Review

# Overcoming Communication Barriers to Healthcare for Culturally and Linguistically Diverse Patients

Chieh Li, EdD;<sup>1\*</sup> Noora Abdulkerim, MA;<sup>1</sup> Cara A. Jordan, BS;<sup>1</sup> Christine Ga Eun Son, BA<sup>2</sup>

Department of Applied Psychology, Northeastern University, Boston, MA School of Business, Northeastern University, Boston, MA

The growing diversity in the United States brings with it multiple cultures, languages, and communication styles. Effective communication between healthcare providers and patients is essential for quality healthcare. Barriers to communication contribute to health disparities among racial/cultural minority groups. In this article, we analyzed both verbal and nonverbal barriers to effective communication with Limited English Proficiency (LEP) patients, including issues with using interpreters. Following the analysis, we explored strategies to overcome the barriers at systemic and individual levels. The available literature indicates that most of the legislative initiatives took place in three domains: (1) continuing education on serving LEP patients for health professionals, (2) certification of healthcare interpreters, and (3) reimbursement for language services for Medicaid/SCHIP enrollees. Additional strategies recommended by previous studies include (4) informing all LEP patients about their legal rights, the resources available to them, and the actions they can take when these are not enforced or made accessible. We proposed adding two more strategies: (5) increasing awareness of both verbal and nonverbal (proxemics, kinesics and paralanguage) barriers to crosscultural communication, and (6) increasing multicultural competencies of health providers.

[N A J Med Sci. 2017;10(3):103-109. **DOI:** 10.7156/najms.2017.1003103]

**Key Words**: communication barriers, limited English proficiency patients, cross-cultural

## INTRODUCTION

According to the 2015 United States Census Bureau, racial and ethnic minorities comprise 38.4% of the U.S. population, and it has been projected that by 2050 non-Hispanic whites will no longer be the majority group. These statistics have significant implications for medical services within the U.S. There is strong evidence to suggest that differences in health status, access to medical care, and the delivery of physical and mental health services are significantly related to race, ethnicity and primary language. I

The growing diversity brings with it a rich variety of cultures, languages, and communication styles, as well as challenges in cross-cultural communication. Communication between healthcare providers and patients is essential for delivery of operative healthcare services. Health promotion, accurate diagnosis, and patient safety and compliance are all contingent on effective communication between medical personnel and multicultural patients.<sup>1</sup> This article will address language barriers in communicating with culturally and linguistically diverse (CLD) patients. We shall first review the cultural and

linguistic diversity of our people, and then analyze the specific barriers in cross-linguistic and cross-cultural communication. Following the analysis, we shall explore strategies to overcome the barriers.

## CULTURAL AND LINGUISTIC DIVERSITY OF OUR PEOPLE

As of 2015, 29.2 million more immigrants came to the United States since 1980. Immigrants made up almost a seventh of the entire US population (14%) as of 2015. According to the US Census Bureau, over 350 languages are spoken in the U.S. Within this diverse population there are nuanced differences in terms of familiarity with the English language, from fluent bilingual speakers to people with limited English language proficiency (LEP). As of 2015, the ten most popular languages in the U.S. were Spanish or Spanish Creole, Chinese, Tagalog, Vietnamese, French, Arabic, Korean, German, Russian and French Creole **Table 1** provides details on the demographics of bilingual and LEP speakers within each of the top ten most popular language groups in the US.

Limited English proficiency (LEP) speakers constitute a substantial part of the total US population, standing at 9% of the whole U.S. population in 2015. LEP American residents also tend to possess a lower level of education in comparison

to U.S. born citizens and "more likely to live in poverty in 2015". In fact, 23% of the LEP population earned salaries that were below the poverty line in 2015. The LEP population is also ethnically diverse. As of 2015, 62% of the LEP

population was Latino, 22% was Non-Latino Asian/Pacific Islander, and 4% was Non-Latino Black.<sup>4</sup> Asian and African immigrants have consistently been increasing over the past few years.<sup>5</sup>

Table 1. Demographics of Top Ten Languages.

