

**Doubly Disadvantaged: A Documentation of How Limited English Proficiency and
Citizenship Status Compound Health Disparities In California**

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Abstract: Despite legal provisions intended to ensure equal access to health care among persons with Limited English Proficiency (LEP) mounting evidence documents poorer health among LEP individuals compared with non-LEP groups. After passage of the welfare reform act of 1996, citizenship status became a central factor influencing access to health services. Given that the majority of LEP individuals are immigrants, this study examines how citizenship status and English ability interact to influence variations in health status and outcomes. The analyses demonstrate that citizenship status significantly compounds disparities in health care utilization and outcomes by English proficiency level. The study also documents a small but important segment of the LEP population; namely native-born individuals who report poor English speaking ability. Despite greater legal access to health care services, this socioeconomically vulnerable population experiences many of the same health disparities as non-citizen LEP individuals.

INTRODUCTION

Despite protections offered by Title VI of the 1964 Civil Rights Act and the publication of standards for Culturally and Linguistically Appropriate Services (CLAS) (U.S. DHHS, 2002; U.S. DHHS, 2001), numerous studies continue to document barriers to appropriate and effective health care posed by poor oral communication between patients with Limited English Proficiency (LEP) and various agents of the health care system. Individuals with limited English ability often have less frequent contact with the health care system, greater difficulty following treatment recommendations including utilizing proper doses of medications, and lack trust in health care professionals (Leyva, Sharif and Ozuah, 2005; Derosé and Baker, 2000; Preciado and Henry. 1997). Poor communication between LEP patients and their providers can lead to risky medical errors and poor adherence to treatment recommendations (Brach, Fraser and Paez, 2005; Carter-Pokras, O'Neill, Cheanvechai, Menis, Fan and Solera, 2004).

Despite these common risks and problems the LEP population is not monolithic. The various ethnic groups that comprise the LEP population vary by socioeconomic circumstances, citizenship status, health-risk profiles, health insurance availability and type, as well as numerous other factors that can influence the likelihood and quality of contact with the health care system (Lee, 2005; CDC, 2004; Kravitz, Helms, Azari, Antonius and Melnikow, 2000). In recognition of this great diversity, Lee (2005) suggested the need for research into how health status, behaviors, needs and sociodemographic characteristics differ not only between LEP and non-LEP individuals but between language groups within the LEP population. The present study presents some basic descriptive data on the non-English speaking population of California that addresses these issues and suggests avenues for future inquiry. Specifically, the paper addresses the following two research questions: 1) How do health status, utilization, and access to care vary between the LEP and non-LEP populations?, and 2) among LEP individuals, are there

significant variations in health measures by language group? Based on prior research I expected to find poorer health status, worse utilization rates and greater barriers to accessing health care among the LEP population than among non-LEP individuals. Secondly, I predicted wide variation across language groups.

METHODS

DATA

Data for this study were derived from the public-use files of the 2001 California Health Interview Survey (CHIS) (California Health Interview Survey, 2002). The study is a random-digit dial telephone survey of 55,428 households drawn from every county in California and is representative of California's non-institutionalized population living in households with a telephone. Interviews were conducted between November 2000 and October 2001 with one adult respondent. Over-sampled populations include American Indians and Alaska Natives, Japanese, Vietnamese, South Asians, Koreans and Cambodians.

Dependent Variable

This study excluded all individuals who reported English-only as the language they speak at home. From the original sample of 55,428 respondents, this reduced the sample to 16,282 individuals. I utilized the question, "How well do you speak English," to dichotomize respondents into a group with Limited English Proficiency (i.e., those who responded that they speak English "not well" or "not at all") and non-LEP individuals (i.e., those who speak English "well" or "very well").

