

# Overcoming Barriers to Improving the Health of Immigrant Women

**FRANCESCA GANY, MD, MS**  
**HEIKE THIEL DE BOCANEGRA,**  
**MA, MPH**

Approximately half a million women migrate to the United States annually; more than two-thirds of them of childbearing age. Early entry into the health care system may be the most effective way to ensure positive health at lower costs and to enable ever-shrinking health care resources to be used most effectively. Immigrant women, however, face economic, legal, linguistic, and cultural barriers to health care. Successful programs have been developed to systematically address immigrant women's health care issues, targeting preventive health services and education to diverse communities.

*Marta A. is an 18-year-old, undocumented Mexican immigrant woman, who speaks Huatacal as her first language and Spanish as her second. She has one child at home in Mexico, born after an uncomplicated pregnancy. She comes to your clinic, at the beginning of her fifth month of pregnancy, for her first prenatal visit. Her aunt thought she was getting too big so she gave her some herbs. After taking them, she noticed some bleeding. She is embarrassed to tell you, and she is very frightened.*

*Ada N. is a 13-year-old Senegalese immigrant. She was brought over by her father and stepmother to help care for their newborn child. After being here six months, Ada developed a cough and is brought to you. Upon questioning, you learn that Ada has not been enrolled in school, nor has she received her immunizations.*

*Alexa V., a recent Russian immigrant, has just been assigned to your managed care panel. At her intake visit, you ask her via*

*an interpreter about family planning. She informs you that she uses abortion. When you offer her the pill or condoms, she refuses. In the former Soviet Union, with its centralized economy, the word "planning" meant to the patient that it cannot be effective. Mrs. V. also remembers that oral contraceptives in the former Soviet Union had high levels of hormones and many side effects; condoms were thick and broke easily; and IUDs, pills, and condoms were not always available at health care facilities or stores. Mrs. V. is also irritated that she would have to decide for herself on a contraceptive method. She would prefer that the provider tell her what is best.*

Health care facilities are increasingly caring for immigrants like those described above.<sup>1</sup> Approximately half a million women immigrate to the United States each year. While the ratio of immigrant women to men has changed with the changes in immigration legislation and in world conditions, it is now 1.03:1.<sup>2</sup> However, immigrants from selected countries tend to be predominantly female. From 1982 to 1987, for example, the large majority of legal immigrants to New York City from some countries, such as the former Soviet Union, Colombia, the Philippines, and Korea, were women. Colombia sent fewer than 90 males for every 100 females, the Philippines, 67.<sup>3</sup> More than two-thirds of these women were of childbearing age<sup>4</sup> and they tended to be younger than the US population. The median age of recent immigrants to New York City was 26 years, compared to a median age of 33 for the total New York City population.<sup>3</sup> Immigrant women are significantly more likely to be married than the general population, partly because of the immigration laws' family reunification clauses.<sup>3</sup>

Each immigrant group possesses a unique set of health beliefs and practices and has a unique epidemiologic profile. Many female voluntary immigrants arrive with good health, but their health status and healthy lifestyles deteriorate after arrival.<sup>5-10</sup> Refugee women have

often undergone traumatic experiences, including prolonged family separation, torture, rape, or life in refugee camps under precarious hygienic conditions.<sup>11</sup> Early entry into primary health care is one of the most effective ways to ensure positive health practices and early diagnosis of diseases, when they can be treated and cured more effectively and inexpensively. However, immigrant women face considerable economic, legal, language, and cultural barriers to health care services. Understanding these barriers will help in planning interventions that will address immigrants' special needs and build on their strengths.

This paper will discuss the barriers faced by immigrant women and factors to be considered in establishing immigrant women's health care programs.

## **Economic Barriers**

Many economic barriers limit the receipt of health care services. Recent arrivals tend to work in low-paying jobs, which often do not include health insurance benefits and may not pay for time lost due to medical appointments. Immigrants may not be eligible for entitlement programs such as Medicaid in the first years after arrival, or at all if they are undocumented.<sup>12</sup> Some states do provide free prenatal services for low-income women independent of immigration status, but immigrants are often not aware of these services.

