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Correlates of Poverty and Participation in Food Assistance Programs among Hispanic Elders in Massachusetts

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Abstract

Hispanics are a rapidly growing population in Massachusetts, but little is known about the health, nutrition, and economic situation of the elder segment of these groups. In this report, we examine factors associated with poverty and the use of food assistance programs, using data from an NIA-funded project on Hispanic elders in Massachusetts. Poverty is shown to be a major problem with differences across Hispanic subgroups. Puerto Rican and Dominican elders have lower incomes, on average, than other Hispanics—mainly Cubans, and Central and South Americans—or than non-Hispanic whites living in the same neighborhoods. Older age, lower education, and living alone are associated with poverty within this population. Limited income sources and recent immigration are also important factors. Hispanic elders are more likely to receive SSI benefits, but are much less likely to have pension income. Financial insecurity in old age among Hispanics is associated with more chronic ailment and mobility limitations. Puerto Rican and Dominican elders have the highest poverty and disability rates and report the most food insecurity. However, with the exception of the Food Stamp program, participation in food programs tends to be very low for these Hispanic elders. Given the prevalence of problems demonstrated by these groups, more attention to program outreach and adaptation for Hispanic elders is needed.

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INTRODUCTION

The character of poverty in American society has changed dramatically over the last three decades. A substantial literature documents the persistence of poverty among some sectors of the population, particularly racial minorities, and the shifting of poverty to a burden carried largely by women and children. Research exploring the causes of poverty has focused on various aspects of societal functioning. Labor market dynamics, residential segregation, family instability, out-of-wedlock births, and discrimination are among the key factors suggested in the literature. Although there is substantial debate as to the causes and consequences of living in poverty, there seems to be agreement about some basic facts: poverty has become more concentrated, more persistent in duration, and the gap between the poor and the rest of society has widened (Massey, Eggers, and Denton 1994).

The Hispanic population in the United States accounts for a significant proportion of the urban poor. Historically, the poverty level among Hispanics has been higher than among the general population and has remained high even at times when poverty for other groups has declined (Barancik 1990; Massey 1993; Melendez 1993). According to the 1994 Current Population Survey (CPS), 10.3 percent of the U.S. population in 1994 was of Hispanic origin. (The CPS codes as Hispanic anyone who self-identified in one of a set of specific categories, including “Mexican,” “Puerto Rican,” “Cuban,” or “Other Hispanic Origin.”) The 1994 CPS estimated that 27.3 percent of Hispanics lived under the poverty line, compared to 7.6 percent for the non-Hispanic white (NHW) population. The CPS also estimated that poverty varied greatly among Hispanic groups, with a low of 17.6 percent among Cubans and a high of 35.4 percent among Puerto Ricans.

Because of the fast-paced growth of the Hispanic population, it is important to understand what happens to this population as it ages. During the next few decades, the Hispanic elderly population is

expected to grow four times as fast as the general elderly population (Miranda and Stanford 1992). Hispanics 60 years and older make up about 5 percent of the total population in that age group. Among the different Hispanic groups, the proportion of the population aged 60 years and above ranges from 6.1 percent for Mexican-Americans to 25 percent for Cubans, with Puerto Ricans in between at close to 9 percent (Cordova and Del Pinal 1995).

Elderly Hispanics face many of the same problems that have characterized the Hispanic experience in general. They are three times as likely to be poor when compared with white elders. Figures from the 1994 CPS indicate that 17.6 percent of all Hispanic householders aged 65 and older live under the poverty line (Cordova and Del Pinal 1995), in contrast to 4.6 percent for non-Hispanic whites in the same age group. Within the Hispanic population, Puerto Ricans have the highest rate of elderly poverty, at 26.6 percent. For Mexican-Americans and Cubans, the figures were around 21.1 percent and 10.8 percent, respectively. Certain subgroups within the elderly Hispanic population experience even greater disadvantage: women 75 years and older had a poverty rate of 30.1 percent in 1990 compared to 17.3 percent for NHW women in the same age group (U.S. GAO 1992). Poverty is especially widespread among elderly Hispanics living alone and with no immediate relatives.

Social Security benefits and retirement pensions—the most common sources of income for the general elderly population—are not options for a substantial number of Hispanic elders. Major reasons for this are migration to the United States at an older age (particularly true of Cubans and Dominicans), and no work experience to qualify for Social Security or a work history in unstable occupations that offer few fringe benefits and instability (particularly the case among Puerto Ricans). Given these conditions, the number of Hispanic elders able to save for retirement is likely to be very low. Many of these elders will be dependent on Social Security income and on Supplemental Security Income (SSI). Still, when compared with black or white elderly, Hispanic elderly are less likely to receive Social Security benefits or income from pensions. In 1990, 93 percent of NHW elders and 88 percent of black elderly received Social Security

while only 80 percent of Hispanics received such benefits (National Council of La Raza [NCLR] 1992). Hispanic elders also received lower average benefits than NHW elders and were more likely to rely on SSI benefits. Hispanics are also less likely to be working after age 65 than their non-Hispanic peers (Andrews 1989).

Financial insecurity in old age among Hispanics is increasingly accompanied by an increase in chronic ailments and mobility limitations. For example, data from the Westat survey on the economic, health, and social status of elderly Hispanics (Andrews 1989) showed that 40 percent of elderly Hispanics reported difficulties with functional ability as measured by the Activities of Daily Living (ADL) instrument.[1] Puerto Ricans reported greater difficulty with ADLs than did other groups. For example, about 22 percent of the Hispanic elders surveyed had been hospitalized in the prior year, compared to 18 percent of all elders. For Puerto Ricans, the percentage hospitalized was much greater—32 percent (Andrews 1989). While Hispanic elders have higher rates of disability than NHW elders (Trevino and Moss 1984), there is some evidence that they tend to underutilize assistance programs (Wallace, Levy Storms, and Ferguson 1995).

Based on evidence from the general Hispanic population, we would expect Hispanic elders to experience considerable social disadvantage. Most indicators suggest that the growing numbers of Hispanic elders are at risk for a variety of problems. Because little research has been conducted on this group, we do not know much about their poverty situation and its demographic and social correlates.

This paper examines the situation of Hispanic elders in Massachusetts, a group composed largely of Puerto Rican- and Dominican-origin elders. Puerto Ricans were the first Hispanics to settle in large numbers in the northeastern United States, and, since the early 1950s, there has been a large community of Puerto Ricans in the Northeast, particularly in the New York City area (Falcón 1991). In contrast, Dominican migration began in significant numbers during the mid-1960s and increased rapidly during the

1970s. Although New York City was the original settlement area for both groups, their numbers have increased throughout the region.

In this report, we discuss social and demographic correlates of poverty among Hispanic elders in Massachusetts, with emphasis on the role of living arrangements and migration. In addition, we examine the use of food assistance programs by Hispanic elders to understand the factors associated with participation.

Hispanics in Massachusetts

The Hispanic population of Massachusetts has registered fast-paced growth since the early 1970s. The number of Hispanics doubled between 1970 and 1980 and again between 1980 and 1990 (Rivera 1993). Massachusetts, with an estimated Hispanic population of close to 300,000 in 1990, now has the tenth largest Hispanic population in the country. However, these numbers understate the impact of the Hispanic presence in the state. The concentration of the Hispanic population in urban areas makes their impact much larger. Hispanics constitute at least 10 percent of the population in seven of the seventeen largest cities in the state. In Holyoke, Lawrence, and Chelsea, Hispanics make up, respectively, 31.1 percent, 41.6 percent, and 31.4 percent of the population (Rivera 1993). While the initial settlement of Hispanics in Massachusetts was predominantly composed of Puerto Ricans, an influx of Dominicans and Central/South Americans over the last two decades has contributed to the growth and diversification of the Hispanic population.

Hispanics in Massachusetts have one of the highest rates of poverty among Hispanics in the country—twice the national Hispanic average at the beginning of the 1990s (Melendez 1993). During the 1980s, the Massachusetts economy experienced a period of boom and bust. Most population groups went through this period without a substantial erosion in their standard of living, but Hispanics experienced a drastic increase in poverty. Although there are various explanations for this deterioration in socioeconomic

status, it is clear that this is a community growing at a very fast pace and experiencing adjustments as they integrate into an economy also in transition (Falcón 1993).

