Cross-cultural Medicine

Health Care Usage by Hispanic Outpatients as a Function of Primary Language

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Three groups of Hispanic patients at five outpatient clinics in San Diego County, California, participated in a survey questionnaire concerning health care usage according to whether they were Spanish-speaking only, bilingual with Spanish as a primary language or primarily English speaking. Although the three groups were similar in age and income distribution, the use of health services (regular source of health care, health insurance, admission to hospital and frequency of general physical, eye and dental examinations) was positively correlated with increased use of English. Likewise, respondents whose primary language was English were more likely to describe their health care as more than adequate and their own health as excellent than were those whose primary language was Spanish.

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According to the 1980 US census, there are more than 12 million persons of Spanish origin in the United States. It is estimated that by 1990, Hispanics will surpass blacks as the largest minority in the United States. Although the literature on health care concerning Hispanic-Americans is increasing, there are still many major issues inadequately addressed.[1] One of the most comprehensive works to date is from a detailed report by the National Center on Health Statistics.[2] This report, however, did not attempt to classify Hispanics by primary language spoken. In fact, the survey questionnaire used was not even translated into Spanish. Because a large percentage of this minority group does not speak English as a primary language, it is necessary to ascertain the degree to which language ability affects health care usage. Previous studies have compared health care usage between Hispanics and other groups[1] and have documented the effects of language and culture as barriers to health care.[3] None of the major studies, however, have made detailed comparisons of primary language spoken with health care usage. The lack of such data in the literature prompted this pilot study.

Patients and Methods

A sample of 190 Hispanics, aged 18 years or over, was selected from five outpatient clinics in San Diego County. Three of the clinics were located in San Ysidro and southeast San Diego where the Hispanic population is over 50% and which contain 29% of the total Spanish-surnamed population in San Diego County[4] (US Bureau of Census, 1980). The three clinics—San Ysidro Health Center, Chicano Community Health Center and Comprehensive Health Care Center—have about 4,500, 3,500 and 3,000 patient visits per month, respectively. The other two survey sites were the University of California, San Diego (UCSD), Family Medicine Clinic with 800 patient visits per month in central San Diego and the North County Health Service, which accommodates 16,000 visits yearly from rural migrant workers. All five clinics had full-time bilingual personnel such as receptionists, health educators or interpreters. Four clinics had one or more Spanish-speaking physicians on staff.

A Hispanic was defined as any person who has a Spanish surname or claims origin from any of the Spanish-speaking countries.

The two-page survey questionnaire asked for the subject's age, sex, occupation, ethnic background, residence, length of time in San Diego County, marital status, household size, annual income level and primary language spoken. In addition to the demographic information, each subject was asked to respond to the survey questions concerning health care satisfaction and usage as shown in Table 1.

The questionnaire was produced in both English and Spanish. The survey was translated into Spanish by an independent translator and then reviewed by several native Spanish speakers for form and cultural appropriateness.

With the cooperation of clinic receptionists, Hispanics in

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clinic waiting rooms were asked whether they would like to participate in a voluntary study. Potential subjects were instructed that responses would be anonymous and that participation would not affect the health care they would receive. Subjects were asked if they preferred an English or Spanish version of the survey. In all, 82.1% elected to be surveyed in Spanish. Although the majority of the subjects were interviewed, some chose to complete the questionnaire themselves.

Refusal rate was calculated as the number refusing to be surveyed divided by the total number approached. The refusal rate ranged from 12% to 21% at different clinics. This generally conformed to reports from other studies concerning high refusal rates.[4,5]

After the survey was completed, the sample was divided into three groups according to primary language spoken: group I, Spanish-speaking only; group II, bilingual with Spanish as the primary language, and group III, English as the primary language. Data from the survey were coded and analyzed using the Statistical Package for Social Sciences.

Cross tabulations were made between language group and the following variables: income level, regular source of health care, satisfaction, insurance coverage, frequency of checkups (physical, eye, dental), admission to hospital, not seeing a physician when felt necessary, consulting traditional folk medicine and consulting a health professional in Mexico. The Mantel-Haenszel statistic was computed between each pair of variables in the cross tabulations. Controlling for the effects of age, sex, family income and whether the subject had a regular source of health care, cross tabulations were made between language group and the above-mentioned variables. The sample was divided into four age groups (18 to 24, 25 to 34, 35 to 54 and 55 and over). Similarly, the overall sample was divided into three income groups (under $5,000, $5,000 to $9,999 and $10,000 or over).