Economic barriers are likely to increase with the proposed federalization of Proposition 187, which restricted access to health care for undocumented immigrants in California. In a study of 58 health departments after passage of Proposition 187, 37% of respondents reported a drop in patient visits, mostly in programs for preventive care of children and women.<sup>13</sup> The proposed House Welfare Reform Bill (HR 4), which was vetoed by President Clinton in January 1996, would restrict documented immigrants' access to nonemergency Medicaid, pushing more immigrant women to use emergency services instead of more cost-

Dr. Gany is director and Ms. Thiel de Bocanegra is project director, both with the New York Task Force on Immigrant Health in New York City.

effective outpatient care. New legislation is likely to add to immigrants' fears and confusion about using the health care system.

Financial concerns can pose a problem even when the health care itself is provided free or at low cost. Many women work in jobs that do not provide time off for repeated prenatal visits, for example, which could cause the loss of a day's wage and, in some cases, even the loss of employment itself. While this is a problem for low-income women in general, foreign-born women may be less assertive in negotiating benefits and demanding their rights. Immigrant women have difficulties in understanding how to negotiate the fragmented US health care system. The system of co-payments and "sliding fee scale" may be new to them. In many Latin American countries, for example, public health services are provided free without income verification. Women may be surprised and fearful about having to demonstrate their income.

### Legal Barriers

Legal barriers to health care are both perceived and real; they relate to immigration status, which helps determine eligibility for social services such as Medicaid; to fears of deportation; and to immigrants' desires to sponsor relatives for future immigration.

The perceived legal barriers and the immigrant's fear of the Immigration and Naturalization Service (INS) are equally as important as the real barriers. In New York City, for example, a mandate prohibits city employees from reporting any information on legal status to INS (Executive Order no. 124, August 7, 1989). Often, immigrants are unaware of this. For some Medicaid services, such as emergency care, and most hospital and public health programs, immigration status need not be reported.<sup>14</sup> Because of prior experiences with autocratic regimes, many immigrants do not trust "the system" and fear their names will be turned over to the INS if they use health services.<sup>15</sup> Although they do not face deportation for using free medical services or Medicaid, some documented immigrants believe that doing so might eliminate their invisibility and render them "public charges," thereby jeopardizing their chances of becoming citizens and/or of

sponsoring relatives for future immigration. Although these outcomes are unlikely, they are legally possible.<sup>14</sup>

Patients at municipal health care facilities are often asked questions about their income and employment status, as well as about other personal aspects of their lives. For those who are undocumented, such questions strongly deter seeking even this free care. Hogeland and Rosen reported that fear of deportation was the primary barrier to seeking services for 75% of Salvadoran and 54% of Mexican undocumented women in a San Francisco study. Undocumented mothers are sometimes reluctant to apply for Medicaid on behalf of their American citizen children.<sup>16</sup> They are also less likely than legal immigrants to have had prenatal care or care before the third trimester, to return for postpartum examinations for themselves, to seek neonatal care for their infants, or to have had Pap smears.<sup>17</sup> Some current inclusions of the Immigration Reform Act (HR 2202), such as requiring health care providers to check a patient's legal status and report undocumented patients to the INS, reinforce women's fears about seeking necessary health services. In its current form (March 15, 1996), HR 2202 proposes to withhold federal reimbursements to hospitals that provide emergency services to undocumented immigrants until the hospital reports their names to INS.

There are additional legal barriers to health care for immigrants. Immigrant patients may be surprised by the importance given to consent forms and the possible delay of medical procedures until a legal guardian is found. In some countries, such as Russia, no papers need to be signed, and any family member can accompany a child to the hospital in an emergency. In many Caribbean, Latino, and African countries, young relatives may be adopted unofficially. A young girl may be living in the United States with an aunt or uncle, who may be the only adult family member in the country.<sup>18</sup>

Many battered immigrant women do not seek assistance because they fear that doing so would result in their spouses' deportation, which in turn would draw attention to their own undocumented status.<sup>19</sup> Many women fear that they may not be able to use domestic violence services if services are tied to public assistance, for which they may not be eligible.