Language	Number of speakers	Percentage that is bilingual	Percentage of Limited English Proficiency
Spanish or Spanish Creole	40,046,000	59%	41%
Chinese	3,334,000	44.3%	55.7%
Tagalog	1,737,000	67.6%	32.4%
Vietnamese	1,468,000	41.1%	58.9%
French	1,266,000	79.9%	20.1%
Arabic	1,157,000	62.8%	37.2%
Korean	1,109,000	46.8%	53.2%
German	933,000	85.1%	14.9%
Russian	905,000	56%	44%
French Creole	863,000	58.8%	41.2%

Currently there are not enough bilingual healthcare providers to meet the needs of LEP speakers. Access to interpreters is a common strategy to address this challenge. However, many physicians do not utilize interpreter services to the extent needed to support their LEP patients due to its cost.<sup>2</sup> The poor utilization of interpreter services is particularly concerning. Research has established that when bilingual clinicians are fluently communicating with patients in a language they understand, the healthcare improves, "including better patient satisfaction with care, medication adherence, patient understanding of diagnoses and treatment, outcomes for LEP patients with diabetes, patient centeredness, and more health education".<sup>2</sup> In the current context, it is crucial for healthcare providers to be aware of the common barriers in crosslinguistic and cross-cultural communication.

Communication barriers left inadequately addressed may lead to deleterious consequences for LEP patients. This can result in the doctor carrying out an examination for an ailment that the LEP patient may have erroneously communicated when he or she intended to tell about another ailment.<sup>1,2</sup> In addition to the risk of wrong diagnosis and treatment, communication barriers also place LEP patients at risk for becoming uninsured due to difficulty in understanding written materials on what steps to take to become or stay insured. This could lead LEP patients to only seeking a doctor's help for acute or chronical illnesses as opposed to preventive care.<sup>1-8</sup> As the health and well-being of the LEP patients are at stake, it is imperative to explore strategies to address communication barriers.

## COMMUNICATION BARRIERS Barriers in Verbal Communication

The United States Census Bureau codes 381 distinct languages. <sup>12</sup> In 2002, it was estimated that in California alone, there were 200 different languages spoken. <sup>15</sup> Although medical practices in the United States are most often conducted in English, it is no longer adequate to expect all patients to be proficient in English. <sup>19</sup> Ideally non-English speaking individuals would have access to a bilingual healthcare worker, but often this is not the case. Non-English

speaking patients have limited alternatives in terms of communication mode when working with medical professionals who do not speak their language. They may either choose to communicate without any assistance or they may choose to rely on a third party such as a professional interpreter, family, or friend. <sup>12</sup> There are barriers related to each option.

Communicating without an interpreter. Communicating without assistance from a translator would create an evident barrier between health professionals and LEP patients. Individuals who choose not to use a translator or who do not have access to a translator may be at a disadvantage. LEP patients may face challenges related to being misunderstood and therefore misdiagnosed.<sup>20</sup> Language barriers have shown to affect comprehension of diagnosis and treatment, as well as adherence to treatment instruction.<sup>1</sup> The difficulty to communicate effectively with healthcare professionals may contribute to the already disadvantaged minority groups' lack of access to quality healthcare services.

Complete understanding within patient-doctor communication is imperative to the delivery of safe and effective medical services. For example, a study on Latino asthma patients' experiences with health communication found that participants were often unable to accurately get his or her message across to the healthcare providers, which led to feelings of dissatisfaction and frustration with the interaction. It is observed that, if LEP patients cannot communicate to doctors/nurses in their native tongue, they are unable to use complex language to describe situations and feelings. They may feel like they are speaking like a child, using simple words and sentences, which interferes with their ability to fully express their emotional complexity and experience. Is

A common scenario described by Sue & Sue<sup>15</sup> in 2016 demonstrates the barrier between healthcare professionals and diverse patients. In an appointment, a LEP patient may struggle to understand what a doctor/nurse is saying. Some patients may explicitly tell the doctor/nurse that it is

challenging for them to understand what s/he is saying. Others, however, may not be this vocal about their difficulty. Instead these patients might only respond with a few words or mostly use nods as a means of communication. The doctor/nurse may not realize that the patient has limited English proficiency and may assume that the patient's lack of participation is due to indifference, or that the patient does not understand any English at all.<sup>24</sup> This scenario suggests that from the patient's perspective, they may find it difficult to actively participate in conversation, especially if the doctor/nurse is speaking too fast or using words they do not understand. In this case, the communication between the LEP patient and the healthcare professional is unproductive.

When a patient is a fluent bilingual English speaker, it is important to be aware that even when using a common language, communication issues can occur. A meaning of a word may differ depending on culture and language background. For example, in dietetic practice, the word "lean" as in "lean meat" does not necessarily translate into something meaningful within the Hispanic population. <sup>19</sup> This implies that even those who speak some English need a contextual understanding of what is being told to them. It is important to remember that bilingual patients may not know the medical terms in English. Eliminating language barriers is critical in assuring culturally competent and operative care for diverse patients.

