Original Report: Cardiovascular Disease and Risk Factors

INFLUENCE OF LANGUAGE AND CULTURE IN THE PRIMARY CARE OF SPANISH-SPEAKING LATINO ADULTS WITH POORLY CONTROLLED DIABETES: A QUALITATIVE STUDY

Cindy D. Zamudio, BA¹; Gabriela Sanchez, BA²; Andrea Altschuler, PhD²; Richard W Grant, MD, MPH²

Background: We examined the role of language and culture in the interactions between Spanish-speaking Latino patients with poorly controlled diabetes – a fast-growing population in the United States - and their primary care providers.

Methods: We conducted four focus groups with 36 non-US born Spanish-speaking patients with elevated HbA1c. Participants were insured health plan members with either English-speaking (2 groups) or Spanish-speaking (2 groups) primary care providers. Moderated discussions focused on visit preparation, communication during visit, and role of other care team members. Key themes derived from these discussions were then linked to corresponding Latino cultural constructs.

Results: Patients had a mean age of 57.9 (± 11.2) years and last measured HbA1c was 8.6% (1.5%). Two communication-related themes (reluctance to switch providers and use of intermediaries) and two visit-related themes (provider-driven visit agendas and problem-based visits) emerged from our analyses. These themes reflected the cultural constructs of confianza (trust), familismo (family), respeto (deference), and simpatía (harmonious relationship). Trust in the patient-provider relationship led many participants to remain with English-speaking providers who treated them well. Patients with either language concordant and discordant providers reported reliance on family or other intermediaries to close communication gaps. Deference to physician expertise and authority led to visit expectations that it is the doctor's job to know what to ask and that visits were intended to address specific, often symptom-driven problems.

INTRODUCTION

Type 2 diabetes is rising to epidemic levels among US Latinos, the nation's largest and one of the fastest-growing minority groups.¹ Latinos have poorer glycemic control and greater burden of diabetes-related complications compared with non-Latino Whites, even among those with health insurance.^{2,3} Understanding how to reduce barriers to effective diabetes care in this patient population should be, therefore, a major national priority.

For patients with diabetes, the complexity of care and the high prevalence of other competing health needs place significant stress on the time-limited primary care visit.^{4,5} Spanish-speaking and Limited English Proficient (LEP) Latino patients may experience additional, unique challenges interacting and commu-

Conclusions: Spanish-speaking Latino patients' cultural expectations play an important role in framing their primary care interactions. Recognizing culturally influenced visit expectations is an important step toward improving patient-provider communication. *Ethn Dis.* 2017;27(4):379-386; doi:10.18865/ed.27.4.379.

Keywords: Type 2 Diabetes; Latino Health; Patient-Provider Communication; Primary Care nicating with providers during these brief encounters.⁶ Indeed, prior observational studies have highlighted language discordance as an important barrier to effective diabetes care.^{7,8} However, Latino patients continue to have poorer diabetes control even in care systems with robust translator services and Spanish-speaking providers.⁹ This persistent gap underscores the role of influences beyond language, such as culturally mediated factors that influence how Latino patients interact with medical professionals.¹⁰⁻¹²

To gain further insight into the role of culture and language in the primary care of patients with poorly controlled diabetes, we conducted a qualitative study of Spanish-speaking adults; we wanted to characterize the barriers and facilitators to effective patient and provider interactions during primary care visits. We

 ¹ School of Medicine, University of California-Davis, Sacramento, California
² Division of Research, Kaiser Permanente Northern California, Oakland, CA

Address correspondence to Richard W. Grant, MD, MPH; Kaiser Permanente Northern California, Division of Research; 2000 Broadway Avenue; Oakland, CA 94612; 510.593.8891; richard.w.grant@ kp.org

defined culture, in this case, as the attitudes, customs, and beliefs that tend to be common within a given group. To help place our results within a broader cultural context, after identifying the major themes related to these visit interactions, we explored how these results could be linked to four previously identified cultural concepts that have par-