TABLE 1.—*Survey Questions Concerning Health Care Satisfaction and Utilization (N = 190)*

Do you have a regular source of health care (doctor, nurse, clinic or other)?	N = 187
How would you describe the care you are receiving? (check one): ☐ not adequate ☐ adequate ☐ more than adequate	N = 153
Are you covered by Medi-Cal, Medicare, CHAMPUS, Veterans' benefits or any other form of government health coverage?	N = 189
Other than above, do you have health insurance?	N = 189
How would you describe your present health? (check one): ☐ poor ☐ fair ☐ good ☐ excellent	N = 184
Have you had a general physical check-up in (check one): ☐ the past year ☐ 1-5 years ☐ more than 5 years ☐ never	N = 184
Have you had an eye exam in (check one): ☐ the past year ☐ 1-5 years ☐ more than 5 years ☐ never	N = 185
Have you had a dental exam in (check one): ☐ the past year ☐ 1-5 years ☐ more than 5 years ☐ never	N = 184
Have you ever been hospitalized?	N = 182
Have you ever not seen a doctor or other health professional when you thought you or a family member should have?	N = 178
Have you ever consulted a practitioner of traditional folk medicine (for example, a curandero)?	N = 181
Have you ever consulted a doctor or other health professional in Mexico while you were living here in San Diego County?	N = 180

TABLE 2.—*Income Distribution of Three Language Groups*

	Under $10,000 Per Year, Percent	*Under $15,000 Per Year, Percent*
Group I	86.8	97.3
Group II	74.1	96.3
Group III	90.9	95.1

Average annual income <$10,000 for all three groups

TABLE 3.—*Distribution of Selected Indicators of Health Care Satisfaction and Third Party Coverage*

	Group I, Percent	*Group II, Percent*	*Group III, Percent*
Have a regular source of health care	48.7	59.6	63.6
Health care described as more than adequate	19.1	34.1	35.0
Covered by government health (Medi-Cal, Medicare, etc.)	27.2	39.6	54.5
Private, employee, or other health insurance	7.0	9.4	9.1
Self-described health status as excellent	4.6	11.1	22.7
as poor	12.0	13.0	13.6
Ever been hospitalized	37.0	42.3	68.2

Results

The overall sample contained 190 Hispanic adults (60 men, 130 women). In the sample, 60% (N = 114) were classified as group I or Spanish-speaking only, 28.4% (N = 54) were classified as group II and 11.6% (N = 22) were classified as group III where English was the primary language.

All three groups were similar in mean age (35.43, 34.00, 35.36) and income distribution (Table 2). The χ^2 test showed no significant differences between language group and age distribution, and the mean annual income was below $10,000 for all three groups. There were differences in other demographic data, however. The average household size was negatively correlated with increased use of English (4.7, 4.3 and 3.2). The proportion of respondents who have lived in San Diego County for five or more years increased in a predictable manner among the groups (39.1%, 54.7%, 59.1%). The proportion of male respondents increased from group I to group III (24.6%, 40.7%, 45.5%, $P < .05$). Marital status did not differ significantly among the three groups.

There was an increase in the percentages of those reporting a regular source of health care from group I to group III (Table 3).

Patient satisfaction has often been cited as a measure of the quality of medical care.[6] Among the three groups, the proportion describing their care as more than adequate was 19.1% for the Spanish-speaking only, and almost twice as high for those who speak English (Table 3).

According to a recent National Institutes of Health survey,[7] a higher percentage of Hispanics have no health insurance when compared with whites and blacks. Our survey sample showed even lower figures having health insurance and also showed a significant difference between the three groups (Table 3).

The results regarding perceived health status showed that an increasing proportion of respondents rated their health as excellent with increasing use of English, although the per-

centage reporting poor health was about the same for all three groups (Table 3).

