

# PHONE COVERAGE AMONG UNDOCUMENTED IMMIGRANTS: THE PROJECT HOPE HISPANIC IMMIGRANT SURVEY

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## ABSTRACT

Although the cost advantages of telephone surveys make them increasingly popular, substantial concern remains about coverage bias, especially when interviewing vulnerable populations. The Project HOPE Hispanic Immigrant Survey was designed to examine reasons for immigration and use of health care services among undocumented immigrants in Los Angeles, Fresno, El Paso, and Houston using probability sampling. The survey was conducted in person; the use of telephone interviews was rejected because of the sensitive nature of the questions. We also assumed that a telephone survey would result in coverage bias. To test this assumption we obtained information about the presence of a telephone in each household. Thirty four percent of the respondents lacked phones, a much higher percentage than found in the general population. Comparisons between adult respondents with phones and all adults surveyed were made on a number of sociodemographic variables and variables related to use of health care services. Surprisingly, the phone and non-phone populations were quite similar with respect to both demographics and use of health services. While significant numbers of undocumented immigrants would be excluded from a telephone sampling frame, the actual level of bias may be somewhat smaller than expected.

The costs of surveying rare populations using probability sampling are high and survey researchers continue to express interest in the use of telephone surveys as a method of reducing costs. The Project HOPE Hispanic Immigrant Survey was designed to conduct in-person interviews with probability samples of the undocumented Latino population in four major cities. Telephone interviews were not considered when the survey was designed. All interviews were conducted in-person because of the need to collect sensitive data about immigration status. It was believed that face to face contact between interviewer and respondent was necessary to develop adequate rapport and trust. In addition, low rates of telephone coverage within the undocumented population were

expected which could result in significant bias. However, while telephone interviews were not conducted, information about whether or not a phone was available to the respondent was collected so that, we could evaluate whether a telephone frame might be appropriate for future studies that examine issues related to the undocumented.

This paper presents data showing the extent to which the undocumented have access to a telephone in their home. It presents comparisons on sociodemographic, access to care, and health status variables comparing those adult respondents with a telephone to all adult respondents. Rather than comparing those respondents with phones to those without, we compared those with phones to all respondents in an attempt to determine if the coverage bias associated with not having a telephone in the home would have led to significantly different conclusions.

## BACKGROUND

Although the use of telephone interviewing is increasingly popular, researchers have had long-standing concern about the ability of a telephone sampling frame to adequately cover vulnerable populations. Poor households and households with young adults who are more transient (Miller, 1991: pg. 166) are less likely to be covered through a telephone frame. Even strong advocates of telephone interviewing acknowledge that "telephone surveys are at a disadvantage in surveying certain segments of the general population" (Lavrakas, 1998). A review of telephone coverage of the National Health Interview Survey reveals that while 93% of the population had phones; rates of non-coverage were much higher for Hispanics than for the general population (Thornberry and Massey, 1988).

The political debate in California over Proposition 187 as well as the issues raised through passage of the "Personal Responsibility and Work Reconciliation Act of 1996" have profound implications for the way undocumented immigrants are served through our health care system. The survey was designed to study a random population of undocumented immigrants in four sites; Houston, El Paso, Fresno, and Los Angeles.

The survey resulted in an overall response rate of 83% varying from a high of 95% in El Paso to a low of 72% in Houston. The Project HOPE Hispanic Immigrant Survey was developed to provide information to policymakers on reasons for immigration to the United States of persons without documentation.

The use of a telephone mode of interview has implications not only for coverage but also for measurement. Had the survey been conducted over the telephone very different answers may have been obtained on some survey questions including the critical screening questions about immigration status. This study compares the undocumented adults who have phones with all undocumented adults. It does not compare phone interviewing to in-person. We therefore consider only the coverage issues; issues related to measurement bias are not examined. How different would our survey results have been had the survey excluded persons without phones?

