V. Utilization of Curanderos by Mexican Americans: Prevalence and Predictors Findings from HHANES 1982–84

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Abstract: Data from the Southwest sample of the Hispanic Health and Nutrition Examination Survey (HHANES) were analyzed to examine whether the use of a curandero or other folk medicine practitioner hindered, enhanced, or did not affect the utilization of western health care services by Mexican Americans. Findings revealed that only 4.2 percent of the HHANES sample persons between the ages of 18–74 years reported consulting a curandero, herbalista, or other folk medicine practitioner within the 12 months prior to the survey. Income, self-perceived health status, the language of the interview, and dissatisfaction with modern medical care recently received independently predicted curandero utilization (adjusted OR 2.01 and 1.66, respectively). Low income and self-perceived health status were less strongly related to curandero utilization. [*Am J Public Health* 1990; 80(Suppl):32–35.]

Introduction

Mexican Americans have long been thought to be in generally poorer health than White non-Hispanics as evidenced by shorter life expectancies, and higher infectious, parasitic disease, infant and maternal mortality rates; they appear to be in better health than Black non-Hispanics whose socioeconomic conditions are generally comparable.[1,2] Recent evidence indicates that these disadvantages are diminishing.[3–6] Less progress has been made, however, for those conditions usually associated with a lack of access to health care, such as tuberculosis and diabetes.[2,7–9]

Despite their apparent health needs, Mexican Americans have not achieved expected levels of health care utilization. Unlike Puerto Ricans and Cuban Americans who exhibit higher levels of health care utilization than other White Americans, Mexican Americans demonstrate the lowest level of health care utilization of all ethnic/racial groups (for whom there are data).[6] This underutilization of modern medical care has occurred despite factors which in other groups have been indicative of higher utilization rates (e.g., the stress factors of poverty, acculturation, and crowded housing).[10]

Alternative hypotheses to account for this underutilization include:

- cultural and language differences between patient and provider;
- folk medicine practices as an alternative to that of the modern health care system;
- environmental and socioeconomic conditions creating priorities for daily living inconsistent with the fee-for-service modern health care system.[11]

Contradictory results have been reported on why Mexican Americans underutilize health care services. Some of this research, particularly concerning the use of folk medicine, has been considered a disservice to Hispanics because it focuses on cultural or attitudinal explanations for underutilization while ignoring other possible explanations such as those associated with socioeconomic factors and lack of access to care.[12]

Andersen, *et al,* posited that Hispanics have limited access to medical care due to low levels of income, education, and health insurance coverage.[13] Treviño and Moss found that Mexican Americans with health insurance are 1.5 times more likely to consult a physician than Mexican Americans without insurance.[14] In addition to the monetary restraints, Chesney, *et al,* suggested that acculturation and social isolation are pertinent barriers to medical care for Mexican Americans.[15] While the debate continues as to what the exact barriers to health care are for Mexican Americans, the general consensus is that for Mexican Americans the availability of health care (as distinct from access) is comparable to that of the population in general.[13]

All societies have some systematized manner in which to deal with illness.[16] In the past some Mexican Americans have utilized curanderos or folk medicine practitioners. The number of Mexican Americans who still use curanderos as an alternative to modern medical care, for cultural and/or economic reasons, is unknown.

Most studies of curanderismo, the practice of folk medicine, have sought to describe and evaluate this phenomenon by indirect methods, i.e., through studies focused on the practitioner's patients.[17,18] These studies have produced detailed descriptions of the specific healing techniques used[19] or information on the type of disorder being treated.[17] Little is known about the prevalence of their use by Mexican Americans and what factors differentiate users from nonusers. Such factors could include cultural orientation, ability to pay, and dissatisfaction with previous medical care. It is unknown whether curanderismo is used as an exclusive alternative to modern medicine or whether both types of care are used concurrently.

This study seeks to compare those Mexican Americans (ages 18 years and older) in the Southwestern sample of the HHANES who reported consulting a curandero, herbalista, or other folk medicine practitioner within the last 12 months with those who did not do so. A model to predict those who sought alternative care is formulated.