This study confirms results of previous studies[1,8] reporting the low health care utilization rates of Hispanics. Figure 1 shows the significant differences in usage rates among the three groups, with the Spanish-speaking-only group showing the lowest frequency of general physical, eye and dental checkups. Table 4 shows that the elapsed time since the most recent checkup was negatively correlated to use of English as a primary language. The Mantel-Haenszel statistic showed a significance ranging from *P* less than .05 to *P* less than .0005.

The rate of hospital admissions increased from group I to group III (Table 3). This may reflect either poorer health or better access to health services.

There was no significant difference in the percentages of each group (43.4%, 34.0%, 40.9%) reporting not having seen a health professional when they felt such was necessary. Lack of finances and transportation problems were the most commonly cited reasons.

There was no significant correlation between language group and either consulting a practitioner of folk medicine (8.3% of all groups) or consulting a health professional in Mexico (28.3% of all groups).

When adjusted for age, sex, income level and regular source of care, most of the above relationships between language group and dependent variables continued to hold true. The notable exception was that, for respondents older than 55 years, there was no significant relationship between language group and having health insurance. In addition, the differences between the three groups were more significant in the lower income ranges.

TABLE 4.—*Correlation of Dependent Variables With Language Versus Income*

	Language	Income
Satisfaction	r^* = .2151 P† = .004	r = −.0273 P = .369
Perceived health	r = .1323 P = .073	r = −.0065 P = .93
Checkup, general	r = −.1541 P = .037	r = −.0058 P = .94
Eye	r = −.2140 P = .0036	r = −.1651 P = .025
Dental	r = −.2771 P = .00017	r = −.0656 P = .37

*r = Pearson correlation coefficient.
†*P* refers to the Mantel-Haenszel statistic.

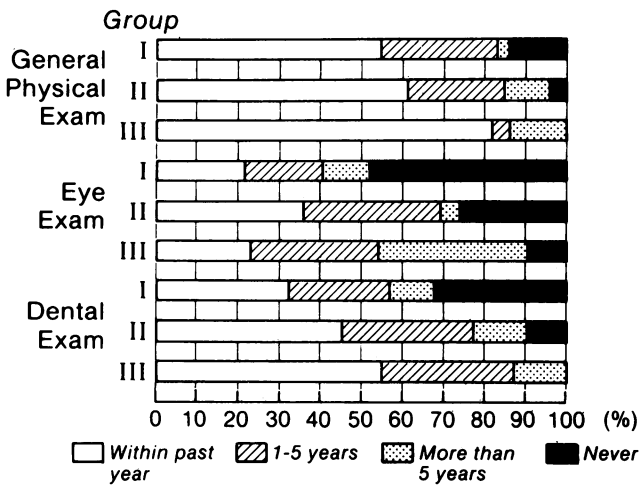

Figure 1.—Frequency of checkups.

Discussion

As mentioned in the introduction, many studies have cited language difficulty as a barrier to health care, but only one recent study by Lopez-Aqueres and colleagues has quantitatively compared health care utilization with language use among the Hispanic elderly.[9] In contrast, in the current study we sampled a wider age group and included more general questions.

Because this study was conducted in San Diego County, the vast majority of the subjects studied (93.2%) were of Mexican descent. It is important to note that there are differences in Hispanic populations in other areas of the United States and according to national origin (Puerto Ricans, Cubans and so forth). In addition, this survey deals with a selected subset of Hispanics from several community clinics and not with the entire Hispanic population of San Diego County.

Income and education have been found to be reliable predictors of preventive health care use.[10,11] It is known that limited time and money among the low-income group studied are critical factors determining health care use. In this study, it is interesting that a stronger correlation exists between primary language and health care levels than between income level and health care levels (Table 4). This is especially significant in light of the fact that all five clinic sites had bilingual personnel. It might be assumed that health care deficiencies would be even greater if bilingual services were not available.

It is highly probable that a significant proportion of the sample consisted of undocumented immigrants. An unpublished study by W. A. Cornelius, PhD, L. R. Chavez, PhD, and O. W. Jones, MD (Center for US-Mexican Studies, UCSD; August 1984) indicates that undocumented immigrants appear to rely more on hospital and clinic-based care in San Diego than legal immigrants. Due to the controversial nature of subjects' immigration status, questions concerning residence status were not included in the survey in order to obtain better cooperation from subjects. This may be a confounding factor, especially when examining dependent variables such as government health insurance. Fears of apprehension in addition to language difficulty among undocumented persons would seriously affect health care utilization rates.