Our overall goal was to identify potential strategies for medical systems to more effectively address the communication barriers that may exist beyond simple language discordance between Latino patients and their primary care providers.

ticular relevance to patient-provider communication^{13,14} and to primary care visit expectations:^{15,16} 1) confianza, the importance of having a trusting relationship with the physician; 2) familismo, the strong identification and attachment to nuclear and extended family (with strong feelings of loyalty, solidarity and reciprocity within families); 3) respeto, the measure of power or influence between two persons (eg, when an individual is perceived to have higher status, the person perceiving the other's higher status often offers deference or is influenced by the person with higher status); and, 4) simpatía, the ability to develop a harmonious relationship that expresses a warm and caring attitude (note: does not mean "sympathy").

Our overall goal was to identify potential strategies for medical systems to more effectively address the communication barriers that may exist beyond simple language discordance between Latino patients and their primary care providers.

METHODS

Setting and Participants

We enrolled non-US born, Spanish-speaking adult Latino patients with uncontrolled type 2 diabetes (last measured HbA1c > 8%) who were members of Kaiser Permanente Northern California (KPNC), an integrated health care delivery system with a robust outpatient translator service and a history of successfully recruiting Spanish-speaking primary care providers.¹⁷ We used purposive sampling based on patient sex and language spoken by the patient's primary care provider (PCP) to create four patient focus groups: Two patient groups (1 male, 1 female) had Spanish-speaking PCPs and two patient groups (1 male, 1 female) had English-speaking PCPs. All focus groups were conducted in Spanish. We separated focus groups by sex to allow privacy for group members to discuss issues that may feel improper to discuss in mixed sex groups.

Qualitative Analysis

We used the following techniques to ensure that data analysis was systematic and verifiable, as commonly recommended by experts in qualitative research:^{18,19} consistent use of the discussion guide; discussion and debriefing by team members after each session; audio-recording and professional preparation and translation of the transcripts; standardized coding and analysis of the data; and maintaining a record of all analytic decisions.

The goal of this study was to examine Latino patient perspectives on communication with their primary care providers during their visits, and how these perspectives were influenced by provider language concordance. We created a focus group guide based on the following three domains related to primary care visits: 1) visit preparation and expectations; 2) barriers and facilitators to communication during primary care visits; and 3) role of other team members in care. Within each domain, we investigated the role of provider language concordance or discordance. Once we identified the major themes from our qualitative analyses, we investigated how our results corresponded with four previously identified Latino cultural constructs (confianza, familismo, respeto, simpatía) with particular relevance to health care. The goal of this second step was to set our results within the broader context of Latino culture and thereby gain a better understating of how the primary care visit interactions of Latino patients with poorly controlled diabetes may be related to their Latino cultural heritage.

Focus groups were moderated by an experienced qualitative researcher

(RWG) and a research assistant (GS) took field notes during the discussions. These authors are native Spanish speakers. Immediately after each patient focus group, three investigators attending the sessions debriefed and reviewed field notes to capture key themes, quotes, and impressions. All patient focus groups were digitally audio-recorded, professionally transcribed and translated by native speakers to allow for coding by non-Spanish speaking members of the research team. Transcripts were reviewed and discussed by at least three investigators. The transcribed data were coded using the *a priori* defined categories from the focus group guide. Data were analyzed using content analysis to identify major concepts and axial coding across the four focus groups to reconcile data into a priori and emerging themes. The constant comparative method of qualitative data analysis was used to develop new themes identified through iterative transcript review and discussion among the investigators.²⁰ After establishing consensus on code definitions, the remaining coding was completed and any coding disagreements (fewer than 15%) were resolved by further discussion to achieve consensus agreement. The institutional review board of the Kaiser Foundation Research Institute approved the study protocol (CN-13-1579, 8/22/2014).