DATA

The data for this analysis are from the Massachusetts Hispanic Elders Study (MAHES) conducted between 1992 and 1996. This ongoing study has been funded by the National Institute of Aging (NIA) to estimate the prevalence and severity of physical frailty (disability) among Hispanic elders (aged 60 years and above) living in the state of Massachusetts, and among an NHW-neighborhood comparison group; to estimate the prevalence of diet-related health conditions, including obesity, undernutrition, diabetes and co-morbidity, hypertension and hyperlipidemia; to describe dietary status and other health-related behaviors (such as exercise, alcohol use, and smoking); and to measure associations between diet, health, and disability. This study is the first to directly address these issues with a sample of Puerto Rican and Dominican elderly. Socio-epidemiological work on Puerto Rican elderly is scarce and there is no prior work with the elderly Dominican population in the United States. Most of the existing research findings on the health of Hispanic elders is based on analyses of Mexican-Americans.

Collecting data on minority populations is usually complicated by the lack of an adequate sampling frame. According to the 1990 Census, the Massachusetts Hispanic population was close to 290,000, with fewer than 20,000 Hispanics over the age of 59 years. The sample selection for the MAHES was done using a two-stage cluster sampling technique where counties and blocks served as the two levels of the hierarchy. The initial subject target was interviews with 750 elderly Hispanics and 250 neighborhood-based non-Hispanic whites. Sample clusters (30) were randomly assigned to counties based on the proportional representation of Hispanics over age 55 (in 1990) in the county. Once sample clusters were allocated to counties, samples of 25 subject blocks were selected with probability of selection of a block proportionate to number of eligible Hispanics in the block. Despite a time-consuming process of enumerating and locating

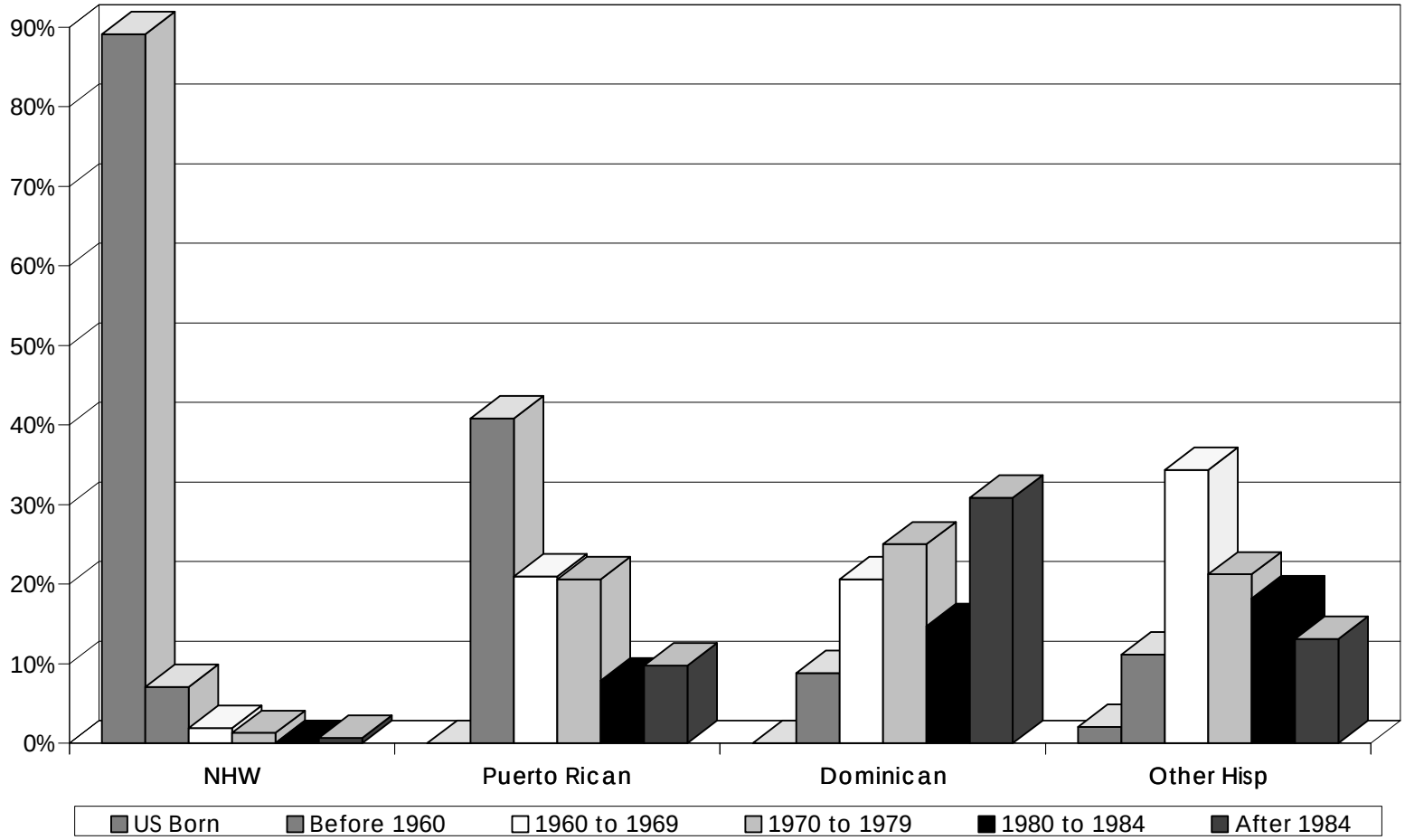
the respondents, a total of 600 interviews were completed by the summer of 1995. (The sample breakdown is 45.2 percent Puerto Ricans, 11.5 percent Dominicans, 16.7 percent other Hispanics, and 26.7 percent non-Hispanic whites.) A two-year continuation grant has been received from NIA so that a revised target of 900 interviews can be completed.

The interviews ask for information on household composition, migration, employment history, acculturation, income, health insurance and income assistance, food security, social and community support assistance, physical activity, health behavior and standardized scales on depression (CES-D), instrumental activities of daily living (IADL), activities of daily living (ADL), and cognitive function. In addition, information is collected on health conditions and use of medications. A specially designed food-frequency questionnaire and a 24-hour diet recall are administered to gather information on food and nutrient intake. Some components of the interview were developed or adapted specifically for this study, while others parallel those used in the Third National Health and Nutrition Examination Survey (NHANES III), which allows for comparisons with U.S. population-based data. Interviews were completed in either Spanish or English based on the respondent's preference.

DEMOGRAPHIC CHARACTERISTICS

As noted above, the Hispanic population in Massachusetts has grown rapidly over the last two decades. The timing of the arrival of the different Hispanic groups, however, varies markedly, reflecting the variety of experiences these groups have had. The Hispanic elders in the MAHES sample present a distribution of old settlers and of recent arrivals to the state. Figure 1 presents data on the year of arrival of respondents in the MAHES. Although the non-Hispanic whites are overwhelmingly U.S.-born, the Hispanics are mostly foreign-born. The modal category for period of arrival for each of these Hispanic groups coincides with the historical period of largest out-migration from their respective countries. For

FIGURE 1
Time Frame of Arrival on the U.S. Mainland, by Ethnic Group
(Respondents Aged 60+)



Source: MAHES.

Puerto Ricans, the period prior to 1960; for Dominicans, the period after 1970. The other Hispanic group—a mix of Cubans and other Central/South Americans—includes a large number of longtime residents as well as many who have arrived since the 1970s. The Puerto Rican and Dominican groups both have noticeable proportions who have arrived in Massachusetts within the last ten years, and Puerto Ricans also make up the largest proportion of arrivals prior to the 1960s. The average number of years in Massachusetts was 21.2 years for other Hispanics, 20.7 years for Puerto Ricans, and 13.6 years for Dominicans.

U.S. Hispanics in general are a young population, and among elders aged 60 years and above, the age distribution is concentrated at the lower end (Table 1). About one-third of the over-60 population of Puerto Ricans and Dominicans are in the 60- to 64-year age group. In contrast, the age profile of the other Hispanics is closer to that of non-Hispanic whites.

Table 1 also highlights some differences in marital status between the Hispanics and the non-Hispanic whites in our sample. Hispanics are more likely to be married than are non-Hispanic whites. Dominicans, the group with the youngest age structure, present the highest proportion married, followed by Puerto Ricans and other Hispanics. Non-Hispanic whites are more likely to be divorced, but Puerto Ricans are more likely to be separated. Hispanics are less likely to live alone than are non-Hispanic whites. However, despite a common assumption that Hispanics are more likely to live with relatives, more than one-third of the Puerto Rican and other Hispanic elders were living alone. A large proportion of each of the three Hispanic groups were living with other relatives. In most of these cases, the elders are actually the household head and sole providers for their children or grandchildren. Only about 10 percent of the Hispanic elders in the sample are non-household heads living in the households of other family members.

