Chapter 4

Language Barriers and Access to Care

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ABSTRACT

The purpose of this chapter is to examine how language barriers contribute to health disparities among ethnic and racial minorities in the United States. A literature search was systematically conducted using selected computer databases (MEDLINE and CINAHL). Searches were limited to English-language-published research in the years from 1985 to 2003. A total of 47 published articles were included in this review. Overall these studies indicate that language barriers are associated with longer visit time per clinic visit, less frequent clinic visits, less understanding of physician’s explanation, more lab tests, more emergency room visits, less follow-up, and less satisfaction with health services. The results also indicate that people who are older, poorer, and female tend to have severe language barriers compared to those who are younger, wealthier, and male. Improvement of communication between patients and providers in relation to health disparity consists of cultural competency and communication skills. Implications of these studies for practice and further research are outlined.

Keywords: access to care, cultural and linguistic competency, language barriers

Language is the means by which a patient accesses the health care system, learns about services, and makes decisions about her or his health behavior (Woloshin, Schwartz, Katz, & Welch, 1997). Language is also the means by which the health care provider accesses a patient’s beliefs about health
and illness, and thus creates an opportunity to address and reconcile different belief systems. In essence, communication between nurses and patients is the heart of nursing care.

In the last twenty years, the United States has experienced a dramatic increase in the number of people who speak a language other than English as their primary language (U.S. Census Bureau, 2002). This is mainly because during this time the United States has experienced a rapid increase in the number of immigrants from Mexico and various countries from Latin America and Asia. In the 1990s, the foreign-born population nearly doubled to 31 million, or 11% of the 281 million that constitute the U.S. population (Morse, 2002). Of the total foreign-born population, 51% were born in Latin America and 25.5% were born in Asia. When both citizens and noncitizens are combined, it is estimated that nearly 25 million adults experience language barriers when they receive health care.

Within the broad Hispanic or Asian categories, the ethnic minority groups in the United States are quite diverse. Within the 35 million counted as Hispanic or Latino, more than half are Mexican; the remainder are Puerto Rican, Cuban, Dominican, Costa Rican, Guatemalan, Honduran, Nicaraguan, Panamanian, Salvadoran, Argentinean, Bolivian, Chilean, Colombian, Ecuadorian, Paraguayan, Peruvian, and Venezuelan. Though they share a common language, Spanish, they differ vastly in their health beliefs, behaviors, and lifestyles. Asian and Pacific Islander Americans (APIAs) are estimated at 11 million (or 4% of the U.S. population), with almost 60 different national and ethnic origins, including such groups as Chinese, Japanese, Korean, Mon-Khmer/Cambodian, Mian/Hmong, Thai, Laotian, Vietnamese, and Tagalog. Each APIA possesses at least one unique language and usually multiple distinctively different cultures. Hispanics or Asians who perceive language barriers when they access health care tend to be new to the United States (D’Avanzo, 1992) and often do not have commercial health insurance (Hampers, Cha, Gutglass, Binns, & Krug, 1999; Schur & Albers, 1996).

Differences in language between health care providers and patients increasingly impose barriers to health care. The purpose of this critical research review is to describe the relation of language barriers among racial and ethnic minorities and to examine how language barriers may contribute to health disparities among these populations. The Health Resources and Service Administration (HRSA) defines health disparity as a population-specific difference in the presence of disease, health outcomes, or access to care (Eliminating Health Disparities in the United States,
Language barriers between patients and health care providers may affect all three outcomes (i.e., disease incidence, health outcomes, or access to care). This review focuses specifically on published studies that address language barriers and access to care in an effort to address health disparities in racial and ethnic minorities.

METHODS

A literature search was systematically conducted using selected computer databases (MEDLINE and CINAHL). The databases were searched using the following keywords with various logical connections: language, communication barrier, access to care, health service accessibility, health disparity, and health outcome. Searches were limited to English-language published research from 1985 to 2003.