Although the working definition of LEP differs from study to study depending on the study purpose and data available, LEP is generally understood to mean individuals "whose

primary language is not English and who cannot speak English at all or who speak English so poorly that they cannot communicate in English without assistance” (Lee, 2001, p. 4). In studies utilizing the self-rated English ability scale used in the CHIS LEP may be operationalized as individuals who speak English “less than very well” (which would include those who speak English “well”) or “not at all” (which would exclude those who rate their English ability as “not well”) (Ku and Flores, 2005). However, Kominski (1989), using data from a content analysis for questions to be included in the 1990 Census, found that only among persons reporting English ability of “not well” or “not at all” were there significant numbers of respondents who said they also could not read or write in English. Kominski concluded by saying that respondents who said they speak English “not at all” and “not well” “...come closer to identifying a unique population (one that we might call ‘in need of English assistance’)...” (p. 5).

Independent Variables

The analyses identified a number of independent variables which were thought likely to differ significantly between LEP and non-LEP individuals and which would also reflect differential access to health care, variations in the need for care, and ultimately patterns of utilization. Differences across each set of variables can identify barriers to appropriate care or health conditions that disproportionately impact the LEP community and can indicate areas for future interventions to improve the health of LEP individuals.

Sociodemographic Characteristics

Sociodemographic characteristics influence health in a variety of ways. Certain conditions afflict women more often than men, the elderly need different services than young adults, households with children face higher insurance costs and need different services than those without children, and rural households may have limited access to health care providers, to

name a few examples. The sociodemographic variables included were gender, age, family type (with four categories differentiating between single and married households and those that included or excluded children), educational attainment, whether the respondent was working for wages at the time of the interview, household poverty level, the Claritas classification of urban-rural residence (which incorporates both population density and spatial proximity to population centers and differentiates between urban, second city, suburban, small town and rural areas; see (Miller and Hodges, 1994) for further information), language spoken at home, and citizenship status. Identifying the languages spoken by LEP individuals is particularly important in order to help health professionals plan supportive services, such as professional translators, for their patients.

Health Status

An individual's current health status reflects both current and future health care needs, prior patterns of utilization, and illness severity. Health status indicators used in this study were self-rated health, Body Mass Index (BMI), identifiers for specific conditions which a doctor might have told a respondent they have, whether the respondent felt downhearted or sad in the past four weeks, whether the respondent needed help for emotional problems in the past 12 months, and whether or not the respondent visited a specialist for emotional problems in the past 12 months.

Preventive Measures

Use of preventive services reflects general knowledge of health risks as well as some understanding of the health care system and can reduce the need for future, more costly health services. The preventive measures in the CHIS included some indicators that were asked only of respondents in certain age ranges or by gender based on the commonly accepted guidelines for

administration (e.g., flu shots are particularly recommended for adults aged 65 or older) or their applicability to a particular sex (e.g., PAP smears). The specific items included were indicators for having had a flu shot, a colon-rectal exam, a blood stool test, a PAP smear, a mammogram, a bone density test, or a prostate exam, as well as the length of time since the respondent had last visited a dental health professional and whether the respondent had been seen by a health professional other than a medical doctor (e.g., chiropractor or acupuncturist) in the past year.

Health Behaviors

Personal health behaviors may reflect cultural background and awareness of health risks and were included to identify patients with potential future needs for health care. Measures included were the use of alcoholic beverages in the last month, use of vitamins or supplements in the last month, whether or not the respondent had smoked at least 100 cigarettes in their lifetime, and participation in moderate activities in the past month.

Health System Utilization

Patients with prior health system utilization potentially have greater health needs and more knowledge of how to negotiate the health care system. The items included in this category were whether or not the respondent had a usual source of care, number of doctors' visits in the past year, type of health care provider visited, visit to a hospital emergency room, having had a hospital stay overnight or longer, indicators for delays in receiving prescribed medicines, treatments or other medical care, having visited another country for health care or purchasing medications from another country, and whether or not the respondent experienced discrimination in receiving health care with all measures reflecting behaviors or experiences over the past 12 months.

Insurance and Public Assistance

Availability and type of insurance coverage influence the ability to receive care as well as the type of care and services available while use of public assistance indicates a respondent's familiarity with and willingness to utilize government services for low-income individuals. Variables included in this group were insurance status in the past year, coverage by Medicare, MediCal (California's Medicaid program) or employer-sponsored insurance, coverage for prescription drugs and eye exams, reasons given for failure to enroll in MediCal, and indicators for use of various public assistance programs including AFDC, food stamps, and WIC.