Historically, the issue of language barriers in healthcare only truly came into light in the early 2000s with the increase of minority populations. Since then, the U.S. Department of Health and Human Services (HHS) and its Office of Minority Health (OMH) have expanded on the few existing federal laws through more concrete and comprehensive standards. In 2001, the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Healthcare were released, which provided a practical framework for health service organizations to implement. Still the lack of enforcement and research on the effectiveness of these solutions mean there is still much to be done to improve the communication experience for LEP patients.

Communicating with an interpreter Jacobs, et al. <sup>14</sup> in 2004 found that providing interpreter services to patients who are not proficient in English, increased the patient's access to preventative and primary care for a reasonable rise in cost. Although using a professional interpreter is preferred when bilingual healthcare workers are not available, it is important to recognize that using a translator in the healthcare setting has its own set of challenges.

If a patient chooses to use a translator, it is possible the translator does not speak the same dialect or does not share the same cultural background.<sup>3</sup> In general, errors made by translators are common. One study by Flores, et al. in 2003 found that an average of 31 errors were made per clinical interaction.<sup>46</sup> Translators included both professionals and ad hoc interpreters (e.g. family or friends). There was no significant difference between errors made by professional

interpreters or ad hoc interpreters. The most frequent type of error made was omission or not interpreting a word/phrase spoken by the clinician or patient. Additionally, interpreters may interject their own beliefs or assumptions. The interpreter may also have emotional repercussions due to the content of an encounter with his or her client and doctor. Although translation is a helpful tool for communication between multicultural patients and doctors, careful consideration must be made.

A less preferred method for communicating medical information is through interpretation by family and friends. A qualitative study using Chinese- and Vietnamese- American patients found that the patients themselves preferred using professional interpreters rather than family members. 15 Using family members, especially children, as interpreters involves a high risk of misinterpretation, and the family-patient relationship may interfere with the translation of medical information, especially in sensitive cases.<sup>4</sup> It is likely that family members would be more selective about what they translate between the patient and the doctor.<sup>28</sup> Children responsible for translating for family members may face stress and an unfair emotional burden related to the content of the medical information.4 It is advised that family members, especially children, should not be used for medical translation unless in an emergent situation.<sup>14</sup>

### **Cultural and Social Barriers**

In addition to language, culture and sociopolitical factors may affect communication between medical personnel and multicultural patients. CLD patients may experience barriers in communication with healthcare providers due to differences in beliefs, values, and cultural practice. For example, expressiveness and verbalization are valued highly in the Euro-American culture. In contrast, some cultures, such as traditional Chinese and Korean cultures, tend to discourage the expression of physical and emotional distress to people outside of the family. 19 This may make it difficult for patients of these cultures to disclose emotional problems to medical professionals. They may have different patterns of communication than the mainstream American culture. For example, a study of Asian-American women with breast cancer found that this group was less likely to ask questions or discuss medical concerns with doctors. They were also less likely to receive medical information and less likely to have a dynamic relationship with physicians. 19

Perception of doctors in a hierarchical relationship may affect how patients communicate to the doctors. For instance, Chinese-Americans have reported viewing physicians as "powerful others" deserving great respect. This cultural view may lead to inadequate communication with physicians. Similarly, Patel, et al. In 2013 suggest that African Americans and Latinos perceive primary care professionals as authority figures and this perception may unintentionally affect the interpersonal component of their medical care. Patients' deference to doctors/nurses may be the result of "low health literacy, lack of self-efficacy or a learned response influenced by cultural attitudes". These perceived

hierarchical relationships may interfere with patient-doctor communication.