RESULTS

A total of 47 articles were included in this review. Research studies accounted for 28 of the articles (16 quantitative and 12 qualitative studies); 8 were review articles, and the others consisted of reports, consensus statements, or position papers. Data-based articles conducted in the United States form the basis for this review. Of these 16 quantitative studies, 11 studies were conducted in the United States, 3 were in Australia, 1 in England, and 1 in Canada. Twelve articles report the results of qualitative studies. Four of these studies were conducted in the United States, four in Australia, three in England, and one in Canada.

Only one study used a randomized trial method (Hornberger et al., 1996). The other 10 quantitative studies included 4 cross-sectional studies (Derose & Baker, 2000; David & Rhee, 1998; Feinberg, Swartz, Zaslavsky, Gardner, & Walker, 2002; Meredith, Stewart, & Brown, 2001); 3 cohort studies—one retrospective (Jacobs et al., 2001) and 2 prospective (Hampers et al., 1999; Kravitz, Helms, Azari, Antonius, & Melnikow, 2000); and 1 chart review (Heilemann, Lee, Stinson, Koshar, & Goss, 2000).

Overall, these studies indicate that language barriers are associated with lack of awareness about health care benefits (such as Medicaid eligibility) (Feinberg et al., 2002), less insured status (Hampers et al., 1999), longer visit time per clinic visit (Kravitz et al., 2000), less frequent clinic
visits (Derose & Baker, 2000), less understanding of the physician’s explanations (David & Rhee, 1998; Gerrish, 2001), more lab tests (Hampers et al., 1999), more emergency room visits (Hampers et al., 1999), less follow-up (Kravitz et al., 2000), and less satisfaction with health services (Meredith et al., 2001; Morales, Cunningham, Brown, Liu, & Hays, 1999). Because these are observational studies (i.e., descriptive study design), no causal relations can be established between a language barrier and these negative consequences. Furthermore, none of the studies address how these negative experiences are related to actual health outcomes or disease incidences. In the following discussion section, the content of 47 articles is discussed in an attempt to answer the research question: How do language barriers contribute to health disparities among ethnic and racial minorities in the United States?

**DISCUSSION**

A limited number of database studies provide a platform from which to analyze possible relationships between language barrier, access to care, and health outcomes. In order to examine these relationships, the characteristics of people with language barriers in the United States are summarized from other sources so that potential spurious relationships can be identified. Various translation services have been used to facilitate communication in daily clinical settings, and the effectiveness of these translation services is discussed. Lastly, research directions are suggested based on the results of this review.

**Characteristics of People with Language Barriers**

In the reviewed articles, only a few studies conducted in the United States concur that certain demographic factors are associated with the level of English proficiency across races and ethnicities. Jacobs and colleagues (2001) studied a total of 4,380 adults continuously enrolled in a health maintenance organization for two years. Their descriptive data indicate that those who did not speak English well enough were significantly older ($p < .01$) and poorer ($p < .01$). In addition, more women than men tended to have severe language barriers. Derose and Baker's (2000) study of Latinos ($N = 724$) also revealed that Latinos with limited English profi-
ciency (LEP) were older than Latinos with better English proficiency. Further, Latinos with LEP were more likely to be female and to be less literate than English speakers of all ethnicities.

Some groups of Asians, such as Japanese, are an exception to the characteristics of persons with LEP previously described. Japanese are often excluded from underserved populations because of their greater similarity to non-Hispanic Whites in socioeconomic status. Yet Japanese clients also identify language as the most difficult and obvious obstacle to access to health care in the United States (Yeo, Fetters, & Maeda, 2000). Many Asians share similar disadvantages as Latinos when it comes to language barriers (Carey Jackson et al., 2000; D’Avanzo, 1992; Gerrish, 2001; Meredith et al., 2001). Thus a language barrier, regardless of socioeconomic status, may be an independent factor that negatively affects access to care.