RESULTS

DISCUSSION

Many LEP Spanish-speaking patients in California are either uninsured or rely on Medicaid with negative implications for their ability to obtain adequate care. A recent study found that despite a relatively high supply of Spanish-speaking physicians within urban areas of the state, the insurance status of this vulnerable population compromises their access to an important source for culturally competent care (Yoon, Grumback and Bindman, 2004).

Reducing discrimination and health care barriers for persons with LEP is a federal priority under Title VI of the 1964 Civil Rights Act (Rosenbaum, 2004), however, this study demonstrates that significant disparities in health status and access remain for LEP individuals, particularly among the Spanish-speaking population of California. One cross-state study examined patient-rated care and documented significantly worse care for racial/ethnic and linguistic minorities than for whites but found that linguistic minorities were particularly vulnerable to poor health care (Weech-Maldonado, Morales, Elliott, Spritzer, Marshall and Hays, 2003)

References

- Arcia, E., M. Skinner, D. Bailey and V. Correa. 2001. Models of Acculturation and Health Behaviors among Latino Immigrants to the U.S. *Social Science & Medicine*, 53(1): 41-53.
- Brach, Cindy, Irene Fraser and Kathy Paez. 2005. Crossing the Language Chasm. *Health Affairs*, 24(2): 424-434.
- Carter-Pokras, Olivia, M.J. O'Neill, V. Cheanvechai, M. Menis, T. Fan and A. Solera. 2004. Providing Linguistically Appropriate Services to Persons with Limited English Proficiency: A Needs and Resources Investigation. *American Journal of Managed Care*, 10(Special Issue): SP29-SP36.
- Centers for Disease Control and Prevention. 2004. Health Status of Cambodians and Vietnamese – Selected Communities, United States, 2001-2002. *Morbidity and Mortality Weekly Report*, 53(33): 760-765.
- Derose, K.P. and D.W. Baker. 2000. Limited English Proficiency and Latinos' Use of Physician Services. *Medical Care Research & Review*, 57(1): 76-91.
- Kominski, Robert. 1989. How Good Is "How Well"? An Examination of the Census English-Speaking Ability Question. Paper presented at the annual meetings of the American Statistical Association, Washington, D.C.
- Kravitz, R.L., L.J. Helms, R. Azari, D. Antonius and J. Melnikow. 2000. Comparing the Use of Physician Time and Health Care Resources among Patients Speaking English, Spanish and Russian. *Medical Care*, 38(7): 728-738.
- Ku, Leighton and Glenn Flores. 2005. Pay Now or Pay Later: Providing Interpreter Services in Health Care. *Health Affairs*, 24(2): 435-444.
- Lee, Sharon M. 2001. *Patients Who Don't Speak English: Improving Language Minorities' Healthcare with Professional Interpreter Services*. Office of Minority Health, U.S. Department of Health and Human Services: Washington, D.C.
- Leyva, M., I. Sharif and P.O. Ozuah. 2005. Health Literacy among Spanish-speaking Latino Parents with Limited English Proficiency. *Ambulatory Pediatrics*, 5(1): 56-59.
- Miller, D., and K. Hodges. 1994. *A Population Density Approach to Incorporating an Urban-Rural Dimension into Small Area Lifestyle Clusters*. Arlington, VA: Claritas, Inc.
- Preciado, Juan and Manuel Henry. 1997. Linguistic Barriers in health Education and Services. In *Psychological Interventions and Research with Latino Populations*, Jorge Garcia and Maria Cecilia Zea (Eds.). Pp. 235-254. Needham Heights, MA: Allyn & Bacon.

Rosenbaum, S. 2004. Reducing Discrimination Affecting Persons with Limited English Proficiency: Federal Civil Rights Guidelines Under Title VI of the 1964 Civil Rights Act. *Public Health Reports*, 119(1): 93-96.