RESULTS

Patients

We enrolled 36 non-US born Latino patients (17 women, 19 men) into four focus groups. The mean age was 57.9 (\pm 11.2) years, last measured HbA1c was 8.6% (1.5%), mean body mass index was 32.0 (6.7) kg/m², and mean health plan membership was 24.81 (11.63) years. Just over half (52.7%) were prescribed insulin for glycemic control. Demographic composition, mean HbA1c levels, and body sizes of the four groups were similar.

Theme 1. Reluctance to Switch Providers

Overall, patients tended to be appreciative of their primary care providers. Most Latino patients with Spanish-speaking providers reported advantages of language concordance. Patients said the shared language facilitated communication and the increased comfort resulted in full disclosure of health information. As one patient noted: "I am very happy. I get a lot of attention. I feel very comfortable, really." (simpatía)

However, language concordance was not seen as absolutely necessary among the patients with Englishspeaking providers. Although these patients experienced communication limitations, they explained that they generally tolerated the language discordance as long as providers demonstrated respect and elicited trust (confianza). In this context, many patients found ways to effectively communicate despite the language barriers. For example, a typical approach involved the patient and provider each communicating to the best of their ability: "He does not speak Spanish. He wants to speak a bit of Spanish just like I want to speak a bit of English. That's how we try to understand each other." As another example of an approach that contributed to improving communication, one participant commented: "When I do not understand, I ask her to please repeat or if she can speak to me slowly so I can understand and she does it." (simpatía)

Patients in the KPNC care system can easily choose a new primary care physician (PCP).¹⁷ When we asked patients with a language-discordant PCP why they did not change to language-concordant provider, а many described established rapport and positive relationships with their PCPs. One patient noted: "I have stayed with him because he treats me well (simpatía)" and "He speaks a little bit of Spanish as well... I understand him. Even though he speaks English and Spanish I trust him." (confianza) Patients who did choose to switch often did so because they were not pleased with the pattern of interaction with their Englishspeaking provider: "They didn't speak Spanish and they didn't treat us that well...So I changed to avoid a problem with them." (lack of simpatía)

Theme 2. Role of Intermediaries to Assist with Communication

When we investigated how patients interacted with their providers, we found that there were often several other important intermediaries in this relationship. Patients in both the language concordant and discordant groups reported on the use of intermediaries when communicating with their providers, albeit for somewhat different reasons. Several patients with Spanish-speaking providers relied on family members for communication, not due to language barriers but to help manage the decision-making. As one male participant explained in response to a question about agenda setting during visits: "The conversations already take place with my wife and the doctor...she is the one that is in charge of everything." (familismo)

Patients with English-speaking providers were often particularly dependent on intermediaries. Several patients spoke about the help they receive from family members, especially from English-speaking adult children. This help can occur during the visit but also often precedes the visit. As one female patient explained, "when there is something going on, [my daughter] first goes on the computer and checks. Afterwards she makes an appointment [for me] online." Another woman noted that her children help prepare her to communicate with her provider: "My kids tell me this is how you write it and how you pronounce it. And they make me repeat it." (familismo)

Non-physician Spanish-speaking providers were frequently recruited to help with communication and care planning. Some providers were seen as more approachable: "I like the doctor but I prefer the nurse ... because she is very understanding about whatever items you tell her I can talk with her about my problems and she tries to help me." (simpatía) Other patients mentioned the nurses are more available than the PCP, making it easier to establish a personal connection. Nurses and medical assistants also helped relay patient messages and requests to the PCP and were individually contacted for clarification and follow-up questions. Some patients expressed reluctance

to use interpreters as intermediaries, who were sometimes perceived as inaccurate and untrustworthy: "When they are doing the interpreting and [the translation] is not correct then there are problems because one is left frustrated. It isn't the same trust with the doctor as with the interpreter." As a result, several patients who were pleased with their English-speaking providers declined interpreter services and preferred to communicate on their own as best as they could.

