



Health-Seeking Behaviors among Latinas: Practices and Reported Difficulties in Obtaining Health Services

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ABSTRACT

Background: Latinos experience disproportionate negative health status and health care access. Expanding understanding of factors impacting Latino immigrant health is imperative. **Purpose:** This study identified health-seeking behaviors among Latinas in a large Midwestern city with rapid immigrant population growth. Health-seeking behaviors like frequency of care, type of health care provider (HCP) sought, and reasons for seeking care were explored. Barriers to health care access and their frequency were identified. Additionally, interactions between demographics, health-seeking behaviors and health care access barriers were explored. **Methods:** Structured interviews were conducted with a convenience sample of 204 Latinas by trained culturally competent and bilingual interviewers. **Results:** Most reported moderate to good health. Foreign born Latinas reported lower overall health. Nearly half had experienced difficulty obtaining health care services. Leading access barriers were: cost, communication issues, and lack of insurance. Those reporting difficulty had: significantly lower education and income levels, lower ability for self-sufficiency, less likelihood of having legal status, and more likelihood of being unemployed. Lack of Latino HCPs and cultural insensitivity by HCPs were reported as barriers. **Discussion:** Incongruities in access to care underscore the importance for novel interventions aimed at reducing health care disparities. Findings emphasize the need for tailored outreach programs that address barriers and that are effective in increasing Latina participation in preventive health care. Continued assessment of acculturation on health-seeking behaviors among Latinas is clearly warranted, as it can have a profound impact on their health seeking behaviors. **Translation to Health Education Practice:** The continuation of efforts to decrease all health disparities is discussed with emphasis on giving attention to the specific needs of emerging populations for culturally appropriate and effective health care options.

BACKGROUND

According to the U.S. Census Bureau, Hispanics/Latinos are the largest and the fastest-growing minority group in the United States.^{1,2} Health disparities among different U.S. racial and ethnic groups have been established by existing research.^{3,4} Latinas often have higher rates of mortality, more barriers to accessing health care and lower likelihood of being insured compared to non-Hispanic Whites.^{5,6,7,8,9,10} Similarly, this minority group has been reported to

be more likely to live in poverty, to have incomplete high school and middle school education, and to be unemployed than White counterparts.^{11,12,13} A general measure of adequate access to health care is having a usual source of care, a less likely occurrence among Latinas as compared to Whites, as is having health insurance.^{7,14} In addition, Latinas are less likely to use preventive health care services than other ethnic/racial groups.⁷

As Aguirre-Molina and Molina¹⁵ (p3-4)

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explain, “some gains have been made in the availability of Latino data, and more studies have been conducted.” However, they further explicate the need for focus on women in the Latino community: “Latinas are underrepresented in the research literature, which is a reflection of the paucity of studies that focus on these women.” A very important point, given how prominent Latino women (Latinas) are within the population changes and health disparities currently a part of U.S. reality; Latinas “are part of the growing sector for which policy and programmatic interventions are needed to address disparities in health status and health care.”¹⁵ (p.4) Of all U.S. minority groups, Latino women are more likely to be uninsured, as “only 26% have private health insurance, 27% receive Medicaid coverage, and 7% receive Medicare.”¹⁶ (p.8) Factors associated with these lower rates of insurance participation include the type of industries where many Latinas work, such as small businesses that do not provide health care coverage for their employees. Latinas are less likely to have insurance even when they live with someone who is employed.¹⁶ When trying to access care consistently, many Latinas also face problems such as: language barriers, culturally delineated differences, immigration status, childcare issues, and other barriers.¹⁷ For example, uninsured Latinas who have breast cancer are two times more likely than other women to be diagnosed in the later stages of the disease, which in turn is much more difficult to treat.¹⁶