Often the batterer uses immigration status as leverage to keep the woman under his thumb. In many cases, the threats do not have legal bases. When women marry legal residents or US citizens, they obtain residency. To prevent the use of marriage merely as a means to obtain legal residency, the Marriage Fraud Act provides for conditional residency for two years and a reassessment at the end of that period to verify that the marriage is real. While sponsorship for permanent residency may depend on a batterer filing the legal papers at the correct time, under the 1995 Violence Against Women Act, battered foreign-born wives of US citizens and legal residents may apply without the husband's sponsorship. Few women are aware of this.<sup>19</sup>

### Language Barriers

In 1980, 23 million US residents did not speak English as their first language. By 1990, the number had increased 38% to 31.8 million. The most common language spoken by non-English speakers is Spanish (17.3 million), with significant numbers speaking Asian, African, and other European languages and dialects.<sup>20</sup> More than 11% of patients in a survey of US public and private teaching hospitals required interpreter services. One-third of the responding institutions reported that, on average, 27% of their patients required interpreters.<sup>21</sup> Adult immigrant women may be less likely than men to learn English. They are less likely to be employed<sup>3</sup> and are therefore more likely to be confined to ethnic neighborhoods than men. Additionally, the responsibility of caring for their families may impede their attending English classes.

The inability of patients and practitioners to communicate seriously compromises effective health care and adds to other access difficulties faced by patients unfamiliar with the US health care system. Language discordance is a major deterrent to use of child and prenatal health services. In a New York study, Spanish-speaking callers were far less likely to obtain prenatal appointments by phone (22%) than were English-speaking callers (46%).<sup>22</sup> In another study, non-English-speaking Chinese parents indicated that they delayed visits to the health care provider until they had someone accompany them to interpret.<sup>23</sup>

Interviews with 59 Chinese parents of children with developmental disabilities living in New York City revealed that language difficulties impeded their understanding of the nature of the handicaps as well as the required interventions.<sup>24</sup>

Language discordance can also hamper clinical assessments and lead to misdiagnosis. Marcos found that clinically relevant interpreter-related distortions can lead to misevaluation of a patient's mental status. Compared to when they were interviewed in Spanish, Latino patients interviewed in English demonstrated more frequent misunderstandings of the interviewer, briefer responses, and a significantly higher frequency of speech disturbances associated with anxiety. Patients tended to speak more slowly and with longer silences, characteristics associated with depression.<sup>25</sup> Unless s/he is aware of this, the clinician may misinterpret these characteristics as reflecting increased psychopathology. Patient/practitioner language differences also lead to noncompliance with treatment recommendations. A chart review of patients with asthma found that monolingual Spanish-speaking patients attended by English-speaking providers were more likely to omit medication, miss office appointments, and use the emergency room than those with Spanish-speaking providers.<sup>26</sup>

Most medical interpretation, when available at all, is provided by untrained volunteers. When there is no one else available, a bilingual bystander from the clinic waiting area may be asked to volunteer or staff members may be pulled away from their usual jobs to interpret. All too often, a family member, who may be a child, is relied on to interpret. S/he may feel that s/he must protect the patient and delete "bad news." Family members may also have their own agendas. For example, husbands who batter their wives may censor any information concerning an abusive situation when interpreting for them. It is critical for the health care provider to interview a woman alone if domestic violence might have occurred. A woman's female companion may not always be a supporter, for example, if she belongs to the husband's family.<sup>19</sup> When children are used as interpreters, additional issues may arise; children are kept home from school in order to provide interpretation,

and the parent-child relationship can reverse as the child becomes the mediator between the family and the outside world. In addition, developmental concerns may be present, such as a child's cognitive readiness for comprehension, sufficient vocabulary for accurate interpretation, and social and emotional maturity in handling medical information. Haffner reported a 50-year-old Mexican patient with a rectal fistula who was too embarrassed to talk about her condition in front of her son. As a result, she hid the symptoms, thus delaying an appropriate diagnosis and treatment.<sup>27</sup> In another instance, a minor was used as an interpreter to tell her mother that she had been diagnosed with breast cancer (New York Task Force on Immigrant Health, unpublished data, 1996).

The use of untrained interpreters can result in miscommunication between the provider and patient, violate confidentiality, disempower non-English speaking patients, and raise serious ethical and legal questions. In addition, such consequences of miscommunication as treatment of patients prior to receiving informed consent to do so, diagnostic errors, patients' failure to adhere to medication and other instructions, missed appointments, and, ultimately, negative health outcomes, can be costly and severe.