U.S. Department of Health and Human Services. 2001. *National Standards for Culturally and Linguistically Appropriate Services in Health Care*. Washington, D.C.: Office of Minority Health.

U.S. Department of Health and Human Services. 2002. Policy Guidance on the Prohibition Against National Origin Discrimination as It Affects Persons With Limited English Proficiency. *Federal Register*, 67(22): 4968-4982.

Weech-Maldonado, R. L.S. Morales, M. Elliott, K. Spritzer, G. Marshall and R.D. Hays. Race/ethnicity, Language, and Patients' Assessments of Care in Medicaid Managed Care. *Health Services Research*, 38(3): 789-808.

Yoon, J, K. Grumbach and A.B. Bindman. 2004. Access to Spanish-speaking Physicians in California: Supply, Insurance or Both. *Journal of the American Board of Family Practice*, 17(3): 165-172.

Table 1: Sociodemographic and Acculturative Characteristics of Study Population by English Language Ability and Citizenship Status^a

	(LEP)				Non-LEP		
	Native Born	Naturalized	Non-Citizen		Native Born	Naturalized	Non-Citizen
	162	1,545	3,775		5,560	3,225	1,993
Total N							
<i>Sociodemographic</i>							
Ethnicity							
Mexican	69.8	53.2	74.8		31.6	23.6	31.1
Central American	1.3	9.3	11.0		1.2	5.3	7.8
Other Latino	15.7	5.2	2.4		14.5	8.2	7.3
Chinese	0.0	13.0	4.4		2.0	10.7	7.5
Filipino	0.0	2.4	0.6		0.6	10.1	6.4
Other Asian	2.5	13.6	5.4		2.3	16.1	17.7
Other	10.7	3.1	1.5		47.8	26.2	22.2
Sex							
Female	66.1	61.0	61.0		53.6	56.4	50.2
Male	33.9	39.0	39.0		46.4	43.6	49.8
Age							
18-25	10.5	2.3	13.2		17.0	6.9	19.9
26-34	12.4	9.6	32.3		16.5	18.7	36.7
35-50	19.8	40.5	40.0		33.7	41.8	33.4
51-64	19.8	25.7	10.6		17.5	20.5	7.7
65-74	22.8	14.1	2.8		8.9	8.0	1.7
75 or Older	14.8	8.0	1.1		6.3	4.1	0.7
Educational Attainment							
Less than High School Degree	63.6	57.0	68.5		11.0	9.2	15.6
High School Degree	22.2	22.3	17.5		27.6	20.8	24.4
Some College	8.6	11.8	8.2		31.3	27.0	21.2
College Degree	5.6	8.9	5.8		30.1	43.0	38.8
Poverty Level							
0-99% Federal Poverty Level (FPL)	41.4	34.6	47.7		13.2	10.4	16.9
100-199% FPL	35.2	37.4	35.6		20.0	19.8	25.5
200-299% FPL	11.1	13.9	9.6		16.7	17.8	15.6
300% or More FPL	12.4	14.1	6.7		50.1	52.0	42.1

Table 1, continued...

Working for an Employer for Wages							
Claritas Urban-Rural Residence Classification		30.3	46.3	53.4	56.4	63.1	65.3
Urban							
Second City		28.0	52.8	48.0	31.7	45.6	50.2
Suburban		24.2	17.8	22.2	25.2	18.6	19.1
Small Town		13.0	14.3	12.1	21.5	26.4	21.8
Rural		5.0	3.6	4.3	9.6	5.2	4.2
Family Type		29.8	11.6	13.3	12.1	4.3	4.8
Single Adult							
Married without Kids		39.5	24.8	24.0	42.3	30.8	34.8
Married with Kids		29.0	29.8	12.7	21.5	24.8	17.0
Single with Kids		20.4	37.7	50.5	26.8	36.9	40.0
		11.1	7.8	12.8	9.3	7.5	8.3
Acculturation							
Parental Birthplace							
Both Parents U.S. Born		19.2	0.5	0.0	51.3	1.3	0.0
One Parent Foreign Born		18.6	3.0	1.2	18.7	5.4	1.9
Both Parents Foreign Born		62.2	96.6	98.8	30.0	93.3	98.1
Years Lived in the United States							
< 1 Year		0.0	0.5	5.5	0.0	0.1	5.7
2 to 4 Years		0.0	1.6	13.4	0.0	0.5	15.6
5 to 9 Years		0.0	5.7	21.7	0.0	4.0	18.9
10 to 14 Years		0.0	14.6	28.6	0.0	12.1	24.4
15 Years or More		100.0	77.6	31.0	100.0	83.3	35.4
Language(s) Spoken at Home							
Any Spanish		88.3	67.1	87.4	64.9	36.3	44.0
Any Chinese		0.6	10.6	3.5	2.2	8.8	5.9
Any Other Asian		2.5	8.0	4.0	2.2	4.8	7.7
Other Languages		8.6	14.4	5.1	30.8	50.1	42.5