Language Barriers and Access to Care

The consequences of language barriers range from miscommunication (David & Rhee, 1998) to inefficient use of health care services (Hampers et al., 1999; Kravitz et al., 2000). Some studies describe behavior due to cultural beliefs without clearly differentiating it from behavior due to language barriers (Carey Jackson et al., 2000; Derose & Baker, 2000; Feinberg et al., 2002; Meredith et al., 2001). Culturally specific health beliefs and behaviors must be considered separately from barriers related to language. In other words, the use of translators does not in itself decrease barriers to care.

As an example, one study (David & Rhee, 1998) compared the understanding of side effects of two groups (those who had good English skills and those who either had poor English skills or brought translators) using a written survey of yes/no questions. In this study, Spanish-speaking people who had poor English skills regardless of having a translator had significantly less understanding of the side effects explained to them than those with good English skills (41% vs. 16%). Researchers did not examine whether language barriers or culturally specific health beliefs were the reason for the lack of understanding. Both groups showed similar responses regarding (1) how the understanding of side effects corresponded to compliance with medication; (2) the feeling that they had enough time to communicate with doctors; and (3) whether they received enough explanation
about preventive tests. Both groups also demonstrated a similar proportion of people who took preventive tests in last 2 years.

Differences exist in the proportions of people who say (1) that they understand the side effects of medication; (2) that they are satisfied with medical care; and (3) that they feel that their doctor understands how they feel. If the language was the only barrier, why did the translator fail to explain the side effects of medication? Why are they less satisfied with medical care? And why do they feel the doctor does not understand how they feel? It is possible, though caution must be applied because of overinterpretation, that side effects of medication, medical care, and doctor’s responses are difficult to comprehend because of the differences in the health beliefs of patients and the health care system.

Language barriers have been linked to limited access to health services. For example, several studies have reported negative associations between the presence of language barriers and the number of health care visits (Derose & Baker, 2000; Feinberg et al., 2002; Jacobs et al., 2001). Feinberg and others examined Medicaid enrollment of children in non-English-speaking families. They report that those who did not speak English at home were less likely to be aware of Medicaid eligibility for their children. The study did not indicate the effect on health outcomes; further studies are necessary to determine this effect.

In contrast, some studies do not present a clear relationship between the patient’s perception of health services (e.g., satisfaction with or acceptance of health service) and a language barrier (Carey Jackson et al., 2000; Meredith et al., 2001; Morales et al., 1999). For example, the association between adherence to various regimens and language barriers is not well delineated. Brach and Fraser (2000), in their review article, attribute the literature’s failure to find a clear relationship between general clinician-patient communication and adherence. Regardless of language barrier, communications between health care providers and patients often involve misunderstanding, and thus poor compliance. Morales and colleagues (1999) studied English- and Spanish-speaking Latinos in a cross-sectional study (N = 7,093). They report that Latinos who responded in Spanish were significantly more dissatisfied than Latinos who spoke in English. Dissatisfaction was measured by five observations about medical staff: (1) they listen to what patients say; (2) they give answers to questions; (3) they explain about prescribed medications; (4) they explain about medical procedures and test results; and (5) they give reassurance and support. It is important to note that dissatisfaction indicates the poor
According to a national survey, 33% of Hispanics and 27% of Asians, as compared to 16% of Whites and 23% of African Americans, reported communication problems similar to the study’s results. Similarities included failing to understand their physician, feeling that their physician did not listen to them, or declining to ask the physician questions about their care. These statistics included both English- and non-English-speaking people. The study further reported that, among Hispanics, 43% of non-English speakers had communication problems compared to 26% of English-speaking Hispanics. Among Asians, these percentages were 39 and 25, respectively (Anonymous, 2002). It should be pointed out that one in four minority patients who speak English have communication problems with their doctors, compared to 16% of Whites. In sum, both language barrier and minority status are associated with poor communication with care providers. The causal relationships among minority status, language barriers, and perceived barriers to care are not well examined.