Methods

The Hispanic Health and Nutrition Examination Survey (HHANES), the first national study of the health of the Hispanic population, was conducted during 1982–84 by the National Center for Health Statistics. A more detailed account of the design is presented elsewhere.[20,21] The HHANES sought to obtain representative samples of Hispanics households by concentrating sampling procedures for Mexican Americans in five southwestern States.

Specifically, this analysis includes those Mexican Americans, ages 18 years and older, who responded to the question

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"There are some providers of health care that we sometimes go to, such as curanderos, sobadores, herbalists, spiritualists, and others. Have you seen or talked to any of these persons for health care during the past 12 months?" There are significant differences between curanderos, herbalistas, and other folk medicine practitioners; however, all were included in the single question used in HHANES to access folk medicine utilization. Further, they all represent a traditional medicine alternative to "scientific" medicine. Henceforth in this report, curandero will be used to refer to all of these folk medicine practitioners.

Due to the nature of these data, efforts were undertaken to account for the large size and method of sampling in the analysis. Design effects have been accounted for through the reporting of weighted percentages and adjusted variances, which were computed utilizing the Taylor approximation of the SESUDAAN methodology.[22] Comparisons were made between weighted and unweighted estimates resulting in insignificant variation, sample sizes are presented unweighted while statistical test and percentages utilize weighted estimates.

The variables used in the prediction model were drawn from the literature. They included indicators of: health status, ability to pay for health care, and health care utilization (see Appendix for details of these items), as well as the demographic variables of gender, age, marital status, education, nativity, acculturation, language of interview, family size, and size of the respondent's community or city of residence.

Descriptive and multivariate analyses, including logistic regression (using SAS, Proc Logist; SAS Institute, Inc.), were performed on the data in order to build the model which best predicted curandero utilization with the fewest variables. Odds ratios and 95 percent confidence intervals, using adjusted standard errors, were calculated from beta coefficients.[23]

Results

The total sample size for this investigation includes 3,623 Mexican Americans from the Southwestern United States ages 18 years and over. Of this number, only 148 persons (4.2 percent) reported consulting a curandero, herbalista, or other folk medicine practitioner within the last 12 months.

Users of curanderos were slightly more likely to be male, less well educated, and foreign born (Table 1). Marital status, age, family size, geographical distribution, or size of the community in which they reside were not found to be related to the use of curanderos.

Acculturation was not found to be significantly related to use of curanderos. Subsequent analysis, however, revealed that being interviewed in Spanish was found to be highly predictive of curandero utilization, whereas nativity was not.

Table 2 presents the comparisons of proportions on indicators of health status by users and non-users of curanderismo. During the physical examination portion of the HHANES, the physician was asked to indicate his/her global assessment of the respondent's health status. The vast majority (>85 percent) for both groups were classified by the physician as being in very good or excellent health. There were no differences in physician assessment of health status of Mexican Americans who used curanderos and those who did not utilize them.

Those who consulted a curandero were more likely than those who did not to report their current perceived health status as fair or poor and to believe they had little control over their future health status.

Those who consulted curanderos in the last year were found to be less satisfied with the care they received at their last visit to a medical practitioner. However, no differences were found regarding having a regular source of care or recency of last visit to a medical practitioner (Table 3). Further, poverty status, the presence or absence of health insurance coverage or the type of coverage were not found to be related to use of curanderos (Table 4).

Logistic regression with backward elimination was applied to this sample in order to delineate which variables out of this theoretical framework were most predictive of curandero utilization. Those variables that remained within the model were: satisfaction with care received at last visit, the language of the interview, self-perceived health status and income (Table 5).

