facilitates access to pharmaceutical services by closing the loop of not only language, but also of culture, by having first-hand experience with the patients' culture. Bilingual, bicultural health care providers in general, and pharmacists in particular, have an important role to play in the reduction of health disparities for Hispanic patients. We offer an interpretive review of the existing literature on this topic and present a couple of examples for analysis from our own practice.

PubMed was used to research the available literature on the value of language and culture offered by Hispanic pharmacists to the care of Hispanic patients. The search was

<sup>1</sup>St. JohnFisherCollege, Rochester, NY, USA

<sup>2</sup>California HealthSciencesUniversity, Clovis, CA, USA

### Corresponding author:

Gabriela C Cipriano, St. John Fisher College, 3690 East Avenue, Rochester, NY 14618, USA.  
Email: gcipriano@sjfc.edu



**Table 1.** Patients' average dissatisfaction with communications by health care providers based on language and ethnic origin.<sup>8</sup>

Survey Question	Hispanic/Spanish-speaking (n = 181)	Hispanic/English-speaking (n = 532)	White (n = 5498)
"How would you rate medical staff listening to what you have to say?"			
Very poor/poor or fair	28.8%	17.2%	13.4%
"How would you rate answers to your questions?"			
Very poor/poor or fair	26.6%	16.0%	12.4%
"How would you rate explanations about prescribed medications?"			
Very poor/poor or fair	30.5%	18.6%	14.0%
"How would you rate explanations about medical tests and procedures?"			
Very poor/poor or fair	36.0%	21.2%	17.3%
"How would you rate reassurance and support from your doctor and the office staff?"			
Very poor/poor or fair	28.8%	17.3%	13.4%

conducted by using the MeSH terms or key words Hispanic Americans or Latinos in various combinations with patient satisfaction, pharmaceutical services, pharmacists, Hispanic pharmacists, community pharmacy services, language, communication/health communications, health personnel, health care providers, cultural competency, and health care disparities. Articles were limited to the English language. References from the publications identified were also reviewed.

The Office of Minority Health (OMH) refers to *culture* as "integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups" and *competence* as "having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs" of the consumers and their communities.<sup>4</sup> Therefore, a culturally competent health care system would be one that "acknowledges and incorporates, at all levels, the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that results from cultural differences, expansion of cultural knowledge, and adaptation of services to meet culturally unique needs."<sup>5</sup> Health beliefs and behaviors are, therefore, strongly influenced by the person's cultural background. Cultural barriers, which include language, are one of the main causes of disparities in health care, as providers who lack cultural sensitivity and competence carry a set of cultural beliefs which may be at odds with that of their patients.<sup>6,7</sup>

Hispanics are often more dissatisfied than non-Hispanics with the care received and communications with their health care providers.<sup>7-10</sup> In 1999, Morales et al.<sup>8</sup> investigated the possible association of ethnicity and language with communication satisfaction by surveying a sample of Hispanic and White patients on their contentment with medical staff listening skills, provision of answers and explanations, and reassurance and support (Table 1). Although the study included a rather small number of Spanish-speaking Hispanics (n = 181), the results clearly demonstrated that, independent of age, gender, education, and insurance status, these patients were

significantly more dissatisfied with provider communications than White English-speaking patients. Strikingly, the disparity was even greater in Spanish-speaking than in English-speaking Hispanics. However, English-speaking Hispanics were more dissatisfied than White individuals as well, which may indicate that language may be the main, but not the only barrier to effective communications with Hispanic patients. This dissatisfaction may reveal the negative effects of the lack of cultural sensitivity and competency deficiency among health care providers.

Similarly, in a survey administered by Villani and Mortensen<sup>9</sup> in 2014, more Spanish-speaking than English-speaking Hispanics reported to be less satisfied with the amount of time given to them by their providers and with their providers' listening skills. However, in contrast with the study by Morales et al., Villani and Mortesen reported that their findings were mostly accounted by acculturation, health insurance, and education. This study did not differentiate the type of health care providers attending the Hispanic population surveyed (i.e. physicians, physician assistants, nurses), and most likely did not include the services rendered by pharmacists. In addition, the survey did not contain specific questions revealing patients' understanding of the instructions/recommendations given by the provider. Similarly, the survey did not include objective measures of the number of providers, their ethnic background, or their primary language; information on providers' background was obtained through patients' report only. Therefore, although the authors considered patient-provider concordance of race, ethnicity, gender, and language in the analysis of the data, its accuracy and reported lack of impact cannot be reliably determined.