There are marked differences in education between Hispanics and non-Hispanic whites aged 60 and above. As shown in Table 2, large proportions of Puerto Rican (69 percent), Dominican (65.2

TABLE 1
Demographic Characteristics by Group
(in percentages)

	NHW	Puerto Rican	Dominican	Other Hispanic
Age				
60–64 yrs	14.4	29.2	33.8	26.7
65–74 yrs	47.5	43.9	42.7	42.6
75+ yrs	38.1	26.9	23.5	30.7
Marital Status				
Married	26.9	32.8	47.1	36.8
Widowed	37.5	30.6	26.5	33.7
Divorced	15.6	10.7	7.4	11.9
Separated	5.0	24.0	13.2	11.9
Never married	15.0	1.9	5.9	5.9
Living Arrangements				
Married, lives with spouse	25.0	32.1	46.4	34.0
Not married, lives with others	15.6	35.4	34.8	30.0
Not married, lives alone	59.4	32.5	18.8	36.0
N	160	271	69	100

Source: All tables, MAHES 1996.

TABLE 2
Education Distribution by Group and Gender

	NHW	Puerto Rican	Dominican	Other Hispanic
Males				
0–6 years	8.6%	69.4%	65.2%	47.6%
7–11 years	37.1%	21.6%	26.1%	19.1%
12 years	21.0%	2.7%	0.0%	7.1%
≥13 years	33.9%	6.3%	8.7%	26.2%
N	57	111	24	42
Females				
0–6 years	4.1%	80.0%	80.0%	71.2%
7–11 years	41.8%	11.3%	15.4%	8.5%
12 years	24.5%	3.8%	2.2%	5.1%
≥13 years	29.6%	5.0%	2.2%	15.3%
N	98	160	45	59

percent), and other Hispanic (47.6 percent) men have completed six years or less of school, compared with only 8.6 percent for non-Hispanic whites. Only 9 percent of Puerto Rican and 8.7 percent of Dominican men had completed high school. Educational differences between Hispanic and NHW women are more marked, with even higher proportions of Hispanic elders having completed six years of school or less. Because a large number of Hispanics are foreign-born and because many have low education levels, limited use of the English language is a common obstacle. Data from the 1990 Public Use Microdata Samples (PUMS) show that, among the population aged 60 years and above, about 71 percent of Dominicans, 55 percent of Puerto Ricans, and 35 percent other Hispanics did not speak English well or did not speak English at all. Living in a household that faces language barriers in communicating with service providers has been documented as a problem for Hispanic elders (Andrews 1989). The vast majority of Hispanic elders reside in households where Spanish is the language spoken. Dominicans, the most recently arrived group, have the highest proportion (98 percent), followed by 88 percent of Puerto Ricans. Slightly over half (52 percent) of Puerto Rican elders reside in linguistically isolated households while for Dominicans the figure was 46 percent.[2] For this older population, which is more likely to be in need of services, language barriers could seriously affect their ability to interact with service providers.

Given their disadvantaged educational profiles, it is not surprising that the Hispanic groups include large numbers who were last employed in low-wage jobs. Table 3 presents the distribution of the last/current sector of employment for males and females in the MAHES. In general, NHW men had a better occupational profile than Hispanics. Still, the modal category for all groups was blue-collar employment. Among the Hispanics, other Hispanics are the only group with a large proportion formerly employed in professional or technical jobs. Notice also the large proportion of Puerto Rican and Dominican men whose last occupation was in agriculture, underscoring the rural backgrounds of many of these immigrants. Many of the initial migrants from Puerto Rico, for example, came to work in agricultural labor throughout the Northeastern United States (Falcón 1991).

TABLE 3
Sector of Last Occupation by Group and Gender

	Group			
	NHW	Puerto Rican	Dominican	Other Hispanic
Males				
Prof/Tech	16.7%	2.9%	0.0%	12.5%
Clerical/Sales	11.1%	3.8%	11.1%	3.1%
Service	11.1%	25.7%	38.9%	34.4%
Blue collar	51.9%	44.8%	38.9%	50.0%
Agriculture	3.7%	19.0%	11.1%	0.0%
Never worked	5.6%	3.8%	0.0%	0.0%
Females				
Prof/Tech	16.3%	2.6%	2.5%	2.5%
Clerical/Sales	28.3%	3.9%	5.0%	10.4%
Service	28.3%	27.5%	20.0%	39.6%
Blue collar	17.4%	34.6%	42.5%	22.9%
Agriculture	0.0%	9.2%	0.0%	0.0%
Never worked	9.8%	22.2%	30.0%	25.0%

The distribution of former occupations for women shows a similar concentration in blue-collar employment but also includes large proportions in service employment. Among Puerto Rican women, we also find about 10 percent whose last job was in agriculture. Further, a large proportion of Hispanic women (22.2 percent of Puerto Ricans, 30 percent of Dominicans, and 25 percent of the other Hispanics) have never held a paying job. The proportion currently employed varied across groups, with the Dominicans and other Hispanics making up the largest proportion. Only 3.8 percent of Puerto Rican elders were currently employed, in contrast with 7.3 percent of non-Hispanic whites, 15 percent of Dominicans, and 21 percent of other Hispanic elders.

In summary, Hispanics, a recently arrived population to the state of Massachusetts, exhibit a clearly disadvantaged profile. Although younger on average, Hispanic elders (aged 60 years and above) have lower educational levels than their NHW counterparts, and have employment histories characterized by low-wage occupations. While they are more likely to live with relatives or a spouse than NHW elders, they are very likely to live in a linguistically isolated household, which could restrict their access to needed services.

Income and Poverty

Because of their lower educational background and their concentration of employment in low-wage occupations, Hispanic income levels are far behind those of non-Hispanics. Table 4 presents data from the MAHES on average and median income and income per capita for the respondents' household by group. Dominicans and Puerto Ricans fare the worst on both indicators when compared to non-Hispanic whites and to "Other Hispanics." While differences in median income are not dramatic, the average income and the income per capita figures underscore the differences in income level and distribution between Hispanics and non-Hispanic whites and across Hispanic groups. Because our NHW sample is selected from non-Hispanic whites who reside in Hispanic areas, their income levels are low when compared to the general population. However, they are more likely to live alone and their per-

TABLE 4
Income Indicators by Ethnic Group

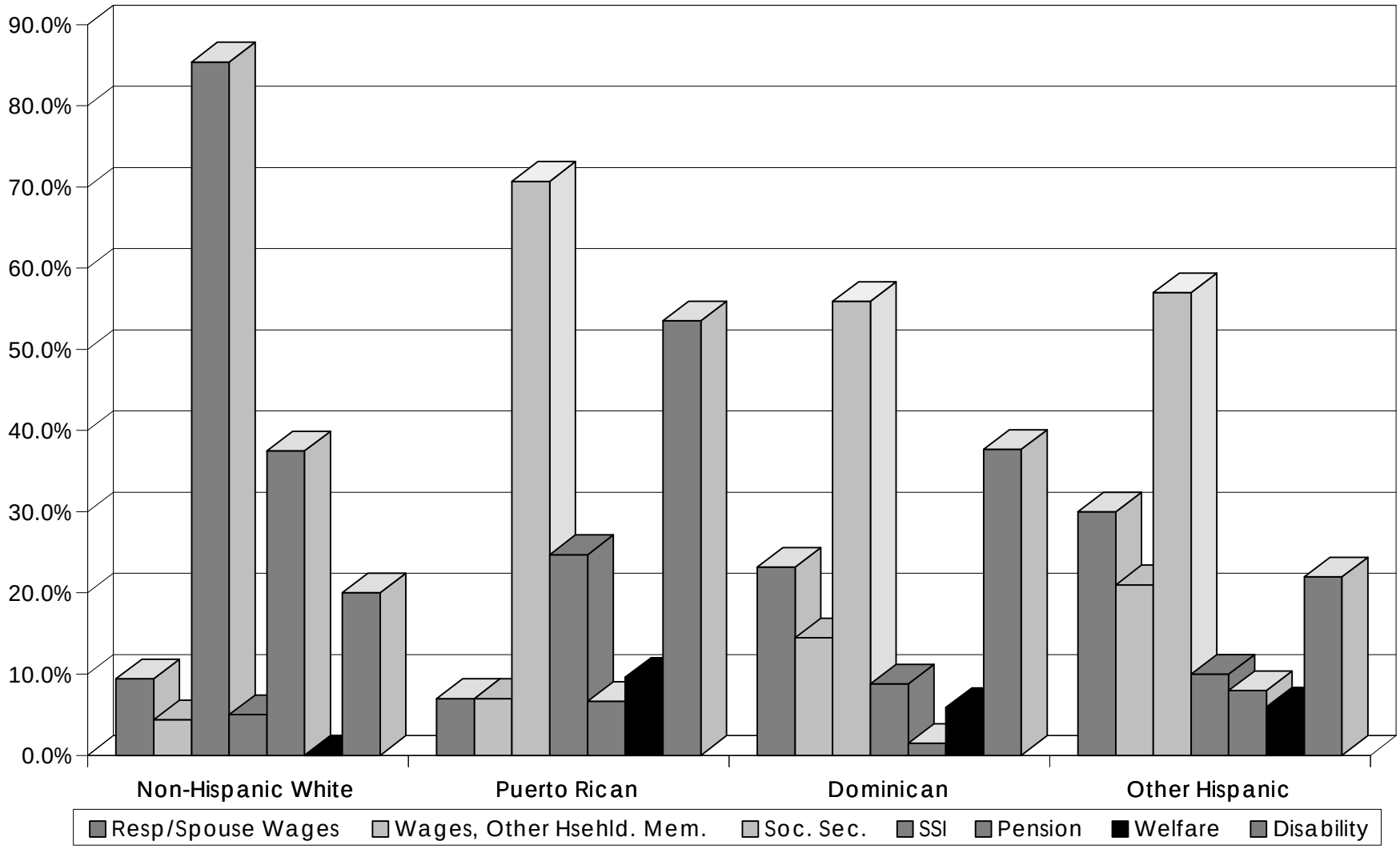
	Mean Income	Std. Deviation	Median Income	Mean Income per Capita
Non-Hispanic White	$17,411.90	$26,207.80	$10,200.00	$10,742.80
Puerto Rican	$11,300.60	$8,547.30	$9,312.00	$5,753.50
Dominican	$10,605.70	$6,112.40	$9,600.00	$4,580.50
Other Hispanic	$18,285.10	$19,835.60	$10,800.00	$9,384.70