Among the sampled population, the percentage (8.3%) who reported ever having consulted a *curandero* or other traditional folk medicine practitioner was surprisingly low. This appears to lend support to the argument by Scheper-Hughes and Stewart that "time and acculturation have greatly eroded the belief in and practice of curanderismo, the traditional folk medical system of the Southwest."[12]

A significant number of respondents (28.3%), however, especially at the sites close to the US-Mexican border (48%), did choose an alternative to conventional American care: consulting a doctor or other professional in Mexico. Lower costs and language convenience were the reasons most commonly cited.

Summary

In this study, we have examined a limited subset of Hispanics from several outpatient clinics and have noted that selected self-reported health care level indicators differed sig-

nificantly according to the patient's primary language. Because many cultural factors related to language can influence a person's use of health services, it is impossible to isolate primary language usage as an independent variable separate from other cultural factors.

This pilot study should provide an impetus for additional research. Future studies should include larger sample sizes from a wider spectrum of the Hispanic population. Inability to communicate directly (as opposed to through interpreters) with a native-speaking primary care giver who would be consciously or unconsciously aware of cultural nuances in language, presentation and demeanor may be a major factor adversely influencing the effectiveness of the doctor-patient interaction. Also, despite outreach services, inability to speak English may present a barrier in the patient's ability to identify and subsequently reach clinic services wherever they may be provided. On the other hand, language may be an indirect factor in health care usage and perceived health status, with immigration status and length of time in California acting as more direct causative factors. Thus, in follow-up studies, controlling for immigration status and length of residency would be highly desirable, although this information is very difficult to obtain reliably. Finally, it would be interesting to compare these results with a comparable study of Southeast Asians or other significant bilingual or non-English-speaking groups in the western states. The eventual objective in pursuing these studies would be to improve the health care and health status of non-English-speaking segments of the population.

REFERENCES

1. Roberts RE, Lee ES: Medical care use by Mexican-Americans. Med Care 1980; 18:266-281

2. Trevino FM, Moss AJ: Health indicators for Hispanic, black and white Americans, *In* National Center for Health Statistics: Vital and Health Statistics, Series 10, No. 148, Dept Health and Human Services publication No. (PHS)84-1576. Government Printing Office, 1984

3. Quesada GM, Heller PL: Sociocultural barriers to medical care among Mexican-Americans in Texas: A summary report of research conducted by the Southwest Medical Sociology Ad Hoc Committee. Med Care 1977; 15:93-101

4. Howard CA, Samet JM, Buechley RW, et al: Survey research in New Mexico Hispanics: Some methodological issues. Am J Epidemiol 1983; 117:27-34

5. Welch S, Comer J, Steinman M: Interviewing in a Mexican-American community: An investigation of some potential sources of bias. Pub Opinion Q 1983; 37:115-126

6. Lochman JE: Factors related to patients' satisfaction with their medical care. J Community Health 1983; 9:91-109

7. Trevino FM, Moss AJ: Health insurance coverage and physician visits among Hispanic and non-Hispanic people, *In* National Center for Health Statistics: Health, United States 1983, DHHS publication No. (PHS)84-1232. Government Printing Office, 1983, pp 45-48

8. Andersen R, Lewis SZ, Giachello AL, et al: Access to medical care among the Hispanic population of the southwestern United States. J Health Soc Behav 1981; 22:78-89

9. Lopez-Aqueres W, Kemp B, Staples F, et al: Use of health services by older Hispanics. J Am Geriatr Soc 1984; 32:440-453

10. Bullough B: Poverty, ethnic identity and preventive health care. J Health Soc Behav 1972; 13:359-374

11. Hershey JC, Luft HS, Gianaris JM: Making sense out of utilization data. Med Care 1975; 13:838-854

12. Scheper-Hughes N, Stewart D: *Curanderismo* in Taos County, New Mexico—A possible case of anthropological romanticism? (Cross-cultural Medicine). West J Med 1983; 139:875-884