Theme 3. Provider-Driven Visit Agendas

As described in the Chronic Care Model, primary care visits are more productive when informed patients actively collaborate with their providers.²¹ In contrast, we found that many Latino patients, regardless of language concordance with their provider, reported preference for physician-driven agendas. Providers were viewed as respected experts who "know best" and patients usually put off their own questions until the end of the visit, allowing PCPs to set the visit agenda. A male patient recounted that he avoids interrupting his provider: "I would let him finish and then explain to him my questions that I had." (respeto)

Few of the patients in our focus groups proactively prepared for their primary care visits. A commonly expressed theme was that doctors, as the experts, should know what to do during the visit. This was seen primarily in the male focus groups. In response to a question about asking his doctor questions, for example, one man declared: "[The doctors] are the professionals and they should keep the proper questions and have a routine. It is something that they always ask their patients. The doctors must examine the chart to see if the patient has mentioned in the past something that the patient is currently talking about. It is the doctors' responsibility because they are the professionals." (respeto)

Patients often described a passive approach to interaction with their providers during the visit, and they had an expectation that their provider would take the lead in following-up about previously discussed topics. This expectation that the provider would determine the visit agenda was described by participants in all four focus groups. For example, one female patient provided the following description: "She always asks me... and if the last time I spoke with her about some problem that I was having or something that I had, when I get there the following time she says, 'What about your problem, how is it going, did you resolve it' ...?" Other patients felt disappointed when their provider did not actively inquire about prior concerns. For example, one woman noted, "The doctors have a lot of work and what-not. But why don't they ask: Rosa how did you do with your rash?" Another man provided an illustration of this expectation: "If the patient complains about their knees, then the doctor should check the chart and see what the patient has [previously] told him about their knees" (all examples of respeto).

Time constraints during the visit had a notably negative impact on patients' willingness to raise their own agenda items. For example, one patient described a tendency toward self-censoring when the PCP appeared pressed for time: "We tend to avoid bothering doctors. We know they have a limited time with a patient. They begin to constantly check their watch so you begin to think that you shouldn't tell them something is wrong." (respeto)

Theme 4. Problem-Based Visits

Most US models of primary care emphasize the importance of preventive care and management of often asymptomatic chronic conditions such as diabetes. In contrast, several participants, predominantly among the male focus group participants, described a model of primary care visits that was determined by current, active problems that did not resolve on their own. As one participant explained, "When we make an appointment it is because a problem has been bothering us for a while." Another patient captured this model in his explanation: "Every time I go to the doctor's it's because I have something It's because I have pain in the leg, pain in my wrist or for the ear or something like that."

This symptom- or problem-driven approach had several other consequences for patient visit expectations. Related to communication, we identified a pattern of patients who focused on symptomatic issues and would not bring up questions or concerns related to long-term planning for their diabetes care. For example, one patient reported that even though "at the end he asks if you have any other questions. If you say no, then goodbye and thanks, we'll see you next time... And I do not talk much because nothing hurts." Conversely, when the doctor appeared not to actively resolve the symptomatic problem,

patients sometimes felt that the visit was not worthwhile: "He does something but he does not find anything. Then I say, 'why do I go to the doctor?" Several patients also expressed frustration with the model of coming back for a second appointment if all issues could not be addressed at the current visit due to the financial penalty of missing another day of work.

DISCUSSION

Cultural differences between non-US born Latino patients and the common cultural norms of the US health system may represent a potentially ameliorable barrier to optimal care.²² Prior research has shown that language concordance is related to improved interpersonal communication²³ and several diabetes process and outcome measures.²⁴ We found a general consensus that language concordance was highly valued. However, despite this shared view, many of our study patients with Englishspeaking providers felt a reluctance to change doctors due to the value they placed on their existing interpersonal relationship with their PCP, which may have been developed over many years together. To overcome the language barrier, these patients developed strategies such as combining their limited English skills with providers' limited Spanish skills to communicate and relying on intermediaries like family or Spanish-speaking staff to exchange information.