Notes: Source: California Health Interview Survey, 2001; ^a – for all variables, χ^2 tests were significant at $p < 0.001$

Table 2: Health Status and Health Care Utilization by English Language Ability and Citizenship Status^a

	LEP				Non-LEP	
	Native Born	Naturalized	Non-Citizen		Native Born	Non-Citizen
<i>Health Status</i>						
Self Rated Health						
Good/V Good/Excellent	55.6	54.4	58.3		82.0	89.0
Fair/Poor	44.4	45.6	41.7		18.0	11.0
Body Mass Index						
Normal	21.9	36.6	34.8		37.4	53.3
Under/Overweight	46.3	40.1	39.4		38.6	35.1
Obese	31.8	20.3	25.8		24.0	11.5
Doctor has Told Respondent They Have						
Arthritis	33.3	26.0	10.8		23.4	6.2
Asthma	11.7	7.2	4.8		14.3	5.4
Diabetes (non-gestational)	16.7	11.7	6.5		8.7	2.7
High Blood Pressure	35.0	28.6	14.6		24.8	10.7
Heart Disease	9.9	9.0	4.3		8.4	2.5
Cancer (other than breast cancer)	6.2	4.4	1.5		7.7	2.1
Felt Downhearted/Sad Past 4 Weeks						
All/Most of the Time	9.9	9.0	6.5		4.3	4.3
Some/Little of the Time	47.8	52.4	57.5		46.5	50.6
Not at all	42.2	38.6	36.0		49.2	45.1
Needed Help for Emotional Problems Past Year	19.9	16.9	18.5		18.1	12.7
Visited Specialist for Emotional Problems Past Year	4.4	2.4	2.7		10.5	4.1
<i>Preventive</i>						
Ever had Colon-rectal Exam (40 years+)	39.7	29.8	14.6		40.3	20.8
Ever did Blood Stool Test (40 years+)	28.5	20.8	9.4		38.9	21.1
Time Since last Visit to Dental Health Professional						
Never Been	2.5	3.7	8.4		1.1	4.1
1 to 6 Months	40.4	43.0	32.0		56.2	49.2
7 to 12 Months	24.2	16.4	16.3		15.7	17.5
More than 1 Year	32.9	36.9	43.3		27.1	29.2

Table 2, continued...