TABLE 1—Demographic Characteristics of Reported Users and Non-Users of Curanderismo

	% Users	% Non-Users
(N)	(148)	(3475)
Gender		
Male	58.1	50.0
Female	41.9	50.0
Ages (years)		
18–44	64.2	65.2
45–64	31.1	29.2
65–74	4.7	5.6
Marital Status		
Married: spouse in household	67.1	66.3
Married: spouse not in household	3.3	1.9
Widowed	5.4	3.5
Divorced	5.3	5.5
Separated	3.3	3.9
Never Married	15.6	19.0
Education		
0–8 years	46.6	36.6
9–11 years	15.4	20.0
12+ years	37.9	43.5
Nativity		
United States	52.0	61.0
Other	48.0	39.0
Acculturation		
1.0–1.9	48.4	33.9
2.0–2.9	17.6	21.1
3.0–3.9	31.1	38.5
4.0–4.9	2.9	6.4
Language of Interview		
English	48.6	61.3
Spanish	51.4	38.7
Family Size (persons)		
1 or 2	22.2	19.6
3 or 4	39.6	40.5
5 or 6	25.3	27.6
7 or more	12.9	12.4
Size of Place (population)		
500,000 or more	27.9	24.2
100,000–499,999	14.4	15.0
25,000–99,999	28.2	27.5
200–24,999	21.7	24.1
Not in a place	7.9	9.2

Discussion

As noted by others,[16] relatively few persons of Mexican origin in the United States consult a curandero. Only 4 percent of the adult Mexican Americans interviewed in the HHANES reported that they had consulted a curandero within the past 12 months. Comparable population estimates

TABLE 2—Indicators* of Health Status by Reported Users and Non-Users of Curanderismo

	% Users	% Non-Users
(N)	(148)	(3475)
Health Status (Physician Assessment)		
Excellent	52.9	59.4
Very Good	36.5	28.0
Good	9.0	9.2
Fair	1.1	2.8
Poor	0.5	0.5
Health Status (Self-Assessment)		
Excellent	11.8	13.8
Very Good	15.5	18.1
Good	30.7	34.7
Fair	31.7	28.3
Poor	10.4	5.1
Future Health Locus of Control		
Excellent	37.7	43.1
Good	43.4	44.6
Fair	17.1	8.9
Poor	1.8	3.4

*See Appendix for definitions.

TABLE 3—Indicators* of Health Care Utilization by Reported Users and Non-Users of Curanderismo

	% Users	% Non-Users
(N)	(148)	(3475)
Source of Care		
Regular only	58.8	66.2
Regular & other	7.4	7.1
Other	29.7	24.6
Never visited	4.1	2.1
Visit Interval		
Never	4.1	2.1
<1 month	19.9	19.3
>1 & <12	50.2	47.7
>1 year & <5	23.4	25.0
>5 years	3.3	6.0
Satisfaction with Care		
Very satisfied	69.2	80.8
Somewhat satisfied	14.2	14.4
Not at all satisfied	16.6	4.7

*See Appendix for definitions.

for utilization of folk healers in other ethnicities are not available in the literature.

Mexican Americans may be reluctant to discuss use of curanderos and this could have an impact on the findings of this investigation. However, bilingual interviewers of predominantly Hispanic origin were used in the HHANES. While some reluctance to answer questions regarding curanderismo usage may have occurred, the level of reluctance is thought to be decreased by the cultural and linguistic similarity between the interviewers and the sample persons.

It has been hypothesized[13] that, as a consequence of the use of curanderos, Mexican Americans tend to delay seeking medical care, often until the condition becomes critical. The data presented here do not support that view. If this were true, then differences in time since last health care visit and health status would be evident in the two groups compared. This was not found to be the case.

Regression analyses revealed that adherence to a Mexican cultural orientation (in the form of preference to be interviewed in Spanish) and dissatisfaction with medical care received were related to use of curanderos while ability to pay and availability of care (as indicated by the reporting of a regular source of care) were not so related.

TABLE 4—Indicators* of Ability to Pay for Health Care Services by Reported Users and Non-Users of Curanderismo

	% Users	% Non-Users
Income		
<$20,000	36.7	35.0
≥ $20,000	63.3	65.0
Type of Health Insurance		
Not covered	39.0	35.3
Private	50.2	53.9
Medicare	4.3	4.4
Medicaid	4.9	5.0
Other public	1.7	1.3
Poverty Level		
At or below	24.2	28.1
Above	75.8	71.9

*See Appendix for definitions.