Reluctance to switch from English- to Spanish-speaking providers reflected the value these patients placed on the existing relationship with their doctors, a tendency that reflects the cultural constructs of respeto, confianza, and simpatía. These results provide support for provider education efforts to teach cross-cultural medicine skills,^{25,26} since Latino patients in our study remained willing to receive care from English-speaking providers who were able to inspire trust, confidence, and warm personal relationships. Although many health systems serving large Spanish-speaking

Many of our study patients with English-speaking providers felt a reluctance to change doctors due to the value they placed on their existing interpersonal relationship with their PCP, which may have been developed over many years together.

populations have worked to recruit Spanish-speaking providers and to provide Spanish-language translators, there are likely too few Spanish-fluent US primary care providers to care for all Spanish/LEP patients. Our results suggest that even in language discordant pairs, providers who emphasize warm and trustful inter-personal relationships typified by the constructs of confianza and simpatía are likely to have greater success communicating with their Latino patients.

In settings where Spanish-fluent providers are not readily available, our findings underscore the important role played by intermediaries. Family, particularly younger and more acculturated family members such as adult children, play a key role. Patients with diabetes are often cared for by a team of providers, and we identified the increased influence of any Spanish-speaking care team members (eg, medical assistant, diabetes educator) on the patient's experience and understanding of care. While trained medical translators are the clinical gold standard for communication between language discordant pairs, several patients raised issues about trust, accuracy, and privacy. Perhaps in contrast to the long-standing relationships patients have with their family intermediaries, prior research has found that in encounters involving interpreters, patients said less and asked fewer questions, there was less humor and less discussion of the patient's feelings or personal circumstances, and were less likely to raise issues unrelated to diabetes, to discuss their own ideas about health, or to talk about clinical parameters.²⁷ In the absence of fluent PCPs, the tension between the use of medically trained translators vs trusted, but potentially biased intermediaries, needs to be further addressed.

We also identified two main themes related to primary care visit expectations. Many of our patients with uncontrolled diabetes, particularly the men, had the expectation that the provider should be fully knowledgeable of what needs to be done at the visit. This expectation

made them less proactive in identifying issues of importance, and appeared to be driven in part of a culturally informed deference to physician expertise. Related to this reliance on the physician to drive the overall visit agenda, many of the patients - again particularly the men - typically presented for care with a specific, generally symptom-driven issue to be addressed. This more transactional model of care is less focused on preventive care and ongoing chronic disease management and therefore may not align with the core goals of primary care providers. Indeed, prior research has found that Latinos with diabetes are more likely to rely on same-day appointments rather than planned visits, a pattern that was independently associated with poorer diabetes-related risk factor control.²⁸

Communication during primary care visits was influenced by patient deference to physician expertise and a pragmatic view that visits are scheduled to address symptomatic problems. This common frame resulted in patients tending to defer their own questions until the end of the visit if there was time and to expect tangible solutions to symptomatic problems. This view of primary care also tended to lead to a lack of visit preparation given the expectation that the provide would (and should) set the visit agenda. Given the limited time available during visits, efforts to educate patients in the importance and value of preparation and proactive communication with their providers may represent a promising strategy to ensure more productive diabetes primary care management.^{14,29}

Culture has a complex and varying

impact on how patients experience and collaborate with their medical care. Prior research has highlighted the negative consequences of culturally discordant care. For example, Elderkin-Thompson reported that cultural metaphors not compatible with biomedical concepts or not congruent with clinical expectations were associated with lack of communication between physician and patient.³⁰ Our results add to the growing body of literature indicating that better understanding of cultural/language barriers in Latino patients could improve patient-provider relationship the and could thereby lead to improved health outcomes.^{31,32} Further work focused specifically on the role of culture, and on strategies to incorporate and leverage its influence, is needed. Indeed, as Rocque and Leanza found in a systematic review of communication in primary care, more than half of the published studies of language discordance did not explore cultural aspects relating to this experience.³³