In 2014, Kim-Romo et al.<sup>11</sup> specifically evaluated patient satisfaction with services provided by clinical pharmacists. Here, a small number of Spanish-speaking patients in Austin, TX, were surveyed on their level of satisfaction with communication skills and cultural sensitivity displayed by clinical pharmacists at several community health care clinics. The results were positive overall. Of note, all four pharmacists were proficient in the Spanish language, about 83% of

the patients indicated not requiring an interpreter because “their clinical pharmacist spoke Spanish,” and half of the clinical pharmacists self-identified as Hispanic. Although the importance of clinical pharmacists’ cultural factors to Spanish-speaking patients was a secondary objective of this study, *only cultural affinity* could predict the satisfaction voiced by Spanish-speaking patients with both the pharmacists’ communication abilities and their cultural sensitivity. This study did not include evaluation of health outcomes; therefore, the impact of language and cultural affinity on patients’ health conditions could not be determined.

The effect of language, but not culture concordance in a health outcome measure was incorporated in a recent study by Gonzalvo and Sharaya.<sup>12</sup> Through retrospective data collection, the authors examined the impact of a Spanish-speaking pharmacist on cardiovascular risk reduction of Spanish-speaking (n=9) and English-speaking (n=62) patients. Both Spanish- and English-speaking patients were participants of a pharmacist-led participants of a pharmacist-led clinic. Clinical biomarkers to assess cardiovascular risk reduction included hemoglobin A1c (HbA<sub>1c</sub>), blood pressure, and low-density lipoprotein (LDL). Data analysis revealed no statistical significance between Spanish- and English-speaking patients in any of these biomarkers. Although this study included only six Spanish-speaking patients, it provides preliminary information linking language concordance to health outcomes. Further work will be needed to confirm these findings.

There are deep communication roadblocks for non-Spanish-speaking pharmacists when dealing with non-English speaking patients of Hispanic origin. In 2002, Muzyk et al.<sup>13</sup> surveyed pharmacists (n=608 respondents) working in metropolitan Atlanta to learn about the types of language-assistance services available to them, their perception on the effectiveness of such services, pharmacists’ attitudes toward counseling Spanish-speaking patients, and cultural sensitivity of pharmacists. In all, 62% of the pharmacists reported having a recent opportunity where they needed to counsel a patient who could only speak Spanish. While 25% of the pharmacists evaluated their interactions as being effective, another 25% indicated they were unable to help these patients at all. Nearly one-half of the pharmacists considered their communications as being “somewhat effective” with “minor difficulties.” Another interesting revelation of this study is that although the only language the patients spoke was Spanish, 90% of the pharmacists used the English language *only* or a combination of English–Spanish language to communicate with their patients. Unfortunately, the survey did not evaluate the level of understanding of the patients served. Most pharmacists were neutral toward counseling Spanish-speaking patients and indifferent to other cultures.<sup>13</sup>

Communication effectiveness with Spanish-speaking patients in community pharmacies was evaluated at a national level by Gonzalvo et al.<sup>14</sup> in 2012. This study reported that although most pharmacies (96.8%) had the

capability of printing patient information for prescription medications in Spanish, only 56% had patient education materials available in the Spanish language. The authors also inquired on the pharmacists’ ability and perceived needs to communicate with their Spanish-speaking patients. In all, 36% of the pharmacists reported being able to effectively communicate information on prescription medications to Spanish-speaking patients; 74% felt that it was important for them, as a pharmacist, to be able to communicate with Spanish-speaking patients. So, while most pharmacists (64%) working in the community could not communicate effectively with their Spanish-speaking patients, close to 25% did not recognize the importance of doing so.<sup>14</sup>