### **Cultural Barriers**

Concepts of health and illness and health care seeking behaviors are rooted in cultural systems. The US health care system is itself a cultural artifact with an explicit structural organization that separates mind and body and with implicit expectations about roles for the clinician and patient.<sup>21-30</sup> The patient's and the provider's health belief or explanatory systems are the basis for expectation and behavior within the health care encounter.<sup>29-39</sup> Immigrants often come from very different health care systems with different expectations of medical care. Previous experience with the health care system in the home country affects the way immigrants seek and experience care in the United States. Immigrant women who have lived for a longer time in the United States are more familiar with the health care system and more likely to seek prenatal care, for example, than recent arrivals.<sup>40</sup> Women may be unfamiliar with medical procedures such

as gynecological exams and may be embarrassed if they are asked to remove their clothing. Any hesitancy exhibited by a patient about a treatment or recommendation may be an indication that one needs to explore a cultural practice or belief and work together with the patient to effect a mutually satisfactory compromise.<sup>18</sup>

Many immigrants and refugees are likely to choose non-Western medicine before or concurrently with seeking Western medical care.<sup>29</sup> In some areas of the Caribbean, for example, one seeks organized health care only when one is very ill and self-treatment has failed.<sup>41</sup> A study in Brooklyn, New York, found that Haitian and English-speaking Caribbean immigrant women have average to high rates of invasive cervical cancer when compared to African-American women. This difference suggests barriers to Pap smears, which would detect cervical cancer at an early stage. Some Mexican Americans determine the severity of illness by the occurrence of blood and pain;<sup>42</sup> thus illnesses that are not accompanied by these symptoms may not be perceived as serious. Some Asian immigrants may delay seeking medical care because their cultures value stoicism and endurance<sup>38,43</sup> or because they fear that Western practitioners will draw a lot of blood, which the Chinese believe is irreplaceable.

Awareness of cultural issues in the clinical encounter can greatly facilitate adherence. Many cultures, for example, have a hot and cold classification system of diseases, food, and medication. It may proscribe the taking of hot medications for hot conditions, for example, unless they are ingested with cold substances,<sup>44</sup> a suggestion that can facilitate compliance.<sup>34</sup> Becerra found that Chinese-American parents knew where to obtain medical care, but delayed seeking it because they perceived the health care providers as insensitive and unresponsive to them and their cultural ways.<sup>23</sup> The provider does not have to agree with the patient's health beliefs to provide effective health care, but understanding them will enable better communication<sup>46</sup> and the possibility of integrating Western with other treatment plans. For example, if blood drawing is kept to a minimum, the need for it explained to the Chinese patient, and herbal remedies or teas

believed to enhance blood production are prescribed, there is a greater chance the patient will comply.

In some cases, the woman may not be the sole decision maker for her care. Treatment options may be discussed and decided on after conferring with influential members of the extended family or community. In these instances it can be helpful to involve these people to help modify and/or endorse medical procedures. Latino husbands, for example, may ultimately decide whether or not condoms are used. Increasingly, human immunodeficiency virus (HIV) education takes this situation into account and targets Latino men.<sup>47</sup> For some immigrant groups, the interests of the family as a whole may be more important than those of the individual. Stigmatized illnesses such as HIV infection or tuberculosis may not be talked about because they are a source of family shame or for fear that the patients may be rejected by their families.<sup>48</sup> Immigrants may not be ready to discuss acquired immune deficiency syndrome (AIDS) or tuberculosis out of fear that their particular ethnic group is being singled out as causing or disseminating the disease.<sup>49, 50</sup>

### Program Implications

**Data Considerations.** Epidemiologic considerations are important in both treating immigrants and delineating programmatic priorities. Appropriate interventions cannot be planned without knowing a group's specific needs. A severe lack of systematic data about immigrants impedes providers and planners from designing and delivering appropriate care.

Immigrants are, by definition, people who are in or have experienced transition. Evaluating health and disease in immigrants is complex. Most health statistics include immigrants, because 8% of Americans are foreign born,<sup>51</sup> yet too few epidemiologic studies of immigrants have been published. This is due to the lack of an accurate immigrant count, immigrants' fears of participating in studies, the additional resources needed to conduct multilingual studies, and the lack of an accepted classification system for immigrants.