Historical and sociopolitical factors may affect patients' trust of doctors and how they communicate with healthcare personnel. An article on racial oppression and its effect on health outcomes (by Wheeler and Bryant, <sup>1</sup> 2017) emphasizes a key point that medical professionals should understand: Many people alive today have lived through segregation and open, blatant racism. Although policies like the Jim Crow laws have been abolished, even the "well-meaning" doctors may have subconscious biases that will affect the way they interact and treat patients from different racial/ethnic groups. These experiences and other inhumane events, such as the Tuskegee syphilis study and the forced sterilization based on a woman's race and ethnicity that occurred until the 1970s, have caused justified distrust of medical professionals by minority patients in the United States. Such issues may interfere with communication between patients and medical professionals and it may affect a patient's response to recommendations, screening test, treatment plans, and can ultimately increase the disparity between races.1

### **Barriers in Nonverbal Communication**

Nonverbal communication is a powerful form of communication and is heavily impacted by culture. Immigrants from different cultures use different forms of nonverbal communication. In order to truly understand their patients, medical staff must make a concerted effort to understand the patients' cultures in addition to providing access to interpreters. Medical staff should be aware of cultural differences in the major domains of nonverbal communication, including proxemics, kinesics and paralanguage.

Proxemics refers to the way people use the space around them unknowingly when communicating. <sup>19</sup> The way in which individuals employ proxemics and attribute meaning to it in their daily nonverbal communications varies from culture to culture. For example, in mainstream American culture if an individual were to step away from someone during a conversation, the act of stepping away would be interpreted as behaving in a cold manner. Also in mainstream American culture the use of touch when communicating with someone is very much accepted while in Japanese culture the use of touch is much less accepted. In Arab culture, it is inappropriate for men and women to touch each other. In Chinese culture, young boys holding hands while they talk to each other is typical. <sup>4</sup>

Kinesics refers to the way people move their body when communicating. Examples of types of kinesics are gestures, facial expressions, eye contact and touching.<sup>27</sup> Kinesics vary drastically from culture to culture. The act of smiling, for instance, is understood as a positive behavior in mainstream American culture while the act of smiling in Japanese culture could be perceived as a negative behavior such as embarrassment. The act of raising the chin in British culture is understood as being polite while this same behavior in American culture is perceived as being conceited.<sup>14</sup>

Paralanguage includes variations in speech, such as voice quality, volume, tempo, pitch, nonfluencies (for example, uh, um, ah), laughing, yawning, etc.<sup>20,21,27</sup> Silence has different meanings for Americans, Arabs and Russians. In mainstream American culture, silence during a conversation is perceived as something negative that needs to be eliminated as soon as possible. In Arab culture, silence is characterized as something that implies privacy. Russian culture utilizes silence to convey agreement between different groups. 14 Cultural differences in nonverbal communication can be barriers for healthcare if healthcare providers are not sensitive to them when interacting with patients from different cultures. Everyday nonverbal communication practiced during a medical appointment such as speaking to the patient at a close distance or greeting the patient with a handshake can be behaviors that certain cultures may find inappropriate.<sup>20</sup> If the healthcare provider is unfamiliar with the patients' cultural differences, the healthcare provider may unwittingly offend the patients or make them feel uncomfortable by unintentionally communicating a negative message through culturally biased nonverbal communication.31

# STRATEGIES TO OVERCOME COMMUNICATION BARRIERS

Addressing the linguistic and cultural barriers discussed above in healthcare requires both system level and individual level efforts. In this section, we shall discuss efforts at a national level and relevant federal regulations/policies, highlight some online bilingual resources, and explore strategies at individual levels.

# Institutional Strategies to Address Communication Barriers

The national strategies to remove language barriers to healthcare for LEP patients have been mainly focused on verbal and written language. Providing language access is recognized as both social and legal responsibilities according to federal and state laws.<sup>4</sup> The legal foundation for language access is stated directly in Title VI of the 1964 Civil Rights Act as "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title VI applies to all federally funded programs or agencies such as hospitals, nursing homes, rehabilitation centers, social service agencies, and other medical institutions. Funding may include but are not limited to Medicaid, SCHIP, Medicare payments, NIH grants, and CDC financing.<sup>32</sup> To enforce these laws and ensure adherence, the Office for Civil Rights (OCR) of the Department of Health and Human Services (HHS) oversees all organizations and programs that receive federal financing. In 1998, the OCR issued a memorandum clarifying that "the denial or delay of medical care because of language barriers constitutes discrimination and requires that recipients of Medicaid or Medicare funds provide adequate language assistance to patients with limited English proficiency". The OCR has the power to investigate complaints, check for compliance, and withhold federal funds if organizations are noncompliant.