Conversely, in 2014, Olenik et al.<sup>15</sup> examined the perceptions of Spanish-speaking patients (n=12) on the care provided and on their satisfaction with community pharmacies. Patients’ perceptions of care in a community pharmacy setting were evaluated through interviews conducted by a Spanish-speaking pharmacist, and the patients’ overall satisfaction, via a written survey also administered in the Spanish language. There were five major barriers perceived by the participants preventing them from receiving satisfactory care: (1) lack of insurance and high health care cost; (2) difficulty in accessing timely and conveniently located primary care services, including a lack of Spanish-speaking physicians; (3) perceived being treated differently and negatively by pharmacy personnel; (4) lack of Spanish-speaking health care providers, including pharmacists; and (5) verbal and written medication information provided in English. On the other hand, satisfaction with the care received in community pharmacies recorded in a Likert-type scale from 1 to 5 (1=excellent, 2=very good, 3=good, 4=fair, and 5=poor) scored above 3.5, that is, good-to-fair. The results of this study reveal that Spanish-speaking patients continue to experience language discordance in addition to perceived discrimination in community pharmacies, despite numerous studies and discussions on the topic of language discordance in community pharmacies dating at least 14 years.<sup>13,14,16,17</sup>

In trying to understand the circumstances influencing community pharmacists’ communication with Spanish-speaking patients, Young et al.<sup>16</sup> examined the effects of environmental factors and pharmacists’ cognition through responses obtained to a patient’s vignette. Environmental factors included those helping to overcome the language barrier (e.g. language-assistance resources, Spanish-speaking staff) as well as the number of Spanish-speaking patients. Pharmacists’ cognition factors entailed self-efficacy (judgment of own capabilities to communicate with Spanish-speaking patients when dispensing prescription medications) and cultural sensitivity beliefs (defined as “a pharmacist’s beliefs about minorities integration into mainstream society/culture”). Pharmacists’ self-efficacy was low in this study (2.12 on a 1–5 scale, with 1=not at all confident and 5=extremely confident), and it was the main factor affecting the provision of medication information by pharmacists to

**Table 2.** Metabolic outcomes in a Hispanic population participating in a Hispanic bilingual pharmacist-based disease state management program.<sup>24</sup>

Parameter	Baseline (mean)	Follow-up (mean)	95% CI	p value
Total cholesterol (mg/dL)	198	170	23–32	<0.001
Triglycerides	247	187	34–85	<0.001
HDL	45	42	1–2	0.001
LDL	107	91	13–19	<0.001
HbA <sub>1c</sub>	10	8	1.7–2.0	<0.001
SBP (mmHg)	124	117	5–9	<0.001
DBP (mmHg)	75	70	4–6	<0.001

HDL: high-density lipoprotein; LDL: low-density lipoprotein; HbA<sub>1c</sub>: hemoglobin A<sub>1c</sub>; SBP: systolic blood pressure; DBP: diastolic blood pressure; CI: confidence interval.

Spanish-speaking patients. Thus, although there is no doubt that translation/computerized services can be helpful, pharmacists' own abilities to communicate with Spanish-speaking patients have a much significant effect in the provision of medication information and education to these patients.

It has also been documented that patients' adherence to their medication regimens improves when patients become actively involved in their care plan, are knowledgeable about their medications, understand what to expect, and are able to weight the risks and benefits of a particular treatment, as well as when their concerns regarding side effects and fears of "addiction" are addressed.<sup>18–20</sup> The effective delivery of this information requires not only the use of a common language but also knowledge and respect of the patient's cultural background including lifestyle and socioeconomic conditions.

Recognizing the existence of communication barriers other than language, Gerber et al.<sup>21</sup> conducted a 6-month pilot study to determine the feasibility of a collaborative effort between bilingual, bicultural health promoters and clinical pharmacists. The goal was to improve medication adherence and optimize therapy in Hispanic patients with uncontrolled type 2 diabetes. This pilot study is unique in that it explores utilizing "health promoters" who are not professional interpreters, but community-based peers who share the patient's language and cultural background. Health promoters have the potential to become extraordinary links between the patient and his or her care provider.