Medical records and national data sets, such as the National Health and Nutrition Examination Survey (NHANES),

classify individuals according to racial/ethnic groups, mainly white, black, Hispanic, and Asian, but not according to country of birth. These traditional divisions are not only subject to miscounting and misclassification,<sup>52,53</sup> they are particularly misleading when dealing with both dark- and light-complexioned people from Asia, Africa, the Americas, and Europe. Fruchter et al found significant differences in breast and cervical cancer incidence rates among US-born, African-American, Haitian, and English-speaking Caribbean women living in New York, that remained undetected when all women were classified as "black."<sup>54</sup> Birth outcomes for foreign-born black low-income women were better than for US-born black women in a Boston hospital.<sup>55</sup>

"Hispanic" is a broad category that may encompass Spanish-speaking people, those born in Spanish-speaking countries and their children, and indigenous Americans from Mexico, Central America, or South America who do not speak Spanish.<sup>56</sup> The imprecise definition of "Hispanic/Latino" often confuses and may render useless reports on health and disease patterns and health behaviors. A review of available epidemiologic literature on Latinos living in New York found significant differences between first- and second-generation Latinos, with US mainland-born Latinos having, on average, worse maternal risk profiles, worse birth outcomes, and higher infant mortality rates than Puerto Rican-born or foreign-born Latinos.<sup>57</sup>

"Asian" is another large category that similarly lumps people from widely varied regions, cultures, and languages. Aggregating Asian Pacific Americans may also lead to erroneous conclusions, such as assumptions about their good health status when, in fact, there are large fluctuations within the aggregate group.<sup>58</sup> Data would be more meaningful if they were collected by country of origin, length of stay, or generation of residence in the United States; language; self-defined ethnicity; and/or parents' country of origin.

Many people were not counted in the 1990 US Census. In New York City, for example, Robinson et al estimated the undercount at 12%.<sup>59,60</sup> The areas with the largest undercount were those with low-income, black or Hispanic populations and many immigrants, leaving

many New York communities at triple risk of being undercounted. It is difficult to estimate the exact magnitude of the undercount for particular neighborhoods or ethnic/immigrant groups, because, in 1990, the Census Bureau was not funded to conduct the necessary postenumeration surveys. Any immigrant health statistic that has census data in the denominator, such as incidence or prevalence, is thus likely to be too high, because the denominator is too small.

**Overcoming the Barriers.** This paper covered four classes of barriers that immigrants face in getting adequate health services: legal, economic, linguistic, and cultural. Multi-disciplinary interventions implemented at different levels will be necessary to remove these barriers.<sup>61</sup> While some barriers require policy changes in city, state, and federal agencies, many may be dealt with at the institutional and practitioner levels. Health care providers and administrators who address these diverse barriers will ensure more effective immigrant health care.

Ensuring immigrant women access to health care will benefit the entire immigrant and US-born communities. Often, adult immigrant women are the primary health decision makers; gaining their trust would also facilitate the entry of children and adult men into health care. The prenatal visit provides a window of opportunity for providing health care screening and education and for gaining trust.

Successful models that systematically address all four barriers to immigrant women's health care have been developed. The New York Task Force on Immigrant Health, for example, has created a network of policy makers, health care providers and administrators, community advocates, and social scientists whose mission is to facilitate the delivery of culturally and linguistically sensitive health care services based on sound epidemiology. This is accomplished through outreach, information dissemination, training, and advocacy at city, state, and federal levels. Model service programs integrate immigrants' and practitioners' perspectives and employ bilingual, bicultural outreach workers housed at immigrant community-based organizations. They support and use the strengths of immigrant communities, such as healthy behaviors and lifestyles brought from the

home country, a strong sense of community and mutual support, community information dissemination systems, and vitality and enthusiasm. The Task Force's Maternal Child Immigrant Health Training provides cross-cultural training to health care providers and clerical staff at maternal child health facilities.<sup>62</sup> Cultural sensitivity is presented as part of a general understanding of immigrants' sociocultural context and its impact on access to health care health care behaviors. The training programs include information and skills building on overcoming immigrants' health care barriers. The modules address language barriers and how to work with interpreters, entitlements and legal issues, interpretability of racial/ethnic classifications, and the influences of culture on health care practices and the provider-patient interaction.<sup>63</sup> Participants are encouraged to identify immigrants' resources and ways to enable immigrants to remain healthy.