It is projected that by the year 2050, 24.4% of the U.S. population will be Latino.¹⁸ In the period between July 1, 2003, and July 1, 2004, Latinos accounted for about one-half of the national population growth of 2.9 million, a growth rate of 3.6 percent over the 12-month period, which was more than three times that of the total population.¹⁹ In the Midwest, several large cities have experienced rapid growth of immigrant communities, particularly the Latino community. Although southern states had higher rates of growth (over 100%), states like Ohio reported notable rates of growth ranging from 50% to 99.9% increase in their Latino

population from 1990 to 1999.²⁰ The Greater Cincinnati area experienced an increase of 136% in the Latino community from 1990-1995, with an approximate 4% yearly increase since that time.²¹

PURPOSE

The relative newness and 136% increase in size of the regional Latino population²¹ of the Greater Cincinnati area have created a sense of urgency in understanding the factors associated with the disproportionate negative health status of Latino immigrants. The present study identifies health-seeking behaviors among Latinas in a large Midwestern city with rapid immigrant population growth. Health seeking behaviors explored include: frequency of care, type of health care provider sought, and reasons for seeking care. Types of barriers to health care access and their frequency are also identified. In addition, interactions between demographic characteristics, health seeking behaviors, and barriers to accessing health care are explored.

METHODS

Procedures

During the summer and fall of 2004, structured health interviews were conducted with adult Latina women throughout a newer community²² in a large Midwestern city. Participants for this study were recruited and interviews were conducted by trained community members and graduate students, all of which were culturally competent and fully bilingual in English and Spanish. “Structured interviews” were utilized instead of traditional self-administered surveys for two main reasons: to improve participation by using a more engaging process and to include participants who may not possess the reading skills necessary to self-administer the survey. In the six-month period, 214 women were invited to participate, with a very high acceptance rate of 95% (n=204). Participants were approached and verbally invited to participate at several community locations (community health care center, community social services center, religious/spiritual gathering, community market,

community social event, or evening English class). The structured interviews were conducted in either English or Spanish depending on the language of preference reported by the invited participant. Survey administrators included culturally competent bilingual community members and graduate assistants. All survey administrators completed especially designed training on how to ask the survey items and the only acceptable options for answering participant questions about the survey items in order to ensure consistency among interviewers. The training was conducted by the principal investigator. This was necessary due to the variances in language skills, particularly reading ability of potential participants. Study participants received gift certificates for local grocers in the amount of \$5.00 as a thank-you for their time. All data analyses were conducted using SPSS (v14.0) for Windows. The alpha level of significance was set at .05 to reduce the likelihood of committing a Type I error. All procedures and instruments were reviewed and approved by the Institutional Review Board, #03-01-29-15.

Instrumentation

The instrument included demographic information items to measure age, ethnicity, country of familial origin, educational acquisition, and employment status. Self-assessment of acculturation level and English skills were also recorded. Items to assess general health status and health concerns were also included and were followed by health-seeking behavior items including length of time since last health care visit, reasons for health care visits, and type of health care provider sought. Barriers to health care access were also assessed. Question format included “select all that apply,” multiple choice, Likert-type scales and open-ended questions. The Flesch-Kincaid readability score of the instrument was 4.4. The instrument was developed by the authors based on the related literature and on the extensive professional and personal experience of the lead author working with the immigrant Latino community and conducting health research with Latinos. A panel including a subject matter expert, a



measurement design expert, and two Latina women from the community reviewed the instrument for content and face validity. The instrument was then translated into Spanish by a bilingual graduate student and back translated into English by a separate student. Reliability was established using the test-retest technique during the pilot ($n=12$). The overall instrument had good test-retest reliability ($r=.69, p=.05$) and the acculturation scale had a Cronbach's alpha coefficient of .573 ($p=.05$).