capita incomes are much higher than those of Hispanics, once differences in the number of household members are accounted for. The households of elder Hispanics survive on about half the per-capita income of elder NHW households.

The lower income levels of Hispanics reflect a smaller number of income sources. At the Massachusetts state level, data from the PUMS show that non-Hispanics had, on average, 1.8 sources of income while Puerto Ricans, Dominicans, and other Hispanics had 1.3, 1.3, and 1.4 sources, respectively. A more detailed analysis using the MAHES data is shown in Figure 2. Because most income at old age is tied to lifetime employment experience, Hispanics rely more heavily on income from Supplemental Security Income (SSI) and Social Security (SS) than do the non-Hispanic whites. Wages of the respondent or a spouse are important sources of income for Dominicans and other Hispanics, who tend to be younger. Conversely, these two groups are less likely to receive social security benefits or SSI than are the Puerto Ricans, who have been on the mainland longer and are citizens by birth. Puerto Rican elders report the highest proportion receiving income from welfare whereas non-Hispanic whites report the highest proportion receiving income from pension plans.

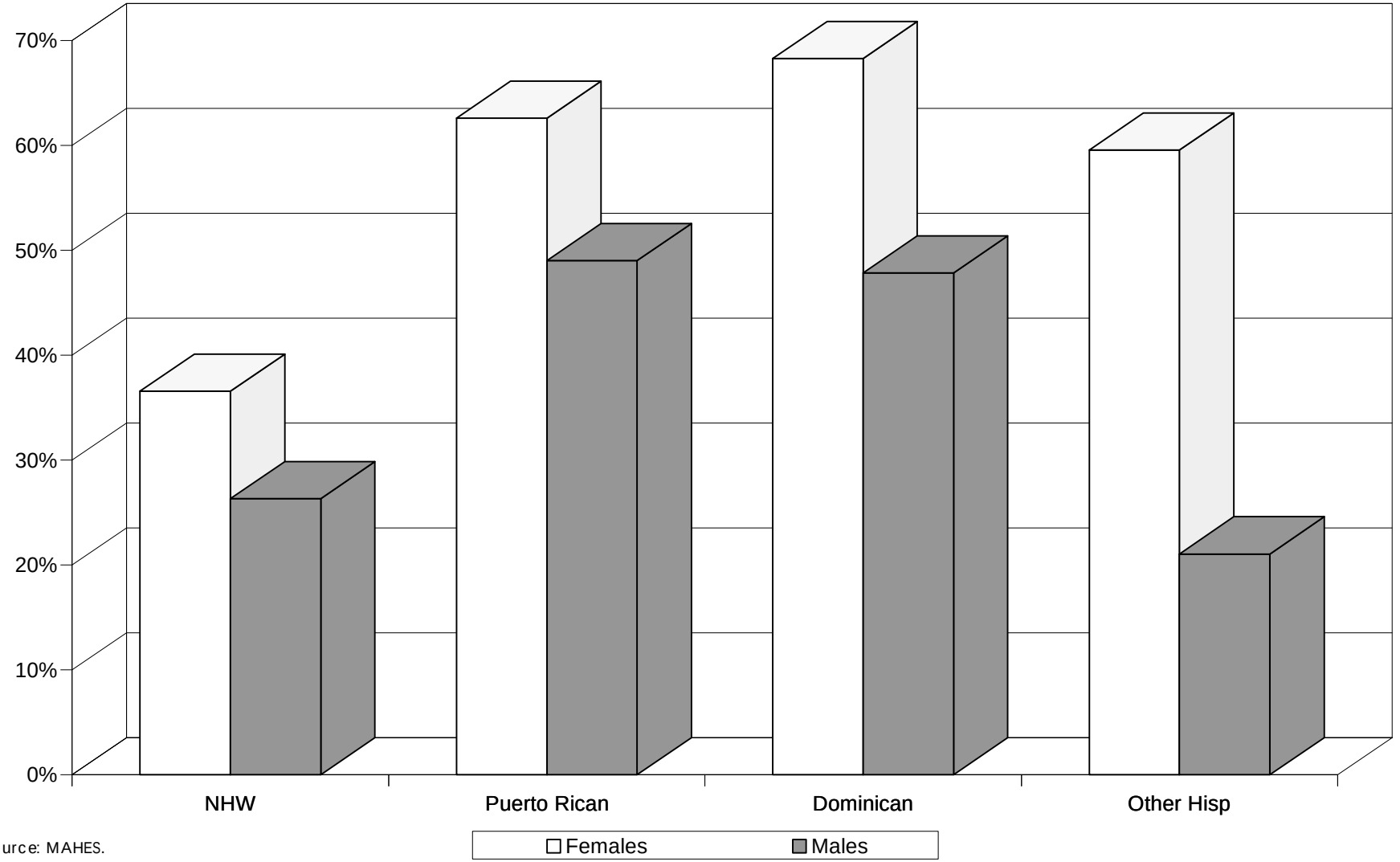
Consistent with this low income profile, Hispanics have much higher rates of poverty when compared to non-Hispanic whites from the same neighborhoods. Figure 3 presents the percentage of the population within each ethnic and gender group in households that had received income at or below the poverty line during the year prior to being interviewed. Consistent with the overall profile presented so far, there is a hierarchy of poverty levels—Dominicans and Puerto Ricans most impoverished, followed by other Hispanics. The poverty rate for Puerto Rican elders is about twice as large as that of non-Hispanic whites. Women are more likely to be in poverty than men, and Puerto Rican and Dominican women are the most disadvantaged of all groups.

FIGURE 2
Percentage with Specific Sources of Income, by Group



Source: MAHES.

FIGURE 3
Percentage Living in Poverty, by Ethnic Group and Gender



Source: MAHES.