Bilingual Spanish/English, bicultural peers were selected as health promoters and trained to provide social support, medical follow-up assistance, education, and training to Hispanic, Spanish-speaking patients. Health promoters also helped clinical pharmacists by assisting in the medication reconciliation process and program compliance through observation of patients' lifestyle. As an example, Gerber et al. highlighted two cases of non-adherence due to numerous barriers (e.g. cost, regimen, psychosocial, access, training), including communication barriers between patient and provider. In both cases, the multifactorial causes for non-adherence identified were successfully addressed and resolved by the pharmacists with the diligent collaboration

of health promoters.<sup>21</sup> Based on the results of this pilot study, adopting community-based peer health promoters may provide a way to further narrow down the communication gap between patients and providers.

Pharmacists' impact on patients' well-being and health outcomes has been studied to some considerable extent and widely documented.<sup>22</sup> The benefits of their work in non-English-speaking populations have been much less studied, with some documenting suboptimal pharmacy care due to language barriers.<sup>23</sup> Much less is known on the effect of pharmacists' cultural literacy on patients' health outcomes. What we do know, however, is that Spanish-speaking Hispanic patients express higher satisfaction with their care when they interact with pharmacists who speak their language and share their culture.<sup>11</sup>

Leal and Soto<sup>24</sup> provided evidence that bilingual *Hispanic* clinical pharmacists are indeed pivotal in improving the health of Hispanic patients. The authors reported on a pharmacist-based disease state management model of care implemented in a federally qualified community health center in Tucson, AZ, where the majority of the patients were of Hispanic descent. In this model, Leal and Soto—who are both bilingual Hispanic highly trained professionals—worked collaboratively with physicians to provide drug therapy management under an agreement of collaborative drug therapy management (CDTM). The agreement contained a number of clinical measures aimed at reducing the risk of chronic kidney disease in patients with diabetes mellitus. The results were impressive, with statistically and clinically significant improvements in blood pressure, HbA<sub>1c</sub>, and lipid profile (Table 2). Similarly, significant standards of care associated with improved health outcomes in diabetic patients such as institution of an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker, aspirin, or a statin were initiated or adjusted as appropriate. To our knowledge, this is the only publication to this date addressing the added value of *bilingual Hispanic* pharmacists to the care of Spanish-speaking patients.

We agree with the authors' estimation that their ability to speak Spanish and to relate to their patients' culture most likely contributed to the success of their clinical



interventions. Leal and Soto acknowledge that the shortage of Spanish-speaking health care providers in the area they serve makes it difficult to deliver optimal care to patients who only speak Spanish. Due to the presence of bilingual Hispanic pharmacists, it was possible to overcome the language and health literacy roadblocks and address their patient's beliefs, concerns, and socioeconomic barriers to the care of their health. Based on our own experiences, we can speculate that Leal and Soto most likely had to "fill in the gaps" that patients had from interactions with other non-Spanish-speaking health care providers in numerous occasions. In our practices, Hispanic patients commonly come to us requesting clarification or further information of conversations or instructions they received from other health care providers. Thus, the authors recognize that knowledge of the language alone is not enough to overcome the health care disparities encountered; representation of their culture is also very important. Although some of the providers in the CDTM program did speak Spanish, the intervention of Hispanic pharmacists likely contributed to the success of the services by being able to provide clearer communications and attention to cultural differences that contributed to patients' adherence.<sup>24</sup>

## Conclusion

It is possible to recognize a triadic effect in the provision of care to Spanish-speaking Hispanic patients, where differences in *culture*, *language*, and *health literacy* lead to poor health outcomes and health disparities when compared to non-Hispanic Whites.<sup>25</sup> The most obvious contributing factor is the language gap, which is generally believed to be conquered by the help of a translator or technology. Invaluable as they are, services given by professional translators have some shortcomings; they cause continuous interruptions in the patient-provider interaction and create an environment perceived as unsafe for some patients to discuss their most intimate health concerns. Feelings of shame or inadequacy can lead patients to avoid asking pertinent questions about their symptoms.<sup>26</sup> The result is that patients often have incomplete understanding or do not trust the medical information provided to them, likely leading to non-adherence to medications and/or follow-up visits.<sup>5,27</sup>