Our results must be considered within the context of the study design. Because we used qualitative methods, our results should be considered as hypothesis-generating. In addition, while our interest was focused on the role of cultural constructs, several of our medically relevant findings do not easily fit within these constructs. We believe that the insights we gained can guide further work in developing primary care innovations related to visit preparation and education for Latino diabetes patients, their providers, and staff. Our constant comparative method focused on identifying key themes related to communication and visit expectations. Other qualitative methods, such as ethnographic or phenomenological approaches, may have yielded different insights. In addition, we enrolled Latino patients with health insurance who were members of an integrated care system. Patients in other health settings may have different communication barriers. However, in limiting our study to insured members, we are able to focus on potential barriers beyond the wellrecognized problems resulting from inadequate access to health care.³⁴

Our findings may have useful implications for efforts to improve the primary care of Spanish-speaking patients with poorly controlled type 2 diabetes. As with any patient, Latino patients wish to be treated with respect and will stay with a language discordant provider and struggle through communication hurdles when they feel that the provider is understanding and respectful. This situation, in turn, places increased responsibility on the role of other care team members and on family. To the extent that these others lack medical expertise, carefully managing these side channel communications is key to avoid communication errors.

In the domain of visit expectations, we identified the common expectation that physicians are "experts" and should therefore control the visit agenda. When patients initiate the visit, it is often to address an immediate, generally symptom-driven concern. These factors make a poor fit for the primary care framework of longitudinal preventive care and chronic diabetes management. We recommend that efforts are needed by both patients and providers to understand to others' cultures. For example, providers need to understand prevalent cultural beliefs that influence patient behavior before and during visits, and patients need to understand the culture and expectations of primary care. This recommendation is concordant with a systematic review by Ashton et al of pre-visit coaching that found that such coaching may be a useful strategy for reducing disparities in care.³⁵

CONCLUSION

As Latino patients with diabetes grow in number, supporting effective patient-provider communication during time-limited visits becomes increasingly important. Our results underscore the importance of Spanish-speaking Latino patients' cultural expectations in framing their interactions with primary care providers. Interventions to help Latino patients prepare for visits by eliciting their priorities and concerns may represent one potential strategy to support more productive visit encounters to help align patients with the model of prevention and asymptomatic disease management that are foundations of primary care. Recognizing the clinical implications of these culturally influenced visit expectations is an important step toward educating patients and providers in how to develop more collaborative care relationships.

ACKNOWLEDGMENTS

Supported by NIDDK (R01DK099108 and K24DK109114).

CONFLICT OF INTEREST No conflicts of interest to report.

AUTHOR CONTRIBUTIONS Research concept and design: Zamudio, Sanchez, Altschuler, Grant; Acquisition of data: Zamudio, Sanchez, Altschuler, Grant; Data analysis and interpretation: Zamudio, Sanchez, Altschuler, Grant; Manuscript draft: Zamudio, Sanchez, Altschuler, Grant; Acquisition of funding: Grant; Administrative: Zamudio, Sanchez, Grant; Supervision: Altschuler