RESULTS

The sample for this study consisted of 204 Latinas aged 18 to 59 years ($M=29.5, SD=9.41$), with a mean of 9.8 years of educational attainment ($SD=4.15$). Most were foreign born (89.4%) and lacked legal immigrant status (61.0%) (Table 1). The majority had Mexican familial origin (57.3%) followed sequentially by Peru, Guatemala, and the Dominican Republic as the most reported countries of origin. Regarding marital status, one-third (37.3%) were married while one-fourth (26.7%) lived with a partner. The majority (55.8%) were employed at least part time, while one-third (36.7%) was employed full time. Just over half (50.5%) reported a monthly income amount for themselves, or for themselves and their spouse/partner if applicable; the remaining 49.5% reported they did not know their monthly income. The mean monthly income reported was \$1,813.20 ($n=103, SD=\$1,522.40$) with a range of \$400.00 to \$8,750. Of the 103 participants reporting income, 23.6% fell at or below the poverty guidelines for a family of two (\$1,100) and 77.8% fell at or below the poverty guidelines for a family of four (\$2,028.00) according to the federal guidelines.²³ Among respondents who did not work outside of the home, 43.3% identified themselves as stay-at-home moms. The majority (61.9%) reported speaking English "some," "poorly," or "very poorly." Most (76.7%) preferred speaking Spanish over English and other languages, and nearly half (42.3%) reported feeling more comfortable with the Latino culture than with the American culture, though 56.2% reported equal

Table 1. Demographic Characteristics and Acculturation Level of Latinas

Characteristic	N	%
Born in U.S. (yes)	21	10.6
Have Legal Status (yes)	68	39.5
Country Family is From		
Mexico	114	57.3
Peru	21	10.3
Guatemala	15	7.5
Dominican Republic	7	3.5
Puerto Rico	7	3.5
Other	35	17.6
Marital Status		
Married	76	37.3
Living together	54	26.7
Single, never married	53	26.2
Separated or divorced	19	9.3
Widowed	0	0.0
Stay-at-home mom (yes)	87	43.3
Current Employment Status		
Not employed	88	44.2
Employed full-time	73	36.7
Employed part-time	38	19.1
Earn enough money to sustain self (yes)	92	48.2
How well do you speak English?		
Very well	33	16.8
Well	42	21.3
Some	32	16.2
Poorly	39	19.8
Very poorly	51	25.9
What language do you prefer to speak?		
Spanish	145	76.7
English	17	9.0
Other	12	6.3
Both Spanish and English equally	15	7.9
What culture are you more comfortable with?		
Hispanic/Latino	85	42.3
American	9	4.5
Both American and Hispanic equally	107	56.2
N=204; Missing values excluded		

levels of comfort with both cultures.

Health-Seeking Behaviors

Latinas were requested to rate their overall health status by using a five-point

scale (1=very poor; 5=very good) (Table 2). The majority (59.2%) reported good or very good health status, while the remainder (40.9%) reported moderate health status.



Latinas who were born in the U.S. reported higher health status than their counterparts ($\chi^2=4.8114$, 1, $p=.034$). Three-fourths (74.5%) reported having seen a doctor in the last 12 months and one-half (55.0%) reported having seen a doctor in the last six months. The three most commonly reported reasons for seeing a doctor were to obtain preventive or screening exams (58.7%), due to illness (46.3%), or to obtain treatment or therapy (6.0%). Several different sources of health care were utilized when participants were ill. These included community clinics (58.2%), private doctor offices (35.8%), and emergency rooms (21.4%), among others. Few participants (8.0%) reported that they preferred to stay at home to care for themselves. Fewer participants reported utilizing alternative medicine (5.5%) or folk healers (2.5%) as sources of health care when they had been ill. Even fewer respondents turned to media or the Internet (1.5%) as sources of health information when they were ill.

Participants were asked if they had ever had difficulty obtaining health care services. Four out of ten respondents (43.9%) reported having had such difficulty at some point. Types of barriers identified included: cost related issues, communication limitations, cultural differences, access to transportation, waiting periods, and child care necessities. The most often reported problems when accessing health care were: the high cost of care (45.9%), lack of spoken English skills (43.7%), and lack of health insurance (42.1%). Other reported barriers included: lack of transportation (23.5%), long wait periods for making appointments (18.1%), and lack of child care (7.7%). Some immigrant-specific barriers were reported, such as: fear due to undocumented status (18.6%), cultural issues such as not finding a Latino provider (10.4%), and experiencing providers who are not sensitive to cultural issues (5.5%).