In August 2000, President Clinton issued Executive Order 13166 titled *Improving Access to Services for Persons with Limited English Proficiency*, which drew nationwide attention to the severity of the language access issue. This required all federal agencies to "develop and implement a system by which LEP persons can meaningfully access [the] services [it provides]."<sup>23</sup> The Bush Administration continued these efforts and in August 2003, the Department of Justice (DOJ) released a revised policy guidance document (called the "LEP Policy Guidance") that detailed the compliance standards even further.<sup>2</sup> Two weeks later, the HHS released its own policy guidance, specifically requiring both oral and written language assistance at no additional cost to LEP individuals. <sup>ii</sup> The level of assistance is rather vague, even allowing friends and family members, including minor children, to serve as interpreters.<sup>29</sup>

In addition to federal laws, many states and private institutions have worked towards expanding the provisions of language access services in healthcare. All fifty states have adopted various measures to address the language barriers of LEP individuals in the healthcare setting,6 with most of the legislative initiatives taking place in three main areas: continuing education for health professionals, certification of healthcare interpreters, and reimbursement for language services for Medicaid/SCHIP enrollees, 6 Many of the drivers behind these reform policies are states with significant minority populations such as California and New Jersey, and as a result, laws vary from state to state. Private institutions, such as the Joint Commission, have also expanded the landscape of language access service through accrediting and certificating hospitals and healthcare programs when certain performance standards are met. In 2010, the Joint Commission released a set of revised standards for patient communication requiring hospitals to offer a professional interpreter for every patient who needs one, and requiring written medical documents to consider the patient's language, age, and ability to understand.<sup>50</sup> To this day, the Joint Commission is the primary accrediting body for most hospitals in the U.S.

For language access to become more functional and comprehensive, Chen, Youdelman, and Books in their article *The Legal Framework for Language Access in Healthcare Settings: Title VI and Beyond* suggests four main changes that need to happen:<sup>32</sup> (1) Establishing a financing mechanism for those that provide language assistance services. (2) Investing more in our medical interpreter workforce. We need both increased quantity and quality. Certification might be a cost-efficient and standardized way to achieve this. (3) Increasing awareness of this issue among healthcare professionals so they can be encouraged to call upon the help of medical interpreters for patients. (4) Informing all LEP patients about their legal rights, the resources available to them, and the actions they can take when these are not enforced or made accessible.

The strategies suggested by Chen et al.<sup>32</sup> and private institutions, along with the federal and state laws, have all focused on removing barriers to verbal communication with LEP patients. We want to add three more strategies that

include addressing nonverbal barriers: (1) Strengthening both preservice and in-service training in cross-cultural communication for all medical staff. The training should include both verbal and nonverbal communication skills along with knowledge and skills in using interpreters. Cross-cultural communication competencies should be included in the training goal of medical students and residents. (2) Including awareness of verbal and nonverbal communication styles in the training of interpreters. (3) Including information on national and local bilingual resources (e.g., where to find interpreters for different languages; apps and online translations/dictionaries of medical terms and patients' rights, bilingual medical information and forms) in new staff orientation as well as cross-cultural communication training. As to relevant resources, the National Board of Certification Medical Interpreters (http://www.certifiedmedicalinterpreters.org/) currently offers a Certification for Medical Interpreter credential in: Spanish, Mandarin, Cantonese, Russian, Korean, and Vietnamese. For health professionals and bilingual patients who only need to look at the translation of some medical terms in another language, several websites funded by federal, state and private institutions provide bilingual dictionary/tools. One example of this type of tools is the Mandarin Vocabulary List for Common Medical Terms (see the website: http://mandarin.about.com/ od/vocabularylists/tp/medical terms.htm). Another example is English-Spanish Dictionary of Health Related Terms 3rd Edition, which includes terms related to emergency (http://www.cdpr.ca.gov/docs/dept/spanish/engspdict.pdf). More examples include: Health Information in Vietnamese (Tiếng Việt): MedlinePlus (https://medlineplus.gov> Multiple Languages); and Glossary of Medical Terminology (English-Hmong) WordPress.com (https://ucdhmonginhealth.files. wordpress.com/.../glossory-of-medical-terminology-en...). These resources may ease health providers' individual efforts in combatting language barriers.