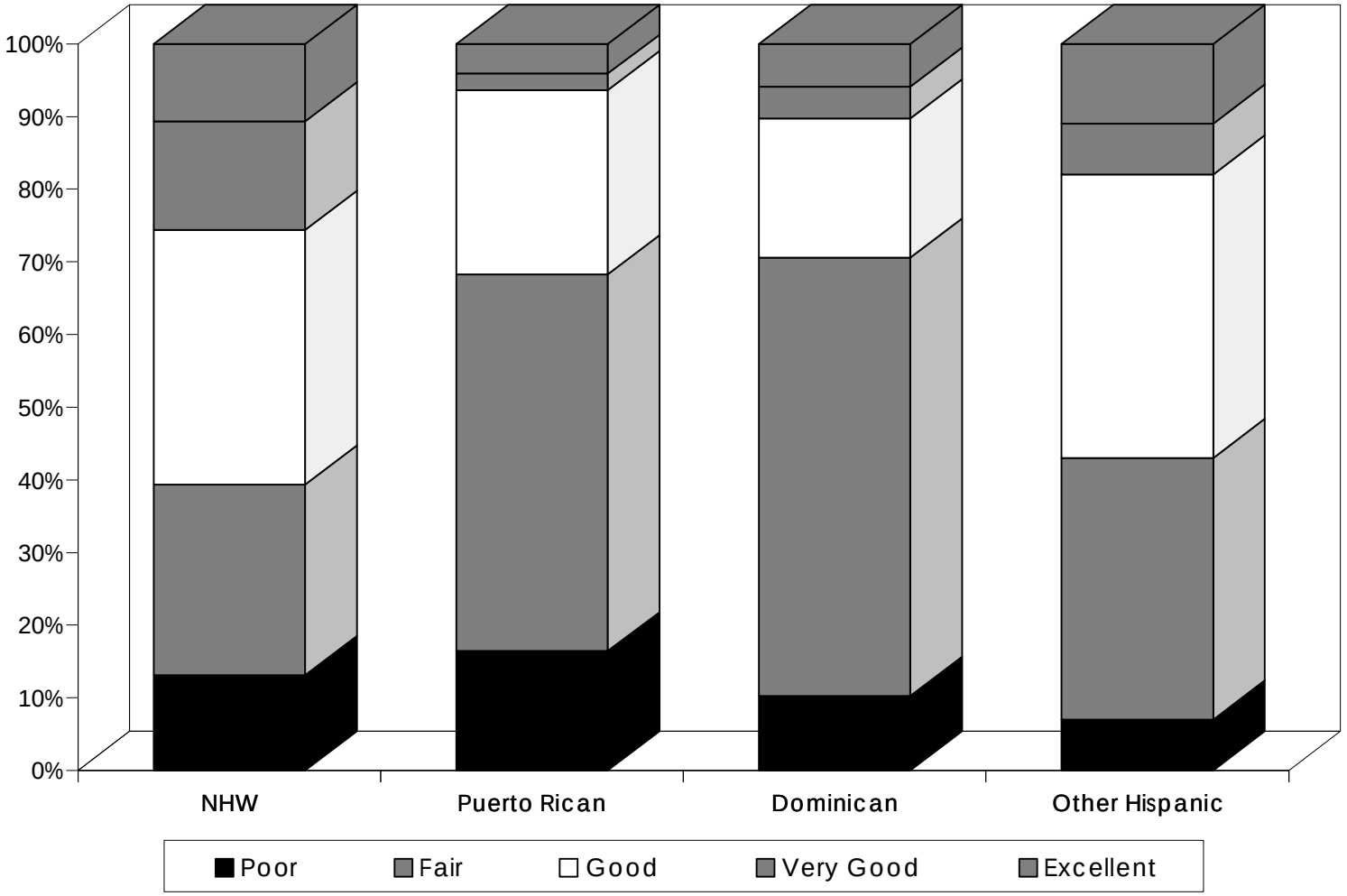
Self-Rated Health and Disability

General health is another area where Hispanic elders differ markedly from their non-Hispanic white counterparts. Evidence of poor health status among Hispanics in general has been documented in several studies (Flack et al. 1995; Torres-Gil 1986). Puerto Ricans tend to rate their health as being much worse than do members of other groups.[3] In the MAHES study (Figure 4) very few Hispanic elders rated their health as being excellent or very good. Among Puerto Ricans and Dominicans the majority—about two-thirds—rated their health as fair or poor.

Given such poor assessments of their own health, it is not surprising that Hispanic elders report higher levels of disability when compared with non-Hispanics. Data from the PUMS for Massachusetts suggest that Puerto Rican elders experience much higher levels of mobility and personal care limitations than any other elderly group.[4] About 38 percent of Puerto Ricans reported a mobility or self-care limitation, compared to around 20 percent of Dominicans, other Hispanics, and non-Hispanic whites. Similarly, the highest proportion reporting *both* mobility and self-care limitations were the Puerto Ricans (12 percent), followed closely by non-Hispanic whites.

The MAHES study also found greater disability among the Puerto Rican subgroup, although the non-Hispanic white sample in this study, who live in the same neighborhood as the Hispanic sample, had much greater disability levels than those in the general NHW population surveyed by the PUMS. More than 63 percent of Puerto Ricans reported having some difficulty with at least one mobility or self-care item—38 percent (similar to the PUMS data) reported great difficulty.[5] Table 5 presents the relative proportions reporting some or great difficulty with mobility or self-care items on the ADL scale and it illustrates that most of the reported disability comes from mobility limitation.[6] The lower functional status of elderly Hispanics implies a greater need for care and supervision and has implications for their ability to access necessary services and to provide themselves with adequate nutrition.

FIGURE 4
Health Self-Assessment, by Ethnic Group



Source: MAHES.

TABLE 5
Percentage with Mobility or Self-Care
Limitations by Level of Difficulty and Group

	Mobility Limitation		*Self-Care Limitation*	
	Some Difficulty	Great Difficulty	Some Difficulty	Great Difficulty
NHW	51.9%	31.0%	26.3%	9.4%
Puerto Rican	62.9%	37.9%	23.0%	8.9%
Dominican	58.8%	23.5%	17.4%	5.8%
Other Hispanic	45.5%	24.2%	20.0%	8.0%

Our review of the social and demographic characteristics of our sample has highlighted the relatively disadvantaged position of Hispanic elderly. While rates of poverty among Hispanics are high, even when compared with the NHW who live in the same areas, there are also large differences in group characteristics like household arrangements and education. We used logistic regression analysis to examine characteristics associated with poverty and with differences in poverty rates across groups. In Table 6, results for the logistic regression are presented in four models. The first model regresses the dependent variable living in poverty (1=yes, 0=no) on three variables representing each of the Hispanic groups and omitting non-Hispanic whites as the reference category. The subsequent three models introduce controls for sex, age, living arrangements, current employment, education, and sources of income.

The first model in Table 6 shows large and significant effects of Hispanic ethnicity on the relative probability of being poor. Relative to neighboring non-Hispanic whites, the odds ratios (OR) for being poor range from 1.6 times more likely for other Hispanics to 3.2 times more likely for Dominicans. Introducing controls for gender, age, and living arrangements fails to close the gap in the likelihood of living in poverty for Hispanics relative to non-Hispanic whites. Rather, the ORs for all three Hispanic groups *increase* after adjusting for these factors. Of these variables, those associated with living arrangements are most significant. Those living alone are most likely to be poor and those living with a spouse, least likely. No interactions tested between these variables and ethnicity were significant. Therefore, because fewer Hispanics were living alone, control for this factor leads to an increase in the OR for poverty among Hispanics versus non-Hispanic whites.

Consistent with most research on gender and poverty, being male reduces the probability of living in poverty by about 35 percent. Poverty is more common among women because being female is associated with characteristics related to poverty, including more unstable work histories, widowhood,

TABLE 6
Logistic Regression of Living in Poverty on Individual Characteristics

	Model 1			Model 2			Model 3			Model 4		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	1.040	0.000	2.828	1.383	0.000	3.989	0.649	0.038	1.913	0.420	0.198	1.522
Dominican	1.178	0.000	3.247	1.763	0.000	5.832	1.201	0.003	3.322	0.902	0.030	2.465
Other Hispanic	0.471	0.100	1.602	0.681	0.027	1.976	0.363	0.302	1.437	0.066	0.857	1.069
NHW	--	--	--	--	--	--	--	--	--	--	--	--
If male				-0.436	0.031	0.647	-0.432	0.039	0.649	-0.454	0.033	0.635
Age				-0.015	0.227	0.985	-0.029	0.025	0.971	-0.024	0.071	0.976
Married, lives with spouse				-1.635	0.000	0.195	-1.580	0.000	0.206	-1.583	0.000	0.205
Not married, lives with others				-0.546	0.024	0.580	-0.609	0.015	0.544	-0.664	0.009	0.515
Not married, lives alone				--	--	--	--	--	--	--	--	--
Currently working							-1.301	0.002	0.272	-1.333	0.002	0.264
Education												
≥12 yrs							-1.280	0.000	0.278	-1.186	0.000	0.305
5–11 yrs							-0.508	0.061	0.602	-0.387	0.160	0.679
0–6 yrs							--	--	--	--	--	--
Social Security Income										-0.189	0.419	0.828
Receives pension income										-0.991	0.003	0.371
Constant	-0.759	0.000		0.869	0.349		2.846	0.006		2.906	0.005	

higher probability of living alone, lower incomes, and older age (Hardy and Hazelrigg 1993; Zick and Smith 1991).