A number of health care facilities have developed successful partnerships with immigrant communities to improve access. The US Civil Rights Act, and the Office of Civil Rights's interpretation of it, mandates that patients with limited English skills have the same access to health care as English speakers. Interpreter services are keys to the realization of this mandate. Asian Health Services in Oakland, California has a three-pronged interpreter approach that includes: the Language Cooperative health care interpreter service, medical interpreter training, and health care provider training in cross-linguistic/cross-cultural communication. As well, their community health center has a number of targeted community outreach programs.<sup>3,64</sup>

To be successful, programs target all women in the community, independent of their legal status. The New York Task Force on Immigrant Health, for example, also works closely with policy makers to influence the development of health care programs and legislation that will respond to the unique considerations of immigrants. Myths and arguments based merely on anti-immigrant sentiments need to be dispelled. For example, welfare or health benefits are not a magnet attracting immigrants to the United States. Restricting access to primary health care and such programs as prena-

tal care or domestic violence services threatens the health of all US residents.

Immigration verification requirements, as they are proposed in HR 2202, would deter not only undocumented women from seeking necessary health services. Women who look or sound "foreign" and are routinely asked for their residency papers might be discouraged from using preventive and routine health care services for themselves and their children. It is insufficient to exempt only some programs, such as immunization or infectious disease programs, from the reporting requirements, as is suggested in some of the amendments to HR 2202. Childhood immunization is part of comprehensive pediatric care and should not be considered as a single event. Additionally, women may not know whether they have a communicable disease without going to the provider.

In light of the discussed barriers, health care providers should institute targeted outreach programs to provide preventive health services and education to diverse immigrant communities. To achieve this, the providers should develop strong linkages with immigrant community-based organizations to inform each other's work. These social, cultural, and religious organizations often have the trust of immigrant communities, which enables them to act as vital bridges to the health care system. When they reach the health care system, immigrants should find bilingual, culturally sensitive services at accessible times and with affordable fees. Documentation status should not be an issue. Joining forces to deliver culturally and linguistically sensitive health care services will enable the health care system's resources, ever shrinking, to be used with greater effectiveness. ■

#### References

1. Hagland M, Sabatino F, Sherer J. New waves. *Hospitals*. 1993;67:22-31.
2. Hansen K, Bachu A. The foreign-born population: 1994. *Curr Popul Rep*. 1995. Series P20-486.
3. *The Newest New Yorkers: An Analysis of Immigration into New York City During the 1980s*. New York, NY: New York City Department of City Planning; June 1992. DCP #92-16.
4. US Immigration and Naturalization Service. *1990 Statistical Yearbook of the Immigration and Naturalization Service*. Washington, DC: US Government Printing Office; 1991.
5. *Demographic Profiles: A Portrait of New York City's Community Districts*. New York, NY: New York City Department of City Planning;