A few more insights into this relationship are provided by small-scale ethnographic studies. Focus group studies with content and semantic analyses were conducted by Cave, Maharaj, Gibson, and Jackson (1995) to improve cross-cultural communication in Edmonton, Canada. The results of this study provide rich qualitative information applicable to the United States. The study involved recent immigrants from various countries and a group of physicians who treated them. Patients were from Chile, India, East Africa, and Jamaica. They had lived in Canada from 9 months to 7 years. Both physicians and patients raised the problem of compliance; however, the physicians questioned the patients’ compliance with prescribed medications, while the patients insisted they complied until the point where they thought the treatment failed. The doctors felt that understanding the patients’ culture better would help achieve better diagnosis and more effective management. The patients did not understand the intent of the physicians’ questions about their culture and habits and sometimes found such inquiries intrusive or irrelevant. Thus they did not disclose personal information about themselves. At the same time, patients sometimes expected physicians to inherently know their perspective with little or no explanation. These cultural differences can be viewed as barriers to care, but they are not necessarily language barriers.

In efforts to understand the relation between language and health outcomes, Heilemann and colleagues (2000) conducted a chart review in
rural northern California hospitals. The investigators compared perinatal outcomes of 773 women of Mexican descent. They measured acculturation in three different ways: by place of birth, by language spoken, and by the two factors combined as on the acculturation index. The results indicated that language spoken was a less useful indicator of perinatal outcome complications than place of birth or the acculturation index. This study intended to demonstrate that negative health outcomes are the result of culturally determined health behaviors, not a language barrier. In this study, language was not correlated with the degree of acculturation among Latinos. A study by Meredith and colleagues (2001) comparing health perspectives among different ethnic groups may give further insight into the issue of language, culture, and health behaviors. In this study, Asian and Pacific Islanders had better self-reported health, but they were less satisfied and perceived less sharing in physician-patient relationships as compared to Whites. A limitation of this study is that findings were not analyzed by language proficiency, but only by ethnicity and race. Although there is a significant percentage of Asians and Hispanics with LEP, it is unclear how language barriers contributed to negative perceptions of health encounters.

Thompson and others (2002) reported that Hispanics were much less likely than non-Hispanic Whites to ever have had cancer screening. Socioeconomic status was explored as a predictor of differences between Hispanics and non-Hispanic Whites in cancer prevention behavior. In a cross-sectional study, in-person interviews (N = 1,795) were conducted in a population-based random sample of adults in 20 communities with a high proportion of Hispanics. Hispanics were significantly less likely than non-Hispanic Whites to ever have had cervical (p < 0.001), breast (p = 0.007) or colorectal cancer screening (FOBT p = 0.008; sigmoidoscopy/colonoscopy p < 0.002). After adjusting for socioeconomic status (education and having health insurance), only differences in cervical cancer remained significant (p = 0.024). After adjusting for socioeconomic status, Hispanics had a significantly higher intake of fruits and vegetables per day (4.84 servings) than non-Hispanic Whites (3.84 servings) (p < 0.001); and the fat behavior score was marginally significant after adjustment for socioeconomic status (p = 0.053). Significantly fewer Hispanics were current smokers than non-Hispanic Whites (p < 0.001). The researchers concluded that there is only limited support for the hypothesis that socioeconomic status is a major determinant of some cancer-related behaviors. Specifically, in this study, socioeconomic status was related to mammography and colo-
rectal screening, but not to cervical cancer, dietary behavior, or smoking. Cancer screenings were lower in Hispanics regardless of the existence of language barriers. The study did not assess health beliefs related to screening. This may have been a factor in the low rates of screening.