References

- Schneiderman N, Llabre M, Cowie CC, et al. Prevalence of diabetes among Hispanics/Latinos from diverse backgrounds: the Hispanic Community Health Study/ Study of Latinos (HCHS/SOL). *Diabetes Care*. 2014;37(8):2233-2239. https://doi. org/10.2337/dc13-2939. PMID:25061138.
- Fiscella K, Franks P, Doescher MP, Saver BG. Disparities in health care by race, ethnicity, and language among the insured: findings from a national sample. *Med Care*. 2002;40(1):52-59. https://doi. org/10.1097/00005650-200201000-00007. PMID:11748426.
- McWilliams JM, Meara E, Zaslavsky AM, Ayanian JZ. Differences in control of cardiovascular disease and diabetes by race, ethnicity, and education: U.S. trends from 1999 to 2006 and effects of medicare coverage. *Ann Intern Med.* 2009;150(8):505-515. https://doi.org/10.7326/0003-4819-150-8-200904210-00005. PMID:19380852.
- Barnes CS, Ziemer DC, Miller CD, et al. Little time for diabetes management in the primary care setting. *Diabetes Educ.* 2004;30(1):126-135. https://doi. org/10.1177/014572170403000120. PMID:14999900.
- Bohlen K, Scoville E, Shippee ND, May CR, Montori VM. Overwhelmed patients: a videographic analysis of how patients with type 2 diabetes and clinicians articulate and address treatment burden during clinical encounters. *Diabetes Care*. 2012;35(1):47-49. https://doi. org/10.2337/dc11-1082. PMID:22100962.
- Sudore RL, Landefeld CS, Pérez-Stable EJ, Bibbins-Domingo K, Williams BA, Schillinger D. Unraveling the relationship between literacy, language proficiency, and patient-physician communication. *Patient Educ Couns*. 2009;75(3):398-402. https://doi.org/10.1016/j.pec.2009.02.019. PMID:19442478.
- Fernandez A, Schillinger D, Warton EM, et al. Language barriers, physician-patient language concordance, and glycemic control among insured Latinos with diabetes: the Diabetes Study of Northern California (DIS-TANCE). J Gen Intern Med. 2011;26(2):170-176. https://doi.org/10.1007/s11606-010-1507-6. PMID:20878497.
- 8. Choi S, Lee JA, Rush E. Ethnic and language disparities in diabetes care among California

Primary Care of Latinos with Diabetes - Zamudio et al

residents. *Ethn Dis.* 2011;21(2):183-189. PMID:21749022.

- Karter AJ, Ferrara A, Liu JY, Moffet HH, Ackerson LM, Selby JV. Ethnic disparities in diabetic complications in an insured population. *JAMA*. 2002;287(19):2519-2527. https://doi.org/10.1001/jama.287.19.2519. PMID:12020332.
- Chong N. The Latino Patient: A Cultural Guide for Health Care Providers. Boston: Nicholas Brealey Publishing; 2002.
- Caban A, Walker EA. A systematic review of research on culturally relevant issues for Hispanics with diabetes. *Diabetes Educ.* 2006;32(4):584-595. https:// doi.org/10.1177/0145721706290435. PMID:16873596.
- Caballero AE. Building cultural bridges: understanding ethnicity to improve acceptance of insulin therapy in patients with type 2 diabetes. *Ethn Dis.* 2006;16(2):559-568. PMID:17682263.
- Campos C. Addressing cultural barriers to the successful use of insulin in Hispanics with type 2 diabetes. *South Med* J. 2007;100(8):812-820. https://doi. org/10.1097/SMJ.0b013e3180f609c4. PMID:17713308.
- Julliard K, Vivar J, Delgado C, Cruz E, Kabak J, Sabers H. What Latina patients don't tell their doctors: a qualitative study. *Ann Fam Med.* 2008;6(6):543-549. https://doi. org/10.1370/afm.912. PMID:19001307.
- Larkey LK, Hecht ML, Miller K, Alatorre C. Hispanic cultural norms for health-seeking behaviors in the face of symptoms. *Health Educ Behav.* 2001;28(1):65-80. https:// doi.org/10.1177/109019810102800107. PMID:11213143.
- Barron F, Hunter A, Mayo R, Willoughby D. Acculturation and adherence: issues for health care providers working with clients of Mexican origin. *J Transcult Nurs*. 2004;15(4):331-337. https:// doi.org/10.1177/1043659604268950. PMID:15359067.
- Meyers K, Tang G, Fernandez A. Responding to the Language Challenge: Kaiser Permanente's Approach. *Perm J.* 2009;13(3):77-83. https://doi.org/10.7812/TPP/08-103. PMID:20740094.
- Devers KJ. How will we know "good" qualitative research when we see it? Beginning the dialogue in health services research. *Health Serv Res.* 1999;34(5 Pt 2):1153-1188. PMID:10591278.
- Patton MQ. *Qualitative Evaluation and Research Methods*. Vol 2. Newbury Park, CA: Sage; 1990.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. https://doi.org/10.1093/

intqhc/mzm042. PMID:17872937.

- Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q.* 1996;74(4):511-544. https://doi. org/10.2307/3350391. PMID:8941260.
- Huerta EE, Macario E. Communicating health risk to ethnic groups: reaching Hispanics as a case study. J Natl Cancer Inst Monogr. 1999;1999(25):23-26. https://doi. org/10.1093/oxfordjournals.jncimonographs. a024202. PMID:10854453.
- Detz A, Mangione CM, Nunez de Jaimes F, et al. Language concordance, interpersonal care, and diabetes self-care in rural Latino patients. *J Gen Intern Med.* 2014;29(12):1650-1656. https://doi.org/10.1007/s11606-014-3006-7. PMID:25183476.
- Parker MM, Fernandez A, Moffet HH, Grant RW, Torreblanca A, Karter AJ. Association of patient-physician language concordance and glycemic control for Limited English Proficiency Latinos with Type 2 Diabetes. JAMA Intern Med. 2017;177(3):380-387. https:// doi.org/10.1001/jamainternmed.2016.8648
- Smith WR, Betancourt JR, Wynia MK, et al. Recommendations for teaching about racial and ethnic disparities in health and health care. *Ann Intern Med.* 2007;147(9):654-665. https://doi.org/10.7326/0003-4819-147-9-200711060-00010. PMID:17975188.
- 26. Park ER, Chun MB, Betancourt JR, Green AR, Weissman JS. Measuring residents' perceived preparedness and skillfulness to deliver cross-cultural care. J Gen Intern Med. 2009;24(9):1053-1056. https:// doi.org/10.1007/s11606-009-1046-1. PMID:19557481.
- Seale C, Rivas C, Kelly M. The challenge of communication in interpreted consultations in diabetes care: a mixed methods study. *Br J Gen Pract.* 2013;63(607):e125-e133. https://doi.org/10.3399/bjgp13X663082. PMID:23561691.
- Parker MM, Moffet HH, Schillinger D, et al. Ethnic differences in appointment-keeping and implications for the patient-centered medical home--findings from the Diabetes Study of Northern California (DISTANCE). *Health Serv Res.* 2012;47(2):572-593. https:// doi.org/10.1111/j.1475-6773.2011.01337.x. PMID:22091785.
- Grant RW, Adams AS, Bayliss EA, Heisler M. Establishing visit priorities for complex patients: A summary of the literature and conceptual model to guide innovative interventions. *Healthc (Amst)*. 2013;1(3-4):117-122. PMID:24944911.
- Elderkin-Thompson V, Silver RC, Waitzkin H. When nurses double as interpreters: a study of Spanish-speaking patients in a US primary care setting. *Soc Sci Med.* 2001;52(9):1343-1358. https://doi. org/10.1016/S0277-9536(00)00234-3. PMID:11286360.

- Mainous AG III, Diaz VA, Koopman RJ, Everett CJ. Quality of care for Hispanic adults with diabetes. *Fam Med.* 2007;39(5):351-356. PMID:17476609.
- 32. Fernandez A; Quan J; Moffett H; Parker MM; Schillinger D; Karter AJ. Adherence to newly prescribed diabetes medications among insured Latino and White patients with diabetes. *JAMA Internal Medicine*. 2017; 1777(3):371-379. https://doi.org/10.1001/jamainternmed.2016.8653. PMID: 28114642
- 33. Rocque R, Leanza Y. A Systematic Review of Patients' Experiences in Communicating with Primary Care Physicians: Intercultural Encounters and a Balance between Vulnerability and Integrity. *PLoS One*. 2015;10(10):e0139577. https://doi.org/10.1371/journal.pone.0139577. PMID:26440647.
- Cusi K, Ocampo GL. Unmet needs in Hispanic/Latino patients with type 2 diabetes mellitus. *Am J Med.* 2011;124(10) (suppl):S2-S9. https://doi.org/10.1016/j. amjmed.2011.07.017. PMID:21939795.
- 35. 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(2):146-152. https://doi. org/10.1046/j.1525-1497.2003.20532.x. PMID:12542590.