Effect of Demographic Variables on Health-Seeking Behaviors

A series of Chi square and analyses of variance (ANOVA) tests were conducted to determine whether health-seeking behaviors differed significantly based on demographic

Table 2. Latinas' Reported Health Status and Health-Seeking Behaviors

Item	N	%
How would you rate your health status?		
Very Good	20	9.9
Good	100	49.3
Moderate	83	40.9
Poor	0	0.0
Very Poor	0	0.0
How long has it been since you last saw a doctor?		
Less than 6 months	110	55.0
6 months to 1 year	39	19.5
1 to 2 years	35	17.5
3 or more years	14	7.0
I have never seen a doctor	2	1.0
When you are ill, where do you go for help?		
Community health clinic	117	58.2
Private doctor's office	72	35.8
Emergency room	43	21.4
I prefer to care for myself at home	16	8.0
Alternative medicine	11	5.5
Relative/friend/neighbor	8	4.0
Espirista/curandero/santero	5	2.5
Television/magazines/radio/internet/books	3	1.5
Health Educator	1	.5
Which are reasons you usually visit a doctor?		
For preventive screening/exams	118	58.7
I am sick	93	46.3
I need therapy/treatment	12	6.0
Have you ever had difficulty obtaining health services?		
Yes	87	43.9
No	111	56.1
Which of the following are problems you have encountered when trying to obtain health services?		
High cost of care	84	45.9
I do not speak English	80	43.7
I do not have health insurance	77	42.1
Doctor does not speak English	62	33.9
Transportation	43	23.5
I do not have papers so I am afraid	37	18.6
I have to wait a long time for an appointment	34	18.1
It is difficult to find a doctor of my own culture	19	10.4
It is difficult to find childcare while I go to doctor	14	7.7
Doctor is not sensitive to cultural issues	10	5.5
N=204; Missing values excluded		

**Table 3. Significant Differences in Latinas' Reasons for Visiting a Doctor Based on Demographic Variables**

Demographic Variable (nonparametric)	Visit Doctor for Prevention				X ²	p
	Yes		No			
	N	%	N	%		
Marital Status						
Married or Living Together	85	66.4	43	33.6	8.062	.005
Single, Divorced, or Separated	33	45.2	40	54.8		
Stay-at-Home Mom					8.111	.004
Yes	61	70.9	25	21.1		
No	57	50.9	55	49.1		

Demographic Variable (parametric)	Visit Doctor for Prevention				F	p
	Yes		No			
	M	SD	M	SD		
English speaking skill ^a	3.13	1.418	2.63	1.453	5.531	.020

Notes: Chi square analyses conducted for reasons for visiting doctor based on nonparametric variables. Analyses of variance conducted for reasons for visiting doctor based on parametric variables.

^aMeans based on a five-point Likert-type scale (1=very poorly, 5=very well).

and background variables. To control for the possibility of committing a Type I error, a Bonferroni adjustment was conducted, resulting in an adjusted alpha level of .006. Regarding reasons for visiting a doctor, results indicated that individuals who were married or a stay-at-home mom were significantly more likely than their counterparts to report visiting a doctor for prevention reasons (Table 3). Individuals who reported visiting a doctor for prevention had significantly higher self-reported levels of English speaking skills than individuals who did not report visiting a doctor for prevention. The effect of not having legal status on visiting a doctor for prevention approached significance ($p=.030$).

Regarding difficulty in obtaining health services, individuals who were of Mexican descent, not born in the U.S., did not have legal status, and were a stay-at-home mom were significantly more likely than their counterparts to report ever having difficulty obtaining health services. The effect of being unemployed ($p=.015$) and not earning enough income to be self-sustainable ($p=.038$) approached significance. Further,

individuals who reported ever having difficulty obtaining health services had significantly fewer years of school completed (Table 4).

Length of time since participants had visited a doctor also varied significantly based on certain demographic characteristics. Individuals who did not have legal status and who were a stay-at-home mom were significantly more likely than their counterparts to report having seen their doctor in the last six months (Table 5). The effect of being unemployed ($p=.017$) approached significance. Regarding self-reported health status, U.S.-born respondents, and those who were self-sustainable (able to earn enough money to sustain themselves) were significantly more likely to report a higher overall self-assessed health status than their counterparts (Table 6).