- August 1992. DCP #92-32.
6. Guendelma S, Gould J, Hudes M, Eskenazi B. Generational differences in perinatal health among the Mexican-American population: Findings from HHANES 1982-84. *Am J Public Health*. 1990;79:1263-1267.
7. Scribner R, Dwyer J. Acculturation and low birthweight among Latinos in the Hispanic HHANES. *Am J Public Health*. 1989;79:1263-1267.
8. Marin G, Perez-Stable E, Marin B. Cigarette smoking among San Francisco Hispanics: The role of acculturation and gender. *Am J Public Health*. 1989;79:196-198.
9. Wolfgang P, Semeiks P, Burnatt W. Cancer incidence in New York City Hispanics, 1982 to 1985. *Ethnicity and Disease*. 1991;1:263-273.
10. Rosenwaik I, Hempstead K. Differential mortality by ethnicity: Foreign-born Irish, Italians and Jews in New York City, 1979-1981. *Soc Sci Med*. 1989;29:885-889.
11. Edwards LE, Rautio CJ, Hakanson EY. Pregnancy among refugee women. *Minn Med*. 1987;70:633-637.
12. Calvo J. Alien status restrictions on eligibility for federally funded assistance programs. *New York University Review of Law and Social Change*. 1987;16:395-432.
13. Flores. LLLHO Proposition 187. Paper presented at American Public Health Association Annual Meeting, San Diego, California, 1995.
14. Calvo J. *Immigration Status and Legal Access to Health Care*. New York, NY: Center for Immigrants' Rights; 1993.
15. Graham Y. Identifying and addressing obstacles to health care for New York State immigrants. Paper presented at New York State Department of Health, September 24, 1992.
16. Hogeland C, Rosen K. *Dreams Lost, Dreams Found: Undocumented Women in the Land of Opportunity*. San Francisco, Calif: Coalition for Immigrants and Refugee Rights and Services; 1990.
17. Chavez LR, Cornelius WA, Jones OW. Utilization of health services by Mexican immigrant women in San Diego. *Women Health*. 1986; 11:3-20.
18. Gropper R, Thiel de Bocanegra H. Health beliefs and practices across cultures. In: Thiel de Bocanegra H, ed: *Integrated Maternal Child Health Care for Immigrant and Refugee Populations*. New York, NY: New York Task Force on Immigrant Health; December 1993.
19. Warrior S. Domestic violence in immigrant women: Special concerns. In: Thiel de Bocanegra H, ed: *Integrated Maternal Child Health Care for Immigrant and Refugee Populations*. New York, NY: New York Task Force on Immigrant Health; December 1993.
20. *Statistical Abstract of the U.S. 1990 Census*. 113th ed. Washington, DC: US Bureau of the Census, 1993.
21. *Interpretation and Translation Services in Health Care: A Survey of U.S. Public and Private Teaching Hospitals*. Washington, DC: National Public Health and Hospital Institute; March 1995.
22. *Prenatal Care Appointment Study: A Survey by the Infant Mortality Work Group of the Mayor's Advisory Council on Child Health*. New York, NY: New York City Department of Health; 1992.
23. Becerra R. Knowledge and use of child health services by Chinese-Americans. *Health Soc Work*. 1991;6:29-38.
24. Smith M, Ryan A. Chinese-American families of children with developmental disabilities: An exploratory study of reactions to service providers. *Ment Retard*. 1987;25:345-350.
25. Marcos L. Effects of interpreters on the evaluation of psychopathology in non-English-speaking patients. *Am J Psychiatry*. 1979;135:171-174.
26. Manson A. Language concordance as a determinant of patient compliance and emergency