In addition, several studies demonstrate that language barriers result in both inefficiency and potential increases in costs (Hampers et al., 1999; Kravitz et al., 2000). For instance, Hampers indicates that patients with language barriers have significantly higher test costs ($145 vs. $105) and longer emergency department stays (165 minutes vs. 137 minutes) than their English-speaking counterparts. Kravitz also demonstrated that Spanish- and Russian-speaking patients averaged 9.1 and 5.6 minutes longer for visits, respectively, than English-speaking patients. Clearly, health services must be made more effective and efficient for non-English-speaking patients.

Translation Services as a Solution

When a language barrier is identified between patient and care provider, provision of various interpreter services is an obvious and frequently proposed solution (Baker, Hayes, & Fortier, 1998; Poss & Beeman, 1999; Tang, 1999; Woloshin, Bickell, Schwartz, Gany, & Welch, 1995; Zimmermann, 1997). Various approaches to interpretation exist, including on-site professional interpreters, ad hoc interpreters (e.g., staff pulled away from other duties to interpret, friends and family members, strangers from the waiting room), and simultaneous remote interpretations using earphones and microphones with off-site professional interpreters (Brach & Fraser, 2000).

The quality of interpretation depends on the adequacy of interpretation, the bilingual ability of staff, and the accuracy and content of a competent medical interpretation (Woloshin et al., 1995). For example, when patients have to rely on family members for interpretation, the content of medical advice is often not fully understood (Gerrish, 2001) and patients are less satisfied with the health service (Lee, Batal, Maselli, & Kutner, 2002). Lee surveyed the satisfaction of English- and Spanish-speaking patients receiving acute care. Spanish speakers who had to rely on family members or ad hoc interpreters were 54% and 49% less satisfied than those who were provided AT&T telephone interpreters. Only a few studies have examined the effect of translation service and access to health
care (Baker et al., 1998; Derose & Baker, 2000; Feinberg et al., 2002; Jacobs et al., 2001; Lee et al., 2002). But no study in this review examined the relationship between quality of interpretation service and disease incidence or improvement in compliance and health outcomes. Rather, the studies assessed satisfaction and perception of care. These studies reasonably demonstrated, however, that translation services may improve access to care, satisfaction with health care, and possibly adherence (Brach & Fraser, 2000).

The current evidence indicates that simultaneous translation service is an effective and satisfactory mode of translation (Hornberger et al., 1996; Lee et al., 2002). According to Lee et al., patients who were provided access to AT&T telephone interpretation services reported identical satisfaction to English-speaking patients. As a result, both patient and care provider maintained higher-quality communication and perceived less disruption and more privacy. For example, Hornberger and others examined the effectiveness of a remote-simultaneous interpretation system on the communication between patients and physicians during routine postpartum checkups on women who spoke only Spanish. They measured the quality of communications by the outcome variables (i.e., satisfaction, number of physician-mother utterances, and accuracy of translation) using tape-recorded visits coded by trained native Spanish speakers who were fluent in English. The results indicated that, compared to traditional translators (control group), the number of utterances increased significantly among patients and physicians (23% and 10%, respectively). In terms of accuracy of translation, there were 12% fewer inaccuracies with the remote system than with on-site translation with a translator. Both physicians and patients preferred remote systems, giving reasons such as “feels more private” or “less disruption by a third party.”

One study also evaluated the effectiveness of professionally trained translators. Jacobs et al. (2001) studied the effects of a systematic professional interpretation service on access to health care. The study revealed a significant increase in the number of office visits as well as the number of prescriptions written and filled among patients who received a systematic professional interpreter service on all occasions, including appointment desk and lab visits. On-site provision of a comprehensive interpretation service may be available at large facilities, but remote systems may be more a realistic solution for many community-based clinics. A few available studies examined different types of translation services (Hornberger et al., 1996; Lee et al., 2002). However, these studies were interested in
patient satisfaction. Further research is needed to examine the effect of translation services on different health outcomes.