DISCUSSION

The study found that most Latinas reported their health to be moderate to good. Those who were not born in the U.S. rated their overall health to be significantly lower than those who were born in the U.S. This

difference is most plausibly due to a number of factors including differences in access to health care, use of preventive health care services, knowledge and poverty levels, insurance status, perceptions and trust of the medical community, and ease in obtaining services.^{14,16,17,18,19} Not surprisingly, the study revealed that nearly half of Latinas surveyed had experienced difficulty in obtaining health care services, with the leading access barriers being cost, communication issues, and lack of insurance. Those of Mexican descent and those not born in the U.S. were among those most likely to experience these access difficulties. Bruhn and Gilman showed that when health services are made available and accessible and when language and income barriers are minimized, Mexican-american and Anglo individuals do not differ in their use of health services.²⁴ Such incongruities in access to care underscore the importance for novel interventions aimed at reducing health care disparities.

Lack of knowledge about health status, symptoms, and warning signs for serious illnesses also play a large role in the decreased utilization of health services by Latinos.²⁵

**Table 4. Significant Differences in Difficulty Obtaining Health Services Based on Demographic Variables**

Demographic Variable (nonparametric)	Ever Had Difficulty Obtaining Health Services				χ^2	<i>p</i>
	Yes		No			
	N	%	N	%		
Country Family From						
Mexico	61	54.0	52	46.0	10.640	.001
Other	25	30.5	57	69.5		
U.S.-Born						
Yes	3	15.8	16	84.2	7.061	.008
No	83	47.7	91	52.3		
Have legal status						
Yes	16	23.5	52	76.5	25.871	.001
No	64	63.4	37	36.6		
Stay-at-Home Mom						
Yes	48	55.8	38	44.2	7.808	.005
No	39	35.8	70	64.2		
Demographic Variable (parametric)	Ever Had Difficulty Obtaining Health Services				<i>F</i>	<i>p</i>
	Yes		No			
	M	SD	M	SD		
Years of school completed	8.14	3.931	11.10	3.847	26.447	.001
Monthly household income	1330.98	727.289	2252.65	1884.551	10.565	.002
English speaking skill ^a	3.40	1.355	2.04	1.201	52.453	.001

Notes: Chi square analyses conducted for difficulty obtaining health services based on nonparametric variables. Analyses of variance conducted for health-seeking behaviors based on parametric variables.

^a Means based on a five-point Likert-type scale (1=very poorly, 5=very well).

The study found that Latinas who reported having difficulty obtaining health services had significantly fewer years of school completed and lower household monthly income (lower ability for self-sufficiency higher unemployment approximated significance). Issues like acculturation and socioeconomic status are also to be considered. Several studies have determined low acculturation levels and low socioeconomic levels to be predictive of decreased frequency of doctor visits and delayed treatment for health problems.^{26,27} In the present study, six out of ten Latinas reported speaking English only some or at a lower skill level. Similarly, nearly eight out of ten participants reported

a preference for Latino culture over traditional U.S. culture. Gaps in health knowledge that continue to be disproportionately experienced by Latinos are associated with their lower socioeconomic status and acculturation levels.^{28,29} Data from a national survey investigating health-seeking efforts of Latinas found that low acculturation, as measured by preference for the Spanish language, served as a significant cultural barrier to help-seeking.³⁰ Continued assessment of acculturation on health-seeking behaviors among Latinas is clearly warranted, as it can have a profound impact on their health seeking behaviors.