Variations in patients' health beliefs, values, preferences, and behaviors—that is, their culture—has been increasingly recognized as one of the many root causes of health disparities.<sup>4,5,25,26</sup> Lack of understanding about how a disease affects them influences how patients interact with their providers. Moreover, lack of trust in their provider due to differences in culture and misunderstandings can also keep them from seeking care, resulting in illnesses, unnecessary visits to the Emergency Department (ED), and preventable hospitalizations.<sup>5,28,29</sup> These patients are then labeled "*non-compliant*" by the medical community. Before stamping this label in the patient's chart, one needs to take a closer look to the

underlying reasons and hidden causes leading the patient to non-adherence. Patients may have a hard time explaining to us their reasons for failing to follow our recommendations or may hide their beliefs and attitudes about Western medicine behind statements such as "I thought it was a one-time dose," "I didn't want to run out of pills," "I felt better," "it gave me diarrhea," and "I didn't know what it was for." We often hear these reasons for non-adherence from our Hispanic non-English speaking patients. I (G.C.) run a pharmacist-led diabetes clinic in a federally qualified community health center serving primarily underserved low socioeconomic patients. Most patients are insured through Medicaid or pay a sliding scale fee according to their income through a program available at the center. The majority of the patients I see are Spanish-speaking Hispanics, and most of our encounters revolve around their lack of adherence to both their medication regimens and diet. Sometimes, non-compliance is due to the individual trying to save pills for when they feel sick due to a high out of pocket cost; others, they simply stop taking their medications because they "don't feel sick" anymore as demonstrated in the patient case that follows. Still at other times, non-compliance is due to experiencing embarrassing side effects or to simply not understanding the indication of their medications ("I didn't know what it was for").

## Case JG

JG is a Spanish-speaking Hispanic patient, first came to the diabetes clinic 2 years ago with uncontrolled diabetes as indicated by an HbA<sub>1C</sub> of 14% (goal  $\leq 7\%$ ). Duration of diabetes was unknown since he had never had a primary care doctor prior to establishing care at our center. He had been taken to the ED by his son for recent weight loss, blurry vision, and abundant urination, all of which are common symptoms of hyperglycemia. He was admitted to the hospital and later discharged home on an oral anti-diabetic medication. At his first hospital follow-up visit with his now primary care provider, JG was referred to me for insulin initiation and diabetes teaching. After my first visit with JG, I realized that his undiagnosed diabetes was primarily linked to his perception of health. He "felt fine" so he questioned "why would I need a doctor?" After providing him with appropriate insulin adjustments and diabetes education over a period of 3 months, his HbA<sub>1C</sub> decreased to 6.9%. Like any other patient who reaches goal, I was then able to increase the time between our visits to every 6–8 weeks. Unfortunately, his glycemic control lasted for 5 months before his HbA<sub>1C</sub> increased to 7.5%. Again, he was referred to me by his primary care provider for "non-compliance." At our follow-up visit, I learned that he had run into some medication cost issues and stopped taking all his oral medications because he was "not feeling sick" anymore, a common theme I was able to relate to. Growing up without health insurance, I learned first-hand that there are two main reasons for *not* going to a health care provider: (1) the out-of-pocket expense/affordability and (2) not "feeling" sick. Going

to the doctor was necessary only when one felt sick. After sharing these common perceptions with JG, it made reinforcing the importance of taking all his medications easier and personable.

Sharing the same or a similar cultural background as patients helps to gain their trust, providing important opportunities to lifestyle improvements and medication adherence. There is something to be said about the indescribable look I get when I walk into the patient's room before I even say a word in Spanish, as many immediately identify me as "Hispana." Do they perhaps feel relieved knowing that the provider understands where they are coming from? In my experiences, I have had the ability to instantly develop a "professional relationship/bond" because I share a cultural background. Having a similar cultural background seems to remove the communicational and interpersonal barriers that often keep them from following the medical instructions provided during office visits. As many of my patients explain "Dr. X will just think I don't want to take my meds, so why should I say anything ... s/he will not understand anyway ..." Quite often they become more involved with their care because they begin to understand the significance of their health status and of their eating patterns. Additionally, they realize now that I will not be easily persuaded by just *any* explanation justifying their lack of adherence because I have a good understanding of their belief system and the culture that we share. Their regimen becomes important because they finally get some appreciation of how their medications work and what the consequences of non-adherence are. With a Hispanic bilingual pharmacist, the patient can rest from the medical jargon they are used to hearing, from the "stranger" in a white coat who walks into the room.