Women Only						
Ever had PAP Smear	87.9	91.1	90.1	93.6	94.0	85.6
Ever had Mammogram (30 years+)	77.8	77.2	48.5	73.6	73.8	48.9
Ever had Bone Density Test (50 years+)	25.0	26.8	18.4	32.7	33.6	26.9
Men Only						
Ever had Prostate Exam (40 years+)	38.5	29.3	14.3	40.6	36.4	14.7
Health Behaviors						
Drank any Alcoholic Beverage last Month	38.9	35.2	37.5	61.3	54.7	55.4
Took any Vitamins last Month	37.9	41.0	27.8	60.3	58.9	47.6
Smoked at Least 100 Cigarettes in Lifetime	35.2	29.7	27.4	42.9	33.4	35.3
Participated in Moderate Activities last Month	35.4	34.1	34.3	66.2	56.4	55.9
Health System Utilization						
Have a Usual Source of Care	79.4	85.6	69.8	89.1	89.9	77.7
Number of Doctors' Visits last Year						
None	22.5	17.7	29.9	14.5	17.7	27.6
1 to 5	56.3	60.4	55.6	63.3	67.5	61.1
6 to 11	12.6	11.7	8.6	11.7	9.1	6.7
12 or More	8.6	10.3	6.0	10.5	5.6	4.6
Seen by Some Other Health Professional Past Year	13.7	16.2	10.8	30.0	22.4	17.6
Usual Health Care Site						
Doctor's Office/HMO	54.3	53.4	33.9	70.9	70.1	57.6
Hospital/Clinic	44.1	45.0	63.5	26.7	28.2	39.4
Other	1.6	1.5	2.6	2.4	1.7	3.0
Visited Hospital ER last Year	16.7	14.3	10.4	19.0	12.2	11.0
Had Hospital Stay Overnight or Longer last Year	11.8	9.8	8.6	10.4	7.2	6.6
Delayed/Did Not Get Prescribed Medicine last Year	10.6	6.3	4.3	13.1	7.8	5.8
Delayed/Did Not Get Test or Treatment last Year	6.8	6.2	3.4	10.2	6.0	5.4
Delayed/Did Not Get Other Medical Care last Year	11.3	9.8	8.4	17.6	11.6	12.9
Went to Another Country for Health Care last Year	9.3	11.1	9.4	2.2	3.9	7.1
Bought Medication in Another Country last Year	8.6	7.1	4.9	4.7	3.5	4.7
Felt Discrimination Receiving Health Care last Year	6.8	7.5	6.6	6.7	4.5	4.6

Notes: Source: California Health Interview Survey, 2001; ^a – for all variables, χ^2 tests were significant at $p < 0.001$

Table 3: Insurance and Public Assistance^a by English Language Ability and Citizenship Status^b

	LEP			Non-LEP		
	Native Born	Naturalized	Non-Citizen	Native Born	Naturalized	Non-Citizen
Any Insurance last Year	17.3	23.6	46.3	12.0	11.8	25.5
Currently Uninsured	5.6	5.8	9.1	5.9	4.3	7.5
Uninsured at any Point in last Year	77.2	70.6	44.6	82.1	83.8	67.0
Insured all of the Past Year	38.9	22.7	4.1	16.7	12.3	2.6
Covered by Medicare	43.8	32.3	24.3	14.4	10.1	10.3
Covered by MediCal	29.6	37.9	27.8	61.9	66.2	57.6
Covered by an Employer Plan	77.4	84.9	76.2	91.1	90.9	90.5
Covered for Prescription Drugs (those with Insurance)	75.4	77.6	59.2	78.0	77.2	72.3
Covered for Eye Exams (those with Insurance)						
Main Reason not Enrolled in MediCal						
Didn't Know was Eligible	22.2	18.3	15.1	23.2	23.5	16.7
Income is Too High	14.8	20.2	8.7	13.1	19.5	12.9
Citizenship or Immigration Status	7.4	3.9	25.8	1.4	2.2	15.4
Other	55.6	57.7	50.4	62.2	57.7	55.0
Receiving AFDC, TANF or CalWORKS	6.4	4.7	5.9	5.0	2.8	3.9
Receiving Public Housing Subsidies	6.9	8.5	5.8	4.8	3.6	3.6
Currently Receiving General Assistance/Relief	7.0	3.2	4.0	1.1	1.1	1.4
Currently Receiving Food Stamps	11.1	7.5	12.6	6.2	3.9	5.4
Currently Receiving SSI or Social Security Disability	22.2	15.2	4.9	12.7	8.0	2.6
Currently on WIC	14.3	9.4	30.5	9.2	7.4	16.2

Notes: Source: California Health Interview Survey, 2001; ^a – public assistance questions were asked only for households at < 300% of the FPL; ^b – for all variables, χ^2 tests were significant at $p < 0.001$