One in ten Latinas felt that inability to

find a Latino health care provider was a barrier in seeking health care. Additionally, one in twenty reported that experiencing providers who were insensitive to cultural issues was a barrier to their seeking care. Finding a doctor who is of the same ethnicity and one who can be trusted tend to reflect the values of *confianza* (trust) and *personalismo* (personal familiarity) which are extremely important in the Latino culture.²⁵ With that stated, one in nine Latinas reported that fear due to not having legal status or current documented status kept them away from seeking care. Individuals who did not have legal status were significantly more likely to report that they had experienced difficulty



Table 5. Significant Differences in Having Visited a Doctor within the Past Six Months Based on Demographic Variables

Demographic Variable (nonparametric)	Visited a Doctor in Past Six Months				χ^2	<i>p</i>
	Yes		No			
	N	%	N	%		
Have legal status						
Yes	27	40.3	40	59.7	11.423	.001
No	68	66.7	34	33.3		
Stay-at-Home Mom						
Yes	57	66.3	29	33.7	7.747	.005
No	52	46.4	60	53.6		
Demographic Variable (parametric)	Visited a Doctor in Past Six Months				<i>F</i>	<i>p</i>
	Yes		No			
	M	SD	M	SD		
English speaking skill ^a	2.60	1.504	3.10	1.356	5.762	.017

Notes: Chi square analyses conducted for difficulty obtaining health services based on nonparametric variables. Analyses of variance conducted for health-seeking behaviors based on parametric variables.

^a Means based on a five-point Likert-type scale (1=very poorly, 5=very well).

Table 6. Significant Differences in Self-Reported Health Services Based on Demographic Variables

Demographic Variable (parametric)	Self-Reported Health Status ^a		<i>F</i>	<i>p</i>
	M	SD		
U.S.-Born				
Yes	4.00	.649	5.961	.016
No	3.64	.625		
Self-sustainable				
Yes	3.80	.633	5.798	.017
No	3.58	.641		

Notes: Chi square analyses conducted for difficulty obtaining health services based on nonparametric variables. Analyses of variance conducted for health-seeking behaviors based on parametric variables

^a Means based on a five-point Likert-type scale (1=very poor, 5=very good).

in obtaining health service than individuals who had legal status. The fear of legal penalty and/or deportation may prevent many from preventive health care. Attention needs to be directed toward the amelioration of such issues. Therefore, health care providers may wish to learn from community outreach workers regarding practical cultural sensitivity techniques and strategies to enhance both verbal and nonverbal forms of communica-

tion with Latina patients.

While greater than half of Latinas reported that they visited a doctor in order to obtain preventive or screening exams, a sizeable percentage (greater than 40%) reported that they did not visit for preventive reasons. Early detection is essential to proper care and treatment of numerous health maladies. Garbers and colleagues found that personal barriers such as fear, perceived

embarrassment, anticipated pain, and lack of information served as obstacles to obtaining breast cancer screenings among Mexican and Dominican women in New York City.³¹ These findings emphasize the need for tailored outreach programs that address these barriers effectively, to increase the Latina participation in preventive health care.

Interestingly, only 2.5% of Latinas surveyed in this study reported that they went



to an *espiritista*, *curandero*, or *santero* for help when they are ill. Many cultural and ethnic groups, including the Latino population, use alternative methods of healing, folk healers, and spiritualism as a substitute for or supplement to modern medical treatment.³² Applewhite found that Mexicans and Mexican Americans hold strong beliefs regarding the effectiveness of folk healing and herbal remedies and therefore may seek such types of treatment.³³ Utilization of traditional healing practices can decrease with increased acculturation levels. While the use of folk healers was not found to be prevalent in the study, the practice should not be fully discounted given that many participants in this sample reported being comfortable with the U.S. culture and reported high levels of English speaking skills, both of which have been associated with higher acculturation levels to U.S. culture.³⁴

Some limitations within the context of the present study should be noted. First, this study involved self-reported responses on sensitive issues, which may have led some participants to offer socially desirable answers. Second, this study solely surveyed participants who were approached while they attended community facilities that may make them different from Latinas who do not attend targeted facilities or functions. Third, the monothematic nature of the survey may have inadvertently resulted in a response set bias in some participants. Fourth, the present study employed a convenience sample of Latinas residing in a Midwestern city. Although extensive efforts were made to recruit participants from different Latino backgrounds and from different geographical areas and types of locations, results may not be generalizable to all Latinas nationwide. Additionally, it should be noted that the reliability coefficient for the acculturation section of the survey instrument was low and may have limited the ability of the items in the scale to measure acculturation.