Marital status and living arrangements also have important associations with poverty. When compared to elders who live alone, elders who live with a spouse are 80 percent less likely to be poor. Elders who are not married but live with others are 42 percent less likely to be poor than those who live alone.

In model 3, control for current employment and education reduces the likelihood of poverty for Hispanics. The other Hispanics are no longer significantly different from the non-Hispanic whites and the significance level for Puerto Ricans is lower than for non-Hispanic whites. Higher education is strongly associated with reduced likelihood of poverty, which is consistent with previous findings in the literature (Andrews 1989; Bean and Tienda 1987). In addition, elders who are currently working are about two-thirds less likely to be poor than those not currently working.

The fourth model includes control variables for receiving Social Security income and pension income, with interesting effects on the ethnic variables—the significant effect of Puerto Rican ethnicity on poverty disappears. Dominican ethnicity still remains significantly associated with higher odds of poverty although somewhat attenuated by the income source variables. Once we adjust for the higher propensity among the non-Hispanic whites to receive pension income, the odds of poverty for the Hispanic groups are reduced. It is evident that a major factor behind higher poverty for Hispanic elders is the limited number of sources of income in old age, in particular the lack of pension income.

In Table 6A, the same analytical models are presented excluding the non-Hispanic whites from the analysis. Across Hispanic groups, Puerto Ricans and Dominicans are, respectively, 1.8 times and 2.1 times more likely to live in poverty than are other Hispanics. Controlling for sex, age, and living arrangements increases the likelihood of higher poverty for these two groups. After controls for current employment and education are introduced in model 3, the difference between Puerto Ricans and other

TABLE 6A
Logistic Regression of Living in Poverty on Individual Characteristics
Including Age at Arrival: Hispanic Groups Only

	Model 1			Model 2			Model 3			Model 4		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	0.562	0.030	1.754	0.682	0.014	1.979	0.267	0.374	1.305	0.331	0.280	1.392
Dominican	0.743	0.030	2.101	1.051	0.005	2.859	0.818	0.036	2.267	0.729	0.067	2.073
Other Hispanic	--	--	--	--	--	--	--	--	--	--	--	--
If male				-0.514	0.030	0.598	-0.520	0.035	0.594	-0.421	0.096	0.657
Age				-0.017	0.246	0.983	-0.034	0.031	0.967	-0.046	0.011	0.955
Married, lives with spouse				-1.433	0.000	0.239	-1.388	0.000	0.250	-1.471	0.000	0.230
Not married, lives with others				-0.588	0.034	0.556	-0.644	0.025	0.525	-0.705	0.017	0.494
Not married, lives alone				--	--	--	--	--	--	--	--	--
Currently working							-1.491	0.001	0.225	-1.555	0.001	0.211
Education												
≥12 yrs.							-1.101	0.004	0.333	-1.006	0.010	0.366
5–11 yrs.							-0.346	0.264	0.708	-0.305	0.328	0.737
0–6 yrs.							--	--	--	--	--	--
Social Security Income										-0.263	0.305	0.769
Receives pension income										-0.279	0.584	0.757

(table continues)

TABLE 6A, continued

	Model 1			Model 2			Model 3			Model 4		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Arrived in MA at ≥60										0.835	0.035	2.305
Arrived in MA at 40–59										0.784	0.014	2.189
Arrived in MA at < 40										--	--	--
Constant	-0.324	0.150		1.646	0.125		3.450	0.004		3.824	0.003	

Hispanics disappears. The final model introduces the sources of income variables and the age at arrival in Massachusetts. Among Hispanics, the sources of income variables are not significant factors in explaining poverty once all the other variables are included. Older age at migration, however, is significantly associated with poverty status. When compared to Hispanics who arrived in the area before age 40, Hispanics who arrived after age 40 are about twice as likely to live in poverty. Among Hispanics, the final model shows greater poverty among females, those with less education, those not currently working, those living alone, and those who migrated to the area at an older age.

CORRELATES OF RECEIPT OF FOOD STAMPS AND FOOD ASSISTANCE

The major nutrition programs available to the elderly population are the Food Stamp program, the Food Commodity program, Congregate Meals programs, and Meals on Wheels. The first two programs are targeted to the low-income population in general, the latter to address the food and nutrition needs of the older U.S. population. The Food Stamp program is a means-tested voucher program in which recipients use food stamps to purchase food items. The Food Commodity program distributes food packages to needy individuals and families who fall under a set income threshold. Both Congregate Meals and Meals on Wheels were established under the Elderly Nutrition Program (ENP) authorized by Congress. Congregate meals are available to elderly who can leave their homes and attend a meal center; Meals on Wheels is a program for the homebound.

The literature on participation in food programs by minority elders is scant and mostly focused on African-American elderly. Reviewers of the ENP have been critical of its lack of success in reaching out to minority populations (see Balsam and Rogers [1991] for a review). A just-released report by the Administration on Aging suggests, however, that both the Congregate Meals and Meals on Wheels programs “successfully target subgroups of poor and minority elderly people” (Ponza, Ohls, and Millen 1996). Minority elders are sometimes difficult to reach because of residence in more isolated low-income

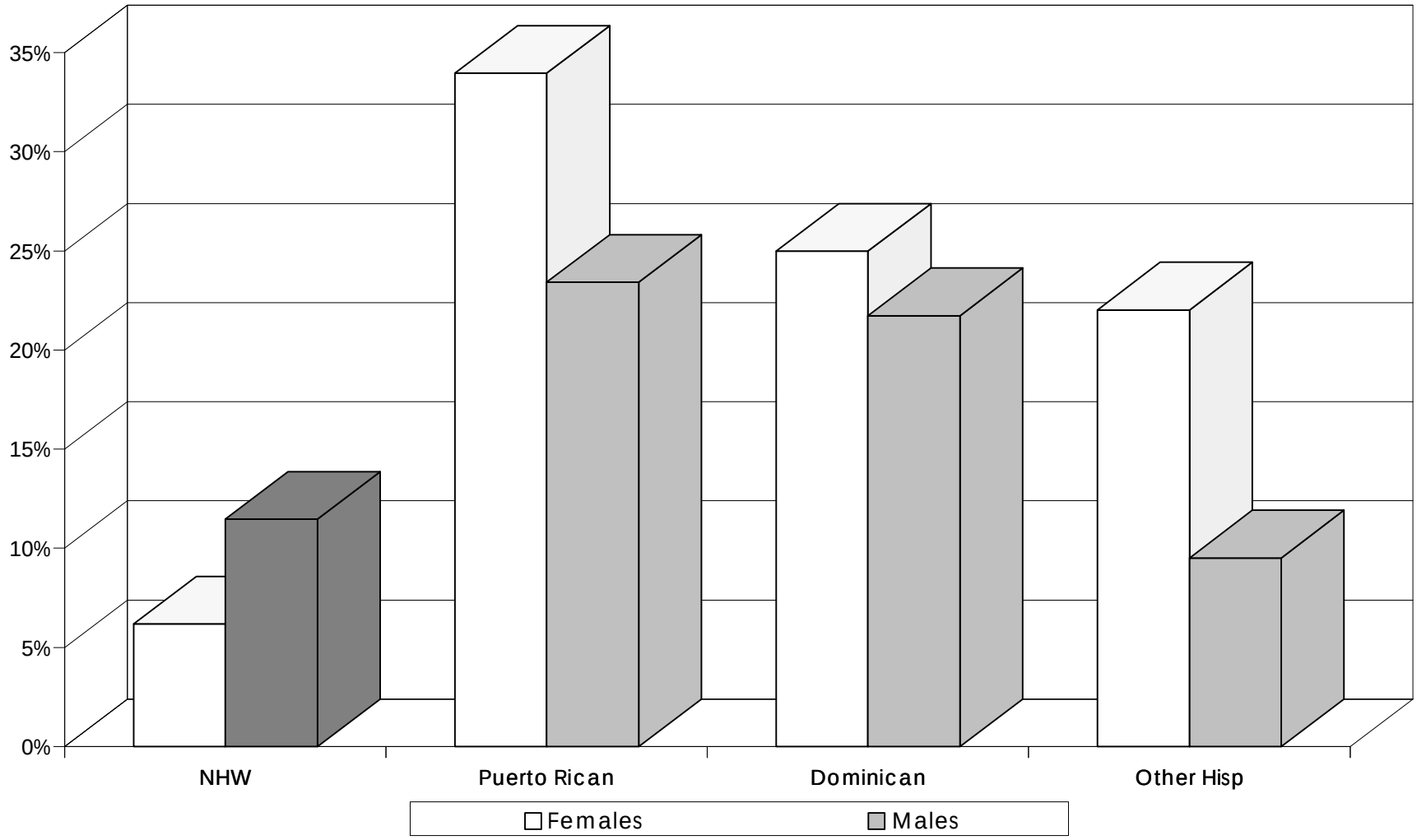
areas or isolation from information networks. Lack of cultural affinity with these programs also seems to be a factor in low participation rates. Holmes (1985) suggests that programs which incorporate cultural aspects in the food and activities, and whose staff are from the particular ethnic group, tend to be more successful in the delivery of services to minority populations. There is some evidence that elders who participate have a better nutritional profile than those who do not (Ponza, Ohls, and Millen 1996; Chernoff 1987). On the other hand, there is also some evidence that elders who experience the worst health and social conditions are less likely to know of these programs (Petersen and Maiden 1991) and, thus, to participate.