In summary, this critical research review found that language barriers are more pronounced among older, poorer, less educated, and newer immigrants. Addressing language barriers is an obvious means to improve access to health care among LEP persons. However, as these studies indicated, this will not be sufficient. Research is needed to further determine the effect of language on access to care, adherence to the regimens, quality of health care, satisfaction, disease incidences, and health outcomes.

Future Research Directions

Based on this review, the following areas are identified as future research needs. Among the three components that constitute a health disparity, access to care has been most studied and thus is the focus of this review. Access to care is analyzed from two aspects: exploration of interpretation services and improvement of communication between patients and providers. The former may require relatively straightforward research methodologies when the outcomes are patient satisfaction. Currently only one randomized control trial has been identified for this review. Similar studies are needed to evaluate and support policy changes.

For example, national standards for culturally and linguistically appropriate services in health care (CLAS, 2001) are a means to correct the inequities that currently exist in the provision of health services and to make these services more responsive to the individual needs of all patients. Further elaboration in designs and methodologies are required to determine the causal relationship between choice of interpretation service and health outcomes. Clinical trials need to be conducted to determine which interpretation services lead to better communication (i.e., access to care), change behaviors (i.e., health outcomes), and ultimately reduce diseases. With these reports, state and national health service policies must incorporate the optimal interpretation services. When systems such as a telephone translation service become widely available subsequent to policy changes, large-scale epidemiological studies may address these relationships.

Improvement of communication between patients and providers involves more complex and daunting tasks, since this is a more pervasive medical problem than language barriers alone. This issue involves cultural competency and communication skills. We need qualitative studies in
cultural competency to develop more efficient models. Existing health belief and behavior models in the United States must be scrutinized for their cultural appropriateness before they are applied. A language barrier, a component of cultural appropriateness, then is clearly identified and analyzed in relation to other factors, which are closely related to it (Brach & Fraser, 2000). These factors include the role of bilingual care providers and an understanding of other health belief models.

Culture, defined as an “integrated pattern of human behavior that includes thoughts, communications, actions, religious or social group” (Cross et al., 1989), and language go hand-in-hand. Therefore, it is probably necessary to view the language barrier through a cultural competency model such as that of Brach and Fraser (2000). They propose a conceptual model of how interpreter services could reduce health disparities, based on their understanding of cultural competency. This model is by far the most developed and detailed. There is a merit to examining the direct link between language barriers and racial and ethnic health disparities because provision of interpretation is a tangible yet costly hypothesized solution. Other conceptual models, such as Anderson’s access-to-care model, can be also used (Andersen, 1995; Andersen, Rice, & Kominski, 2001).

Historically, a language barrier was considered a disability, according to the expansion of the Civil Rights Act of 1964 (Woloshin et al., 1995). A language that has unique and fundamental characteristics of national origin should thus be protected rather than punished. This view was upheld by the Supreme Court in 1974; it thus enforced health programs funded by the Department of Health and Human Services (DHHS) to provide translation services to people with LEP. According to Woloshin, however, this law had three problems: (1) the regulation was vague; (2) funds were inadequate; and (3) enforcement was complaint-driven and ad hoc.

In 1997, the Office of Minority Health (OMH) undertook the development of more comprehensive national standards to provide culturally and linguistically appropriate services (CLAS, 2001). The CLAS standards were published in final form in the Federal Register on December 22, 2000, as recommended national standards for adoption or adaptation by various organizations and agencies.

Although it is clear that adequate funding is needed to provide high-quality translation services, currently only a handful of states reimburse for outpatient use of interpreters via a Medicaid mechanism. Health care providers in other states still put themselves at risk because they are obligated to perform a proper health assessment without adequate re-
sources. The failure to do so can constitute negligence for which nurses and other health care providers may be held liable if the patient suffers some subsequent injury attributable to this failure (CLAS, 2001). In order to implement and evaluate the latest national standards (i.e., CLAS), evidence should be generated by studies with sound research designs and methodologies.

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REFERENCES