TRANSLATION TO HEALTH EDUCATION PRACTICE

Health education and promotion profes-

sionals should continue efforts to decrease all health disparities. Particular attention should be given to emerging populations, and the specific needs of their communities for culturally appropriate and effective health care options. Additionally, health education and promotion programs should aim to increase awareness of all community members about cultural and social issues that may hinder their health care seeking ability. Careful consideration for the potential implications of existing barriers to preventive care is warranted. Specifically, the likely impact on primary prevention health promotion efforts for minority, immigrant, and ethnic communities should be considered. Although Latinas vary greatly in demographic characteristics and health behaviors, they share limited access to health services and barriers to improving health status. Continued research in all dimensions of Latino health issues will help health education and promotion professionals meet the needs of Latino communities.

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REFERENCES

1. U.S. Census Bureau. *2004 U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*. Available at <http://www.census.gov/ipc/www/usinterimproj/>. Accessed March 9, 2007.
2. U.S. Census Bureau. Race And Hispanic Origin In 2005. In *The Population Profile of the United States: Dynamic Version*. Available at <http://www.census.gov/population/www/pop-profile/profiledynamic.html>. Accessed April 5, 2007.
3. U.S. Department of Health and Human Services (HHS). *Healthy People 2010*. 2nd ed. 2000. Available at <http://www.healthypeople.gov/Document/tableofcontents.htm#under;> Accessed March 9, 2007.
4. Health and Human Services. *National Healthcare Disparities Report*. Rockville, MD: Agency for Healthcare Research and Quality (AHRQ). 2005. Available at <http://www.ahrq.gov/qual/nhdr05/nhdr05.htm>; Accessed March 9, 2007.
5. Holmes MD. AIDS in communities of color. *Am J Prev Med*. 1991;12:113-131.
6. Torres, S. A comparison of wife abuse between two cultures: Perceptions, attitudes, nature, and extent. *Issues Ment Health Nurs*. 1991;12(1), 113-131.
7. Carter-Pokras O, Zambrana RE, Latino Health Status. In *Health Issues in The Latino Community*. Aguirre-Molina M, Molina C, Zambrana RE (eds.). San Francisco, CA: Jossey-Bass; 2001.
8. LaVeist TA. The Epidemiological Profile of Racial/Ethnic Minorities. In *Minority Populations and Health: An Introduction to Health Disparities in the United States*. San Francisco, CA: Jossey-Bass; 2005:53-82.
9. LaVeist TA. Health Care Services Among Racial/Ethnic Minorities. In *Minority Populations and Health: An Introduction to Health Disparities in the United States*. San Francisco, CA: Jossey-Bass; 2005:108-129.
10. Cohen, RA, Martinez, ME. Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January–September 2006. Division of Health Interview Statistics, National Center for Health Statistics. Available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur200703.pdf>. Accessed March 9, 2007.
11. U.S. Census Bureau. Poverty In 2004. In *The Population Profile of the United States: Dynamic Version*. Available at <http://www.census.gov/population/www/pop-profile/profiledynamic.html>. Accessed April 5, 2007.
12. U.S. Census Bureau. Educational Attainment In 2004. In *The Population Profile of the United States: Dynamic Version*. Available at <http://www.census.gov/population/www/pop-profile/profiledynamic.html>. Accessed April 5, 2007.
13. U.S. Census Bureau. 2005 American Community Survey: Selected Population Profile in the United States for Population Group Hispanic or Latino. Available at <http://factfinder.census.gov>. Accessed April 5, 2007.
14. Shi L, Stevens GD. *Vulnerable Populations in the United States*. San Francisco, CA: Jossey-Bass. 2005.
15. Aguirre-Molina, M, Abesamis, N, Castro, M. *The State of the Art: Latinas in the Health*



Literature. In *Latina Health in the United States: A Public Health Reader*. Aguirre-Molina, M, Molina, CW. San Francisco, CA: Jossey-Bass; 2003:3-22.