## FINDINGS

Table 1 shows the percentage of respondents with and without telephones. The findings show that rates of phone coverage among undocumented immigrants are much lower than that of any other group reported in the literature (see Thornberry and Massey, 1988). Thirty-four percent of those persons in the survey would not have been able to be surveyed had an RDD approach been utilized. This would represent a much higher rate of non-coverage than is generally found acceptable.

The low phone coverage, by itself, might suggest that surveying only those with phones would result in serious coverage bias. Surprisingly, however, the population with telephones and the total population look almost identical for almost all variables. Estimates of service use were almost identical when comparing overnight hospital stays, doctor visits, ER visits, visits to a clinic, or visits to a doctor's office. Table 2 shows a very similar distribution of health status among adults with telephones and all adults surveyed. Similarly, the estimates in Table 3 show no significant differences when sociodemographic characteristics of the respondents were examined. The telephone and total populations were similar with respect to distributions of sex, marital status, and education. Both populations were equally likely to be employed.

One of the most important variables in the study relates to reasons for immigration. The major focus of the survey was to determine whether or not persons were immigrating to the United States in order to obtain health care services. The survey results in

Table 4 clearly indicate that the undocumented were not immigrating to the United States primarily in order to access increased social services. Had the survey been limited only to those with telephones the conclusion would have been the same.

An examination of the distribution of income across the two populations may give a clue as to why the telephone and total samples appear equivalent. Previous surveys have shown that income is strongly correlated with the presence of a telephone. Accordingly, groups such as minorities, or the unemployed are more likely to not be represented adequately through a telephone sample. Our study, however, indicates that there is very little variation in income within the undocumented population; almost all are poor. As shown in Table 5 about 80% of both those with phones and all respondents have incomes of less than \$10,000 with only about 2% of both samples having incomes exceeding \$20,000.

## DISCUSSION

Our findings indicate that the population of undocumented immigrants with access to a telephone closely mirrors the overall undocumented population even though some 34% of the undocumented in our four sites did not have a telephone. Telephone coverage is usually associated with income; however, almost all undocumented persons appear to have very low incomes. Accordingly, the level of bias introduced through a telephone sampling frame may be far less than it would be in a population with more normal income distribution.

These findings in no way suggest that one should attempt to ascertain immigration status through a telephone survey. Nor does it mean that the actual findings would have been similar had persons been interviewed over the telephone. We certainly expect that lower rates of eligibility would have been realized had we asked questions about immigration status over the telephone. Nevertheless, the findings do suggest that follow-up studies of the undocumented might be done over the telephone once the initial sampling frame is developed using in-person interviewing. Furthermore, coverage bias may be lower in populations with relatively little variance in income.

**TABLE 1: Phone Coverage of Undocumented Immigrants (age 16+)**

	<u>n</u>	<u>Percent</u>
With Telephone	550	66%
Without Telephone	286	34%

**TABLE 2: Undocumented Immigrant Survey**

**Comparison of Key Variables: All Adult Respondents and Adult Respondents with a Working Telephone**

	<u>All Adult Cases</u> Percent	<u>Adult Cases With Phone</u> Percent
<b>Health Status</b>		
Excellent	12.3	11.6
Very Good	15.0	14.2
Good	38.5	38.4
Average	31.7	33.3
Bad	2.5	2.5
<b>Overnight Hospital Stay last 12 mo.</b>		
Yes	10.9	11.6
		1
<b>Overnight Hospital Stay in U.S.</b>		
Yes	10.3	11.1
<b>Dr. Visit last 12 mo.</b>		
Yes	40.3	43.5
<b>Dr. Visit in U.S. last 12 mo.</b>		
Yes	35.4	38.2
<b>ER Visit last 12 mo.</b>		
Yes	9.3	9.1
<b>Clinic/O.P. Visit last 12 mo.</b>		
Yes	25.0	27.3
<b>Dr. Office Visit last 12 mo.</b>		
Yes	6.8	8.0
<b>Problem Getting Med Care last 12 mo.</b>		
Yes	7.5	6.2
(n)	836	550