There is an added value of having a provider who not only speaks the patients' language but also shares their culture. As indicated by Brach and Fraserirector,<sup>30</sup> cultural competency goes beyond awareness, sensitivity, possession of knowledge, or respect for a different culture; cultural competency also includes having the skills and ability to use them efficaciously in a given cross-cultural setting. As an example, let us consider breakfast in an American and a Hispanic home in the United States. In the American culture, breakfast may be the "biggest meal of the day" consisting of eggs, sausage, home fries/hash browns, pancakes, and coffee, or the "smallest" meal of the day, including only coffee. In the predominant Hispanic cultures in the United States, however, *el "desayuno"* (breakfast) includes some pastry like "pan dulce" (Mexicans) or "bizcocho/galletas" (Puerto Ricans) and coffee, a diet which may result quite frustrating for providers caring for diabetic patients.<sup>20</sup> Knowing these differences is important in our approach to treating diabetic Hispanic patients, as illustrated in patient RS below.

### Case RS

RS is a Spanish-speaking Puerto Rican patient, who first came to the diabetes clinic 2 years ago with uncontrolled diabetes as

indicated by an HbA<sub>1C</sub> of 9.1%. He has had diabetes for over 15 years. RS was referred to me by his primary care provider who had concluded that his uncontrolled diabetes was due to non-compliance. In my initial assessment, I realized that his poor glycemic control was primarily linked to his cultural diet. We struggled with the frustrations expressed by "what can I eat?" and laughed at the meager "serving size" of the carbohydrate portion suggested by the American Diabetes Association (ADA) for diabetic patients.<sup>31</sup> However, being able to share the moment and to "laugh" together at what seemed like a pea size serving of rice made talking about "portion control" easier and more personable. In American culture, protein from meats or other sources is often the principal component of the main entrée; in our Hispanic-Mexican culture, however, the principal component is often rice and beans, which are served in portions much bigger than the 1/3–1/2 cup allowed by ADA in a diet for a diabetic patient. Thus, reinforcing the correct use of insulin was the first step in RS' disease management, but addressing his lifestyle and eating habits played a bigger role in his overall care and management of his diabetes. Today, although not yet at the goal of less than 7%, his HbA<sub>1C</sub> of 8% reflects a better adherence to the regimen discussed. Thus, sharing a simple common tradition, as exemplified here, made counseling on the food plate method and the importance of portion control less stressful and more relaxed. Coming from a similar background, one understands first-hand the way our patients live and the foods they eat, allowing the pharmacist to negotiate with them and reach a healthier approach.

The patient cases narrated above exemplify one of the methods to bringing cultural competency to the health system listed by Brach and Fraserirector<sup>30</sup>, namely, recruitment and retention of minority staff. The authors acknowledge the possibility that by sharing the culture and language of a minority community, minority staff may provide better communication and a more welcoming environment for the patients at a given health system. Recent publications seem to not only support the authors' suspicion but also provide some evidence that language and culture concordance may result in improved health outcomes.<sup>12,24</sup> Other cultural competency techniques identified include interpreter services, training, coordination with traditional healers, use of community health workers, culturally competent health promotion, inclusion of family/community members, immersion into another culture, and administrative and organizational accommodations.<sup>30</sup> Each technique has its own merit for improving communications, increasing patient-provider trust, reducing disparities, and procuring better health services to minority patients. While the use of interpreter services to overcome language discordances is a practical and most often available approach, Brach and Fraserirector observe that they do not seem to be a perfect substitute to language and cultural concordance. Studies on patient-physician racial concordance report greater patient satisfaction and perceived quality of care by patients cared by physicians of their same race.<sup>32,33</sup> By recognizing the potential added value of minority professionals and staff members in health

care, we join other scholars in their call for increasing ethnic diversity in the health care workforce as a strategy to overcome health disparities and improve the health of minority populations.<sup>5,21,30,34–36</sup>