TABLE 5—Logistic Regression Odds Ratios (OR) and 95% Confidence Interval (CI) for the Association of Curandero Utilization with Predictor Model Variables

Variables	OR	(95% CI)
Satisfaction with care	1.66	(1.08, 2.53)
Language of interview (English vs Spanish)	2.01	(1.06, 3.82)
Income (≤$20,000, >$20,000)	0.57	(0.14, 2.41)*
Self-perceived health status	1.28	(0.74, 2.19)*

*These variables were found to be significant in the logistic regression model but use of adjusted standard errors in calculation of the CI included the null value.

It is possible that those persons who spoke Spanish during the interview are experiencing greater difficulty communicating with health care professionals (predominantly monolingual in English) hence are more dissatisfied with the care they received and seek an alternative source. It is reasonable to assume that those persons who do not have the expendable income to "shop" for a physician would also be more likely to show dissatisfaction with care and seek an alternative source of care, accounting for the marginal predictability of income. Similarly those who feel that they are in poor health may be somewhat more likely to seek persons with whom they can communicate more easily, and whom they perceive as being more empathetic—in this case, curanderos.

This research has been a first step in trying to unravel complex relationships. A major limitation of this research involves the small number of Mexican Americans who reported consulting a curandero; this precluded an examination of possible interactive variations which may have occurred with respect to curandero use. Nevertheless, the data indicate that few Mexican Americans consult folk medicine practitioners, and that those who do so also consult physicians. The research suggests that health care professionals should maintain and strengthen their efforts to deal with linguistic and cultural differences in order to be as effective as science allows.

APPENDIX

Variables Used in the Analyses

Perceived control of future health status was derived from the following question: "How much control do you think you have over your future health: a great deal, some, very little, or none?"

Income was derived from the following question: "Was the total combined family income during the past 12 months more or less than $20,000? Include money from jobs, Social Security retirement income, unemployment payments, public assistance, and so forth. Also include income net from interest, dividend, income from business, farm or rent, and any other money income received."

Determination of insurance coverage was an amalgam of several questions. A positive response to one or more of the following would indicate the presence of coverage, a negative response to all would indicate the absence of insurance coverage:

- "Is sample person now covered by Medicare?"
- "Does sample person have a Medicaid card?"
- "Is sample person now covered by any other public assistance program that pays for health care?"
- "Is sample person now covered by CHAMPUS, which is medical insurance for dependents or survivors of disabled veterans?"
- "Is sample person now covered by any other program that provides health care for military dependents or survivors of military persons?"
- "Is sample person covered under this plan?" (referring to for-profit health insurance plans to which they or their employer may subscribe).

Type of insurance coverage was determined by the presence or absence of preceding items. Not covered by insurance is equivalent to no insurance coverage above.

The *poverty level* variable was a dichotomization of those at or above and those below the poverty index. The poverty index is a ratio of two components: the numerator is the midpoint of the income bracket reported for each family; the denominator is a poverty threshold which varied with the number of persons in the family, the adult/child composition of the family, the age of the reference person, and the month and year in which the family was interviewed.[20]

The *time since last visit* was determined by the compilation of two questions:

- "Now I would like to ask you some questions about your last visit to the (care source as previously determined). How long has it been since that visit? Less than one month; one month but less than six months; six months but less than one year; one year but less than five years; more than five years."

A second question has the same response categories with the addition of the choice of "never", and it reads:

- "Now I would like to ask you some questions about your last visit to any clinic, health center, doctor's office, or other place for health care. How long has it been since your last visit for health care?"

The *source of care variable,* speaking of the "scientific" source of health care, comes from three questions:

- "Is there a particular clinic, health center, doctor's office or other place that you usually go to if you are sick or need advice about your health?"
- Have you visited any other clinic, health center, doctor's office or other place for health care since your last visit to the (regular source)?"
- "How long has it been since your last visit for health care?"

A positive response to the first question and a negative response to the second indicates a regular only source of health care; positive responses to both questions indicates a regular and other source of health care; those who responded positively to the second question but negatively to the first indicate other source only; and, a response of "never" to the third question indicates that the respondent has never visited any source of health care.

The *satisfaction with care variable* is derived from the question:

- "In general, how satisfied were you with the care you received at that visit?" Would you say you were very satisfied, some what satisfied, or not at all satisfied?"

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