Food Stamps

As will be shown, participation in food programs varies markedly across the different elder groups in our sample. The following analysis presents the level of participation and attempts to identify factors significantly related to participation. Figure 5 presents the percentage receiving food stamps by group in the MAHES. The distribution of food stamp receipt is consistent with the pattern of poverty described earlier. Puerto Ricans make up the largest proportion receiving food stamps, followed by Dominicans, other Hispanics, and non-Hispanic whites. About one-third of Puerto Rican women and a quarter of Puerto Rican men were receiving food stamps. Among Dominicans, about a quarter of both men and women were receiving food stamps.

Can we explain the higher propensity of Puerto Ricans and Dominicans to receive food stamps? In Table 7, a logistic regression of receiving food stamps on individual characteristics is presented. The first model introduces the Hispanic ethnicity variables and shows higher probability of receipt for Hispanics. Puerto Ricans, Dominicans, and other Hispanic elders are 4.4 times, 3.6 times, and 2.3 times, respectively, more likely to receive food stamps than non-Hispanic whites. Controls for gender, age, and living arrangements in model 2 slightly increase the relative likelihood of receiving food stamps for all three Hispanic groups, suggesting that some of their characteristics—particularly a lower propensity to

FIGURE 5
Percentage Receiving Food Stamps,
by Ethnic Group and Gender



Source: MAHES.

TABLE 7
Logistic Regression of Receiving Food Stamps on Individual Characteristics

	Model 1			Model 2			Model 3			Model 4		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	1.479	0.000	4.390	1.593	0.000	4.917	0.881	0.034	2.414	0.517	0.235	1.677
Dominican	1.274	0.002	3.574	1.533	0.001	4.633	0.974	0.050	2.649	0.491	0.336	1.633
Other Hispanic	0.825	0.047	2.283	0.895	0.034	2.447	0.557	0.239	1.746	0.112	0.821	1.119
NHW	--	--	--	--	--	--	--	--	--	--	--	--
If male				-0.061	0.802	0.941	-0.017	0.947	0.984	0.107	0.683	1.113
Age				-0.016	0.265	0.984	-0.029	0.059	0.971	-0.018	0.241	0.982
Married, lives with spouse				-1.228	0.000	0.293	-1.138	0.000	0.320	-0.822	0.014	0.440
Not married, lives with others				-0.111	0.665	0.895	-0.128	0.628	0.880	-0.028	0.920	0.973
Not married, lives alone				--	--	--	--	--	--	--	--	--
Currently working							-1.925	0.011	0.146	-1.766	0.022	0.171
Education												
≥12 yrs.							-1.290	0.004	0.275	-0.922	0.046	0.398
5 –11 yrs.							-0.465	0.140	0.628	-0.234	0.470	0.791
0–6 yrs.							--	--	--	--	--	--
Social Security Income										-0.338	0.190	0.713
Receives pension income										-1.872	0.013	0.154
Under poverty line										1.009	0.000	2.742
Constant	-2.351	0.000		-0.924	0.404		0.822	0.494		-0.135	0.914	

live alone—contribute to lower food stamp receipt. The third model controls for education and current employment, rendering the coefficient for other Hispanics insignificant and reducing the odds ratios for food stamp use for both Puerto Ricans and Dominicans. The final model controls for sources of income and income under the poverty line, making the effects of Puerto Rican and Dominican ethnicity insignificant. The greater use of the Food Stamp program by Hispanics compared with neighborhood-matched non-Hispanic whites can therefore be largely explained by a lower level of education, a lower likelihood of being employed, the lack of additional sources of income, and higher poverty in general.

Table 7A presents a similar analysis restricted only to Hispanics. When compared to other Hispanics, Puerto Ricans report a significantly higher usage of food stamps. A lower propensity to being employed and lower education levels seem to account for this difference. Among Hispanics, those living with others, those currently employed, those with better education, and those who arrived to the area at an earlier age are less likely to use food stamps.

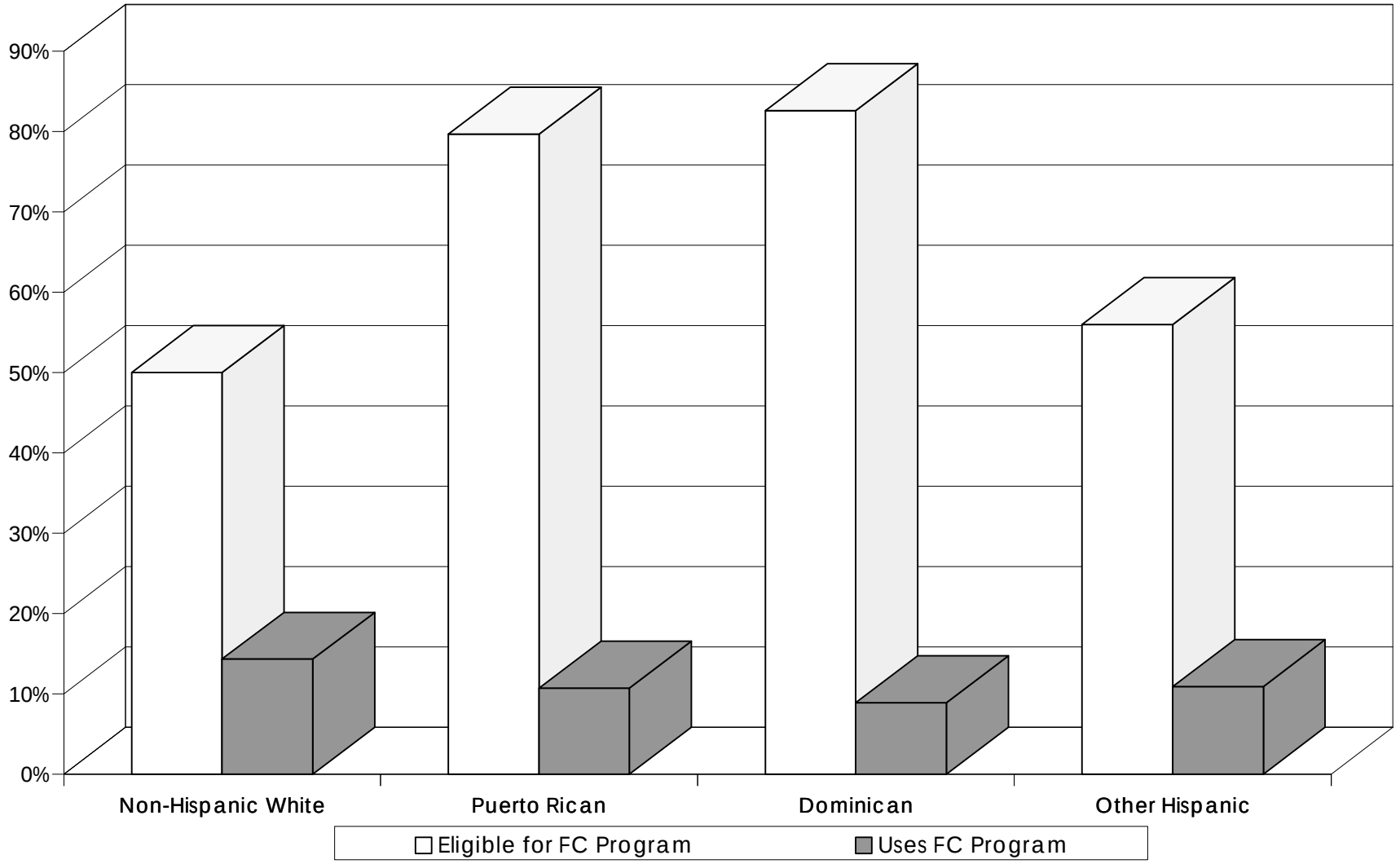
Food Commodity Program

The Food Commodity program is available to elders who meet elderly poverty income guidelines. Eligibility for the program is based on living in a household with an income level that is at or below 130 percent of the federal poverty guidelines, which are published annually by the Department of Health and Human Services. Participants in the MAHES study were asked if they had participated in the Food Commodity program during the last twelve months. Figure 6 presents the percentage of each group who were income eligible for a food commodity program and the percentage of the latter who actually used the program. Consistent with the earlier discussion of poverty, Dominicans and Puerto Ricans have the highest proportions that are income eligible for the food commodity program. However, among those eligible, the non-Hispanic whites have the highest participation. About 14 percent of eligible non-Hispanic whites used the program compared to 9 percent of eligible Puerto Ricans and other Hispanics and 7 percent of Dominicans. Once examined within a logistic regression model, contolling for the age,