- room use in patients with asthma. *Med Care*. 1988;26:1119-1128.
27. Haffner L. Translation is not enough — Interpreting in a medical setting. *West J Med*. 1992;157:255-259.
  28. Friedson E. *Patient's View of Medical Practice*. New York, NY: Russell Sage; 1961.
  29. Szasz T, Hollander M. A contribution to the philosophy of medicine: Basic models of the doctor-patient relationship. *Arch Intern Med*. 1956;24:585-592.
  30. Zola I. Problems of communication, diagnosis and patient care: The interplay of patient, physician, and clinic organization. *J Med Educ*. 1963;38:829-838.
  31. Gil RM. Cultural attitudes toward mental illness among Puerto Rican migrant women. In: Zambrana RE, ed. *Work, Family and Health: Latin Women in Transition*. New York, NY: Fordham University; 1982.
  32. Currier R. The hot-cold syndrome and symbolic balance in Mexican and Spanish-American folk medicine. *Ethnology*. 251-263.
  33. Harwood A. *Ethnicity and Medical Care*. Cambridge, Mass: Harvard University Press; 1981.
  34. Kleinman A, et al. Culture, illness and care: Clinical lessons from anthropologic and cross-cultural research. *Ann Intern Med*. 1978; 88:251-258.
  35. Maduro R. Curanderismo and Latino views on disease and curing. *West J Med*. 1983;139:868-874.
  36. Snow L. Folk medical beliefs and their implications for care of patients. *Ann Intern Med*. 1972;81:82-96.
  37. Zola I. Culture and symptoms — An analysis of patient's presenting complaints. *American Sociological Review*. 1966;31:615-630.
  38. Nguyen MD. Culture shock — A review of Vietnamese culture and its concepts of health and disease. *West J Med*. 1985;142:409-412.
  39. Schultz S. How Southeast Asian refugees in California adapt to unfamiliar health practices. *Health Soc Work*. 1985;142:409-412.
  40. Gaviria M, Stern G, Schensul SL. Sociocultural factors and perinatal health in a Mexican-American community. *J Natl Med Assoc*. 1982; 74:983-989.
  41. *Common Health Beliefs and Practices of Puerto Ricans, Haitians and Low-Income Blacks Living in the New York/New Jersey Area*. Washington, DC: John Snow Public Health Group; 1986.
  42. Gonzalez-Swofford M, Gutierrez. Ethnomedical beliefs and practices of Mexican-Americans. *Nurse Pract*. 1983;8:29-30.
  43. Hoang G, Erickson R. Cultural barriers to effective medical care among Indochinese patients. *Annu Rev Med*. 1985;36:229-239.
  44. Harwood A. The hot-cold theory of disease: Implications for treatment of Puerto Rican patients. *JAMA*. 1971;216:1153-1158.
  45. Souza C. Contraceptive use in second generation Puerto Rican adolescents. In: Thiel de Bocanegra H, ed: *Minutes of the Round table Forum on Contraceptive Use in the Foreign Born and in Puerto Ricans*. New York, NY: New York Task Force on Immigrant Health; 1992.
  46. Valente S. Overcoming cultural barriers. *Calif Nurse*. 1989;4-5.
  47. Catania JA, Coates TJ, Kegeles S, et al. Condom use in multi-ethnic neighborhoods of San Francisco: The population-based AMEN (AIDS in Multi-Ethnic Neighborhoods) Study. *Am J Public Health*. 1992;2:284-287.
  48. Castro de Alvarez V. AIDS prevention for Puerto Rican women. *PR Health Sci J*. 1990; 9:37-41.
  49. Freudenberg N, Jacalyn L, Silver D. How black and Latino community organizations respond to the AIDS epidemic: A case study in one New York City neighborhood. *AIDS Education and Prevention*. 1989;1:12-21.
  50. *Tuberculosis: Attitudes and Knowledge among Chinese, Dominicans, and Haitians in New York City*. New York, NY: New York Task Force on Immigrant Health; August 1994.
  51. Lapham SJ. *The Foreign Born Population in the United States: 1990*. Washington, DC: US Bureau of the Census, Ethnic and Hispanic Branch; 1990. CPH-L-98.
  52. Hahn RA. The state of federal health statistics on racial and ethnic groups. *JAMA*. 1992; 267: 268-271.
  53. Hahn R, Mulinar J, Teutsch S. Inconsistencies in coding of race and ethnicity between birth and death in US infants: A new look at infant mortality, 1983-1985. *JAMA*. 1992;267:1467-1472.
  54. Fruchter R, Nayeri K, Remy J, et al. Cervix and breast cancer incidence in immigrant Caribbean women. *Am J Public Health*. 1990;80:722-724.
  55. Cabral H, Fried LE, Levenson S, Amaro H, Zuckerman B. Foreign-born and US-born black women: Differences in health behaviors and birth outcomes. *Am J Public Health*. 1990; 80:70-72.
  56. Fruchter R. Epidemiologic issues in immigrant communities. In: Thiel de Bocanegra H, ed: *Integrated Maternal Child Health Care For Immigrant and Refugee Populations*. New York, NY: New York Task Force on Immigrant Health; 1993.
  57. Thiel de Bocanegra H, Gany F, Fruchter R. Available epidemiologic data on New York's Latino population: A critical review of the literature. *Ethnicity and Disease*. 1993;3:413-426.
  58. Lin-Fu J. Population characteristics and health care needs of Asian Pacific Americans. *Public Health Rep*. 1988;103:18-27.
  59. Robinson J G. *Use of Analytic Methods for Coverage Evaluation in the 2000 Census*. Washington, DC: US Census Bureau, Population Division; May 5, 1994.
  60. Robinson JG, Ahmed B, Das Gupta P, Woodrow KA. Estimation of population coverage on the 1990 United States based on demographic analysis. *J Am Stat Assoc*. 1993; 88:1061-1079.
  61. McLeroy K, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotions. *Health Educ Q*. 1988; 15:351-377.
  62. *Cross-Cultural Care Giving in Maternal Child Health: A Trainers' Manual*. New York, NY: The New York Task Force on Immigrant Health; September 1996.
  63. Gany F, Thiel de Bocanegra H. Maternal child immigrant health training: Changing attitudes and knowledge. *Patient Educ Couns*. 1996; 27:23-31.
  64. A new model of community language and cultural competency. *Cross Current*. Fall 1995.