## Summary

In summary, while speaking Spanish is important to the Hispanic monolingual community, understanding and experiencing their culture may be equally, if not more, important in pursuing meaningful and successful health care outcomes. Further research is needed to get insight into a possible association between cultural competence and health outcomes. Culture influences the patient's health by affecting lifestyle, beliefs on the causes of diseases and on remedies, as well as their perceptions on what is considered to be a health problem, symptoms of disease, and—ultimately—healing. Adopting measures to increase the recruitment of Hispanics in health sciences and in the workforce of health care institutions will likely have an impact in reducing the health disparity gap currently observed in Hispanic communities. The next most likely achievable strategy to increase minority provider's representation in health care would seem to be increasing the use of community bicultural/bilingual health workers, after appropriate training. It is time to provide recognition and support to bilingual/bicultural health care providers, including pharmacists, working with patients of minority communities; they are fulfilling the 2003 call of the Institute of Medicine for increased representation in health care.<sup>35</sup>

## Acknowledgements

We thank Dr Marta Rodríguez-Galan for her invaluable editorial support during preparation of this manuscript.

## Declaration of conflicting interests

The authors declare that there is no conflict of interest.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## References

1. United States Census Bureau. The Hispanic Population: 2010, <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
2. United States Census Bureau. An older and more diverse nation by midcentury (Press release), 14 August 2008, <http://www.census.gov/newsroom/releases/archives/population/cb08-123.html>
3. Ryan C. Language use in the United States: 2011. American Community Survey reports, August 2013, US Department of Commerce, Economics and Statistics Administration, US Census Bureau, <http://www.census.gov/prod/2013pubs/acs-22.pdf>
4. US Department of Health and Human Services, Office of Minority Health, <http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=11>
5. Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Rep* 2003; 118(4): 293–302.
6. Alicea-Alvarez N, Swanson-Biearman B and Kelsen SG. A review of barriers to effective asthma management in Puerto Ricans: cultural, healthcare system and pharmacogenomic issues. *J Asthma* 2014; 51(1): 97–105.
7. Blair IV, Steiner JF, Fairclough DL, et al. Clinicians' implicit ethnic/racial bias and perceptions of care among black and Latino patients. *Ann Fam Med* 2013; 11(1): 43–52.
8. Morales LS, Cunningham WE, Brown JA, et al. Are Latinos less satisfied with communication by health care providers? *J Gen Intern Med* 1999; 14(7): 409–417.
9. Villani J and Mortensen K. Decomposing the gap in satisfaction with provider communication between English- and Spanish-speaking Hispanic patients. *J Immigr Minor Health* 2014; 16(2): 195–203.
10. Mosen DM, Carlson MJ, Morales LS, et al. Satisfaction with provider communication among Spanish-speaking Medicaid enrollees. *Ambul Pediatr* 2004; 4(6): 500–504.
11. Kim-Romo DN, Barner JC, Brown CM, et al. Spanish-speaking patients' satisfaction with clinical pharmacists' communication skills and demonstration of cultural sensitivity. *J Am Pharm Assoc* 2014; 54(2): 121–129.
12. Gonzalvo JD and Sharaya NH. Language concordance as a determinant of patient outcomes in a pharmacist-managed cardiovascular risk reduction clinic. *J Pharm Pract*. Epub ahead of print 8 August 2014. DOI: 10.1177/0897190014544790.
13. Muzyk AJ, Muzyk TL and Barnett CW. Counseling Spanish-speaking patients: Atlanta pharmacists' cultural sensitivity, use of language-assistance services, and attitudes. *J Am Pharm Assoc* 2004; 44(3): 366–374.
14. Gonzalvo J, Schmelz A and Hudmon KS. Community pharmacist and technician communication with Spanish-speaking patients: needs assessment. *J Am Pharm Assoc* 2012; 52(3): 363–366.
15. Olenik NL, Gonzalvo JD, Snyder ME, et al. Perceptions of Spanish-speaking clientele of patient care services in a community pharmacy. *Res Social Adm Pharm* 2015; 11: 241–252.
16. Young HN, Dilworth TJ, Mott DA, et al. Pharmacists' provision of information to Spanish-speaking patients: a social cognitive approach. *Res Social Adm Pharm* 2013; 9(1): 4–12.
17. Young HN, Dilworth TJ and Mott DA. Disparities in pharmacists' patient education for Hispanics using antidepressants. *J Am Pharm Assoc* 2011; 51(3): 388–396.
18. Zullig LL, Peterson ED and Bosworth HB. Ingredients of successful interventions to improve medication adherence. *JAMA* 2013; 310(24): 2611–2612.
19. Demonceau J, Ruppert T, Kristanto P, et al. Identification and assessment of adherence-enhancing interventions in studies assessing medication adherence through electronically compiled drug dosing histories: a systematic literature review and meta-analysis. *Drugs* 2013; 73(6): 545–562.
20. Freeman J and Loewe R. Barriers to communication about diabetes mellitus. Patients' and physicians' different view of the disease. *J Fam Pract* 2000; 49(6): 507–512.
21. Gerber BS, Cano AI, Caceres ML, et al. A pharmacist and health promoter team to improve medication adherence among Latinos with diabetes. *Ann Pharmacother* 2010; 44(1): 70–79.