## **Individual Strategies to Overcome Communication Barriers**

On an individual level, the first important step is to increase awareness of our own verbal and nonverbal communication including specific proxemics, kinesics paralanguage. The next step is to reflect on our effectiveness in communicating with different populations and identify our strengths, weaknesses, and barriers. In this process, we could also identify the resources we need and where to get them. Doctors must develop "a culturally competent communication repertoire"6 which includes attitudes and skills related to empathy and respect <sup>6</sup> and a few foundational skills of communication. These skills include being able to actively listen and encourage patients' input and perspectives.6 Additionally, doctors/nurses should be aware and considerate of sociocultural components to illness.<sup>7</sup> They must also have the skills to empower patients to make medical decisions for themselves.41

In practice, health providers can remove some of the verbal communication barriers by asking their assistants/secretaries to inquire if interpreters or bilingual resources of relevant medical terms are needed when their culturally and linguistically diverse (CLD) patients are making the first appointment. Such information will allow the health providers to arrange linguistic assistance ahead of time and acquire knowledge about the cultures of their patients.

If the LEP patients know enough English to communicate and an interpreter is unavailable, then healthcare professionals can also be mindful about speaking to the LEP patients in clear ways to help them better understand the meaning of what is being said. Communicating at a slow pace can give the LEP patients time to process what is being said and can help the LEP patient feel calm about communicating because they would realize that the healthcare professional was calm and patient. Only short sentences should be used when communicating with LEP patients because short simple sentences will be easier for the LEP patients to understand and remember. After the LEP patient speaks, the healthcare professional should respond by saying what the LEP patient said in a different way to check if the healthcare professional's comprehension of what the LEP patient said is accurate. Healthcare professionals should be aware of the potential issues with the "Yes or No" questions for LEP patients. An answer of either "yes" or "no" may not indicate that the patient had comprehension of what was asked. It may only indicate that the patient could hear the question.<sup>3</sup>

When using an interpreter, healthcare providers should select a trained medical interpreter who is fluent in both English and the patient's language and culture (for qualification of interpreters defined by the National Council on Interpreting for Health Care, see http://www.ncihc.org/faq-for-translatorsand-interpreters), speaks the patient's dialect, and has no religious or political conflicts with the patient. Before the translation, healthcare providers should review with the interpreter what will happen at the meeting with the patient, and ensure that the interpreter is familiar with the national standards for interpreters of health care, especially confidentiality as outlined by the National Council on Interpreters in Health Care. During the meeting with the patient, healthcare providers should talk in short sentences so that it is easier for the interpreter to translate. Healthcare providers should also ensure that the interpreter is fully translating without interjecting his/her own beliefs, opinions, or assumptions. <sup>16</sup> To maintain the relationship with the patient, healthcare providers should face and talk to the patient instead of the interpreter.

### CONCLUSION

The growing diversity in the U.S. brings with it multiple cultures, languages, and communication styles and the challenges of cross-cultural communication. In this article, we examined both verbal and nonverbal barriers to effective communication with LEP patients, including issues with using interpreters. Following the examination, we explored strategies to overcome the barriers at systemic and individual levels. Most of the legislative initiatives took place in three domains: (1) continuing education on serving LEP patients for health professionals, (2) certification of healthcare interpreters,

and (3) reimbursement for language services for Medicaid/SCHIP enrollees. Additional strategies to combat the language barriers include (4) informing all LEP patients about their legal rights, the resources available to them, and the actions they can take when these are not enforced or made accessible. As the national strategies to remove language barriers to healthcare for LEP patients have been mainly focused on verbal and written language, we propose adding strategies that include (5) increasing awareness of both verbal and nonverbal (proxemics, kinesics and paralanguage) barriers to cross-cultural communication, and (6) increasing multicultural competencies of healthcare providers.

### CONFLICT OF INTEREST

None.