**TABLE 3: Sociodemographics**

	<u>All Adult Cases</u>		<u>Adult Cases With Phone</u>	
	n	Percent	n	Percent
<b>Sex</b>				
Male	384	45.9	253	46.0
Female	452	54.1	297	54.0
<b>Marital Status</b>				
Married, spouse in US	327	39.1	222	40.4
Married, spouse not in US	57	6.8	38	6.9
Divorced/Separated	33	3.9	21	3.8
Widowed	22	2.6	14	2.5
Single/never been married	317	37.9	207	37.6
Living with partner	79	9.4	47	8.5
<b>R Has Children Living in U.S.</b>				
Yes	451	53.9	298	54.2
<b>School Age Children in Home</b>				
Yes	334	40.0	224	40.7
<b>Education Completed</b>				
No school	61	7.3	37	6.7
Elementary	289	35.6	182	33.1
Middle School	130	15.6	88	16.0
Some high school	165	19.7	110	20.0
Graduated high school	147	17.6	105	19.1
Attended college	35	4.2	28	5.1
<b>Speak English w/ Med Prof</b>				
Very well	19	2.3	10	1.8
Well	85	10.2	60	10.9
Not very well	312	37.3	204	37.1
Not at all	419	50.1	275	50.0
<b>Worked in Last 2 Weeks</b>				
<u>Total:</u>				
Worked	335	40.1	231	42.0
Had job but didn't work	22	2.6	13	2.4
No job	478	57.2	305	55.5
<u>Males only:</u>				
Worked	253	65.9	173	68.4
Had job but didn't work	16	4.2	10	4.0
No job	114	29.7	69	27.3
<b>Have Steady Job</b>				
<u>Total:</u>				
Yes	274	32.8	207	53.9
<u>Males Only:</u>				
Yes	207	53.9	139	54.9

**TABLE 4: Reasons for Immigration**

	<u>All Adult Cases (n=836)</u>		<u>Adult Cases With Phone (n=550)</u>	
	n	Percent	n	Percent
Education	127	15.2	91	16.5
Work	487	58.3	315	57.3
Family/Friends	367	43.9	244	44.4
Political	19	2.3	17	3.1
Social Services	9	1.1	7	1.3
Other	30	3.6	20	3.6

**TABLE 5: Family Income (last 12 months)**

	<u>All Adult Cases</u>		<u>Adult Cases Without Phone</u>		<u>Adult Cases With Phone</u>	
	n	Percent	n	Percent	n	Percent
\$5,000 or less	345	41.3	123	43.0	222	40.4
\$5,001 to \$10,000	334	40.0	122	42.7	212	38.5
\$10,001 to \$15,000	102	12.2	31	10.9	71	12.9
\$15,001 to \$20,000	33	3.9	3	1.1	30	5.5
\$20,000 or higher	15	1.8	2	0.7	13	2.4

## REFERENCES

Good C., Jacinto R., Berk, M. "Surveying Rare Populations with Probability Sampling: The Case of Interviewing Undocumented Immigrants." Presented at the American Association for Public Opinion Research Annual Conference, St. Louis, MO, May 1998.

Lavrakas, Paul J. 1998. Chapter 15: Methods for Sampling and Interviewing in Telephone Surveys. In *Handbook of applied social research methods*, Bickman, Leonard and Rog, Debra J., editors. California: SAGE Publications.

Massey, James T. and Thornberry, Owen T., Jr. 1988. Chapter 3: Trends in United States Telephone Coverage Across Time and Subgroups. In *Telephone survey methodology*, Groves, et al, editors. New York: John Wiley and Sons.

Miller, Delbert C. 1991. *Handbook of research design and social measurement*. 5<sup>th</sup> ed. California: SAGE Publications.