22. Chisholm-Burns MA, Lee JK, Spivey CA, et al. US pharmacists' effect as team members on patient care. Systematic review and meta-analyses. *Med Care* 2010; 48(10): 923–933.
23. Westberg SM and Sorensen TD. Pharmacy-related health disparities experienced by non-English-speaking patients: impact of pharmaceutical care. *J Am Pharm Assoc* 2005; 45(1): 48–54.
24. Leal S and Soto M. Chronic Kidney Disease risk reduction in a Hispanic population through pharmacist-based disease-state management. *Adv Chronic Kidney Dis* 2008; 15(2): 162–167.
25. Jackson CS and Gracia JN. Addressing health and health-care disparities: the role of a diverse workforce and the social determinants of health. *Public Health Rep* 2014; 129(Suppl. 2): 57–61.
26. Jackson AK. Cultural competence in health visiting practice: a baseline survey. *Community Pract* 2007; 80(2): 17–22.
27. Doescher MP, Saver BG, Franks P, et al. Racial and ethnic disparities in perceptions of physician style and trust. *Arch Fam Med* 2000; 9(10): 1156–1163.
28. Langer N. Culturally competent professionals in therapeutic alliances enhance patient compliance. *J Health Care Poor Underserved* 1999; 10(1): 19–26.
29. Ashton CM, Haidet P, Paterniti DA, et al. Racial and ethnic disparities in the use of health services. Bias, preferences, or poor communication? *J Gen Intern Med* 2003; 18: 146–152.
30. Brach C and Fraserirector I. Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Med Care Res Rev* 2000; 57(Suppl. 1): 181–217.
31. Carbohydrate counting: American Diabetes Association, <http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/understanding-carbohydrates/carbohydrate-counting/carbohydrate-counting.html?loc=ff-slabnav>
32. Saha S, Komaromy M, Koepsell TD, et al. Patient-physician racial concordance and the perceived quality and use of health care. *Arch Intern Med* 1999; 159: 997–1004.
33. Cooper-Patrick L, Gallo JJ, Gonzales JJ, et al. Race, gender, and partnership in the patient-physician relationship. *JAMA* 1999; 282(6): 583–589.
34. Hayes B. Increasing the representation of underrepresented minority groups in US colleges and schools of pharmacy. *Am J Pharm Edu* 2008; 72(1): 14.
35. Smedley BD, Stith AY and Nelson AR (eds); Institute of Medicine, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. *Unequal treatment: confronting racial and ethnic disparities in health care*. Washington, DC: The National Academies Press, 2003, <http://www.nap.edu/catalog/12875/unequal-treatment-confronting-racial-and-ethnic-disparities-in-health-care> (accessed November 2014).
36. Rodríguez-Galan MB and Falcón LM. Aging Puerto Ricans' experiences of depression treatment: a new ethnographic exploration. *Res Sociol Health Care* 2014; 32: 275–303.