#### REFERENCES

- Wheeler SM, Bryant AS. Racial and ethnic disparities in health and health care. Obstet Gynecol Clin North Am. 2017;44:1-11.
- Rodgers A. Eliminating health disparities: strengthening data on race, ethnicity, and primary language in the United States. https://www.cdc.gov/nchs/data/misc/elihealthdisp.pdf
- 3. Johnson MR. Cross-cultural Communication in Health. Clin Cornerstone. 2004;6:50-52.
- Batalova J, Zong J. Language Diversity and English Proficiency in the United States. The Online Journal of the Migration Policy Institute. November 2016. http://www.migrationpolicy.org/article/languagediversity-and-english-proficiency-united-states.
- Cohn D'V, Caumont A. 10 demographic trends that are shaping the U.S. and the world. Pew Research Center. http://www.pewresearch.org/fact-tank/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/. Published March 31, 2016. Accessed March 31, 2017.
- Vela MB, Fritz C, Press VG, Girotti J. Medical Students' Experiences and Perspectives on Interpreting for LEP Patients at Two US Medical Schools. J Racial Ethn Health Disparities. 2015;3:245-249.
- Diamond LC, Tuot DS, Karliner LS. The Use of Spanish Language Skills by Physicians and Nurses: Policy Implications for Teaching and Testing. J Gen Intern Med. 2011;27:117-123.
- 8. Youdelman MK. The medical tongue: U.S. laws and policies on language access. Health Aff. 2008;27:424-433.
- DeCamp LR, Kieffer E, Zickafoose JS, et al. The voices of limited English proficiency Latina mothers on pediatric primary care: lessons for the medical home. Matern Child Health J. 2013;17:95-109.
- Sentell T, Braun KL, Davis J, Davis T. Colorectal cancer screening: low health literacy and limited English proficiency among Asians and Whites in California. J Health Commun. 2013;18:242-255.
- Paasche-Orlow MK, Wilson EAH, McCormack L. The evolving field of health literacy research. J Health Commun. 2010;15:5-8.
- Kuo DZ, O'Connor KG, Flores G, Minkovitz CS. Pediatricians' use of language services for families with limited English proficiency. Pediatrics. 2007;119:e920-927.
- Jang M, Lee E, Woo K. Income, language, and citizenship status: factors affecting the health care access and utilization of Chinese Americans. Health Soc Work. 1998;23:136-145.
- Feinberg E, Swartz K, Zaslavsky A, Gardner J, Walker D. Language proficiency and the enrollment of Medicaid-eligible children in publicly funded health insurance programs. Matern Child Health J. 2002;6:5-18.
- Conrad P, Barker KK. The social construction of illness: key insights and policy implications. J Health Soc Behav. 2010;51: S67-79.
- Timmins CL. The impact of language barriers on the health care of Latinos in the United States: a review of the literature and guidelines for practice. J Midwifery Womens Health. 2002; 47:80-96.
- 17. Conrad P, Barker KK. The social construction of illness: key insights and policy implications. J Health Soc Behav. 2010;51: S67-79.
- Shin HB, Kominski R. Language use in the United States, 2007. https://www.census.gov/prod/2010pubs/acs-12.pdf
- Mccaffree J. Language: A Crucial part of cultural competency. J Am Diet Assoc. 2008;108:611-613.

- 20. Phelan M, Parkman S. Work with an interpreter. BMJ. 1995;311:555.
- Wilson E, Chen AH, Grumbach K, Wang F, Fernandez A. Effects of limited English proficiency and physician language on health care comprehension. J Gen Intern Med. 2005;20:800-806.
- Riera A, Ocasio A, Tiyyagura G, et al. Latino Caregiver Experiences with Asthma Health Communication. Qual Health Res. 2015;25:16-26.
- Arredondo P, Gallardo-Cooper M, Delgado-Romero EA, Zapata AL. Culturally responsive counseling with Latinas/os. Alexandria, VA: American Counseling Association; 2014.
- Sue DW, Sue D. Counseling the culturally diverse: Theory and practice. Hoboken, NJ: John Wiley & Sons, Inc.; 2016.
- Jacobs EA, Shepard DS, Suaya JA, Stone E-L. Overcoming Language Barriers in Health Care: Costs and Benefits of Interpreter Services. Am J Public Health. 2004;94:866-869.
- Sue DW, Sue D. Counseling the culturally diverse theory and practice. Hoboken, NJ: John Wiley & Sons, Inc.; 2016.: 235
- Ngo-Metzger Q, Massagli MP, Clarridge BR, et al. Linguistic and cultural barriers to care: Perspective of Chinese and Vietnamese Immigrants. J Gen Intern Med. 2003;18:44-52.
- Priebe S, Sandhu S, Dias S, et al. Good practice in health care for migrants: views and experiences of care professionals in 16 European countries. BMC Public Health. 2011;11:187.
- Coleman J. Bill would ban using children as interpreters. San Jose Mercury News. April 2, 2003.
- Heptinstall T, Kralj L, Lee G. Asylum seekers: a health professional perspective. Nurs Stand. 2004;18:44-53.
- Yeh CJ, Inman AG, Kim AB, Okubo Y. Asian American families' collectivistic coping strategies in response to 9/11. Cultur Divers Ethnic Minor Psychol. 2006;12:134-148.
- Ashing KT, Padilla G, Tejero J, Kagawa-Singer M. Understanding the breast cancer experience of Asian American women. Psycho-Oncology. 2002;12:38-58.
- Lim J-W, Gonzalez P, Wang-Letzkus MF, Ashing-Giwa KT. Understanding the cultural health belief model influencing health behaviors and health-related quality of life between Latina and Asian-American breast cancer survivors. Support Care Cancer. 2008;17:1137-1147.
- Lim J-W, Paek M-S. The relationship between communication and health-related quality of life in survivorship care for Chinese-American and Korean-American breast cancer survivors. Support Care Cancer. 2012;21:1157-1166.
- Patel SR, Schnall R, Little V, Lewis-Fernández R, Pincus HA. Primary Care Professional's Perspectives on Treatment Decision Making for Depression with African Americans and Latinos in Primary Care Practice. J Immigr Minor Health. 2013;16:1262-1270.
- Li C, Kruger L, Krishnan K. Empowering immigrant patients with disabilities: advocating and self-advocating. NAJMS, 2016 9:116-122.
- Lunenburg FC. Louder Than Words: The Hidden Power of Nonverbal Communication in the Workplace. International Journal of Scholarly Academic Intellectual Diversity. 2010;12:1-5.
- 38. Kulaksız E. To What Extent does culture create language learning in terms of proxemics? Procedia Soc Behav Sci. 2015;199:695-703.
- Jacobi I. How to say it with your voice. Upper Saddle River, NJ: Prentice Hall. 2009.