16. U.S. Department of Health and Human Services. *Latina Women's Health*. In The National Women's Health Information Center. Available at <http://www.4woman.gov/faq/latina.htm>. Accessed October 9, 2002.

17. Carrillo JE, Treviño, FM, Betancourt JR, Coustasse. Latino Access to Health Care: The Role of Insurance, Managed Care and Institutional Barriers. In Molina CW, Molina M, eds. In *Latino Health in the U.S.: A Growing Challenge*. Washington, DC: American Public Health Association; 1994:55-73.

18. U.S. Census Bureau. *US Interim Projections by Age, Sex, Race and Hispanic Origin*. Available at www.census.gov/ipc/www/usinterimproj/. Accessed August 25, 2005.

19. U.S. Census Bureau. *Hispanic Population Passes 40 Million: Census Bureau Reports*. U.S. Census Bureau News. Available at <http://www.census.gov/Press-release/www/releases/archives/population/005164.html>. Accessed January 12, 2006.

20. Symens Smith A, Bashir A, Sink L. An Analysis of State and County Population Changes by Characteristics: 1990-1999. Available at <http://www.census.gov/population/www/documentation/twps0045/twps0045.html#secII>. Accessed January 12, 2006.

21. Kosheleva T, Jain N. *Contributions of*

Hispanics to the Greater Cincinnati community. Cincinnati, OH: Applied Economics Research Institute, University of Cincinnati; 2006.

22. Health Foundation of Greater Cincinnati, The. 2005 Greater Cincinnati Hispanic/Latino Health Survey. Cincinnati, OH: Health Foundation of Greater Cincinnati; 2006.

23. U.S. Department of Health and Human Services. The 2006 HHS poverty guidelines: One Version of the [U.S.] Federal Poverty Measure. Available at <http://aspe.hhs.gov/poverty/06poverty.shtml>. Accessed November 9, 2006.

24. Bruhn JG, Gilman SC. A comparison of utilization of community primary health care and school health services by urban Mexican-American and Anglo elementary school children. *Med Care*. 1981;19:223-232.

25. Larkey LK, Hecht ML, Miller K, Alatorre C. Hispanic cultural norms for health-seeking behaviors in the face of symptoms. *Health Educ Behav*. 2001;28:65-80.

26. Hazuda HP, Haffner SM, Stern MP, Eifler CW. Effects of acculturation and socioeconomic status on obesity and diabetes in Mexican Americans. *Am J Epidemiol*. 1988;128:1289-1301.

27. Mutchler JE, Burr JA. Racial differences in health and health care service utilization in later life: The effect of socioeconomic status. *J Health Soc Behav*. 1991;32:342-356.

28. Espino DV, Maldonado D. Hypertension and acculturation in elderly Mexican Americans:

Results from the 1982-1984 Hispanic HANES. *J Gerontol*. 1990;45:209-213.

29. Molina CW, Zambrana RE, Aguirre-Molina M. The influence of culture, class, and environment on health care. In Molina CW, Molina M, eds. In *Latino Health in the U.S.: A Growing Challenge*. Washington, DC: American Public Health Association; 1994:23-43.

30. West CM, Kantor GK, Jasinski, JL. Sociodemographic predictors and cultural barriers to help-seeking behavior by Latina and Anglo American battered women. *Violence Vict*. 1998;13:361-375.

31. Garbers S, Jessop DJ, Foti H, Uribe-larrea M, Chiasson MA. Barriers to breast cancer screening for low-income Mexican and Dominican women in New York City. *J Urban Health*. 2003;80:81-91.

32. Roy LC, Torrez D, Dale C. Ethnicity, traditional health beliefs, and health-seeking behavior: Guardians' attitudes regarding their children's medical treatment. *J Pediatr Health Care*. 2004;18:22-29.

33. Applewhite SL. Curanderismo: Demystifying the health beliefs and practices of elderly Mexican Americans. *Health Soc Work*. 1995;20:247-253.

34. Marin G, Gamba RJ. A measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). *Hispanic J Behav Sciences*. 1996;18:297-316.