- Young KS. Communicating nonverbally: A practical guide to presenting yourself more effectively. Long Grove, IL: Waveland Press. 2008.
- Burnard P, Gill P. Chapter 2. In: Burnard P, Gill P, Communication, Nursing and Culture. New York, NY: Pearson Education Limited; 2008: 30-49.
- Chen AH, Youdelman MK, Brooks J. The Legal Framework for Language Access in Healthcare Settings: Title VI and Beyond. J Gen Intern Med. 2007;22(S2):362.
- Title VI of the Civil Rights Act of 1964, Pub. L. No. 88-352, § 601, 78 Stat. 221.
- Flores G. Language barriers to health care in the United States. N Engl J Med. 2006;355:229-231.
- Federal Register. LEP.gov. https://www.lep.gov/13166/eolep.pdf. Published August 16, 2000.
- 46. Health and Human Services. Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Original Discrimination Affecting Limited English Proficient Persons, 67 Fed. Reg. 41,455, 41,459 (June 18, 2002). https://www.hhs.gov/civilrights/for-individuals/special-topics/limited-englishproficiency/guidance-federal-financial-assistance-recipients-title-VI/
- Lo L. The Right to Understand Your Doctor: Protecting Language Access Rights to Healthcare. Boston Coll Third World Law J. 2011;3:377-403.
   http://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=1445&co.
  - http://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=1445&context=twli.
- 48. Perkins J, Youdelman M. Summary of State Law Requirements Addressing Language Needs in Health Care. Visiting Nurse. http://www.vnfw.org/sites/default/files/diversity/Language%20Commu nication/State%20Law%20Requirments%20Addressing%20Language %20Needs%20in%20Health%20Care%20Settings.pdf. Published January 2008.
- Chen AH, Youdelman MK, Brooks J. The legal framework for language access in healthcare settings: Title VI and beyond. J Gen Intern Med. 2007;22(Suppl 2):362–367.
- Washington D, Doyle R. Providing medical care to diverse populations.
   In: Parekh R, Ed. The Massachusetts General Hospital textbook on diversity and cultural sensitivity in mental health. New York: Humana Press; 2014: 261.
- Shapiro J, Hollingshead J, Morrison EH. Primary care resident, faculty, and patient views of barriers to cultural competence, and the skills needed to overcome them. Med Educ. 2002;36:749-759.
- Buyck D, Lang F. Teaching medical communication skills. Fam Med. 2002;34:337-343.
- Makoul G. Essential Elements of Communication in Medical Encounters. Acad Med. 2001;76:390-393.
- Srivastava RH, ed. The Healthcare Professional's Guide to Clinical Cultural Competence. Toronto, ON: John Horne; 2007.
- National Council on Interpreting in Health Care. National standards of practice for interpreters in health care. http://www.ncihc.org/assets/documents/publications/ NCIHC%20National%20Standards%20of%20Practice.pdf.
- Flores G, Laws MB, Mayo SJ. Errors in medical interpretation and their potential clinical consequences in pediatric encounters. Pediatrics. 2003;111:6-14.