TABLE 7A
Logistic Regression of Receiving Food Stamps on Individual Characteristics: Hispanics Only

	Model 1			Model 2			Model 3			Model 4		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	0.625	0.050	1.867	0.699	0.033	2.013	0.313	0.366	1.367	0.414	0.255	1.512
Dominican	0.404	0.321	1.498	0.628	0.141	1.874	0.362	0.414	1.436	0.236	0.607	1.267
Other Hispanic	--	--	--	--	--	--	--	--	--	--	--	--
If male				-0.231	0.387	0.794	-0.213	0.441	0.808	-0.015	0.961	0.986
Age				-0.007	0.686	0.994	-0.017	0.313	0.983	-0.023	0.244	0.977
Married, lives with spouse				-1.305	0.000	0.271	-1.225	0.000	0.294	-1.057	0.003	0.347
Not married, lives with others				-0.243	0.379	0.784	-0.266	0.349	0.766	-0.256	0.393	0.774
Not married, lives alone				--	--	--	--	--	--	--	--	--
Currently working							-1.805	0.018	0.164	-1.629	0.038	0.196
Education												
≥12 yrs.							-1.595	0.011	0.203	-1.276	0.048	0.279
5–11 yrs.							-0.262	0.436	0.769	-0.107	0.760	0.899
0–6 yrs.							--	--	--	--	--	--
Social Security Income										-0.353	0.200	0.702
Receives pension income										-1.142	0.150	0.319
Under poverty line										0.827	0.003	2.285
Arrived in MA at ≥ 60										0.543	0.155	1.721
Arrived in MA at 40–59										0.823	0.074	2.278
Arrived in MA < 40										--	--	--
Constant	-1.482	0.000		-0.569	0.630		0.707	0.576		0.130	0.928	

FIGURE 6
Eligibility and Use of Food Commodity Programs, by Ethnic Group



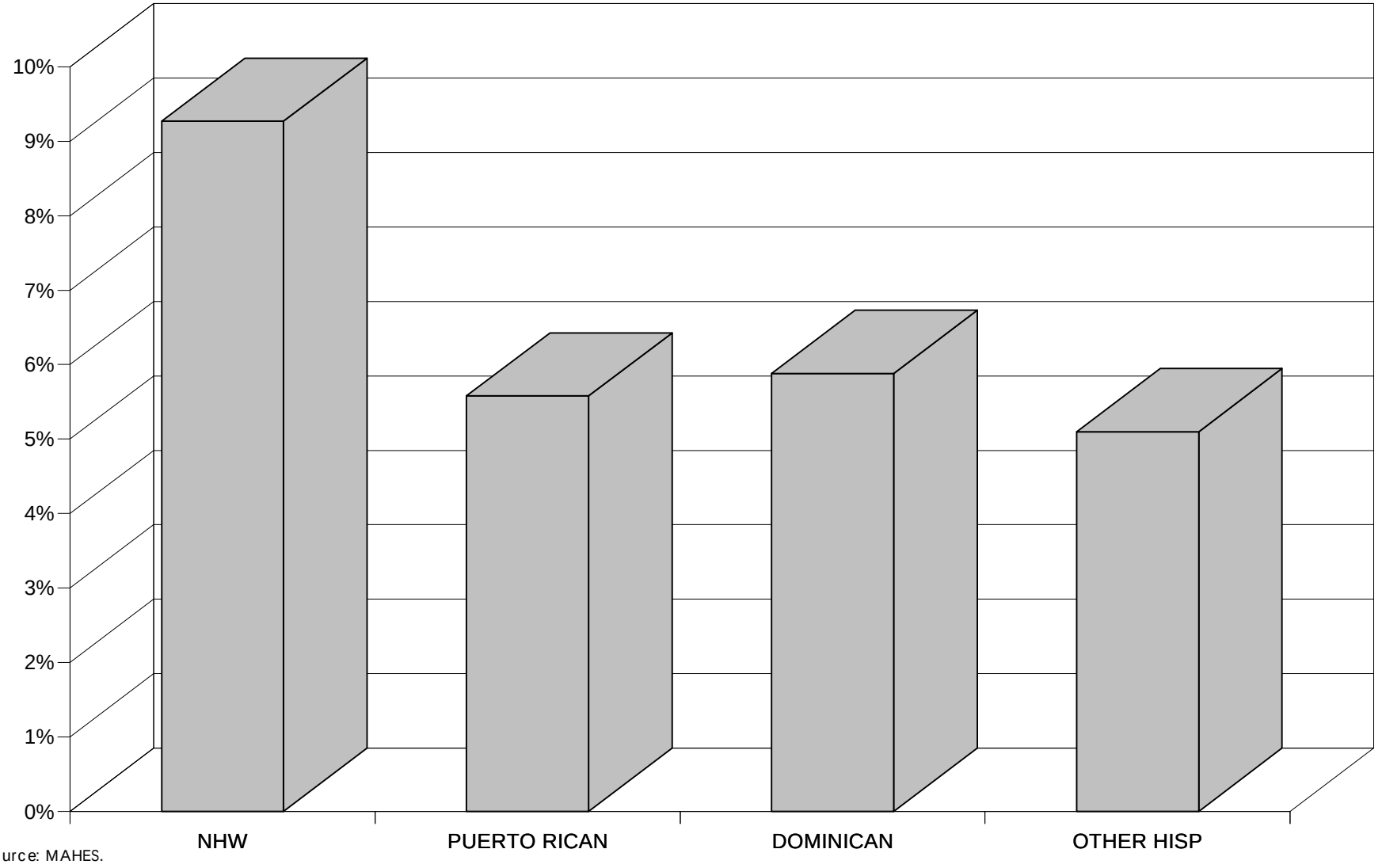
Source: MAHES.

gender, education, living arrangements, age at arrival, and income, these differences were not significant. None of the variables in the model appeared to explain the use of this program. Further investigation is needed to explain this population's low use of food commodity programs. Information related by our interviewers suggests that cultural food preferences may play a part, and access to the distribution centers may also be a problem for some of the Hispanic elders. Anecdotal evidence from our interviews suggests that the elders have little information about how to participate, do not know about the delivery dates, or even how to get to the centers. Lack of transportation may also be a factor limiting participation.

Congregate Meals

The Congregate Meals program is one of the two components of the ENP authorized under the Older Americans Act and administered by the Administration on Aging (Pnoza, Ohls, and Millen 1996). The program is intended to improve the nutritional status of elders while also increasing their social contacts. In addition, elders are able to receive information and/or make use of other available services at congregate meals sites. Figure 7 illustrates the elders' reported use of congregate meals in the MAHES during the previous year. Non-Hispanic whites report the highest participation in congregate meals (9.3 percent), while among the Hispanic groups participation was around 6 percent. The difference in level of use between non-Hispanic whites and Hispanics is significant at a probability level of 0.10 but differences across Hispanic groups were not significant. Table 8 presents results from logistic regression in which attending congregate meals during the previous year (versus not) is the dependent variable. The first section presents an analysis including all elders and the second is restricted to Hispanics. Four variables had independent effects on attending congregate meals: age, living arrangements, poverty, and number of social activities. Older elders were more likely to attend congregate meals sites. Elders who were unmarried and living with others were 79 percent less likely to attend congregate meals than elders who live alone. Differences between elders who were married and lived with a spouse and those elders who lived alone are not significant. Receiving household income that is under the poverty line was

FIGURE 7
Use of Congregate Meals, by Ethnic Group



Source: MAHES.

TABLE 8
Logistic Regression of Using Congregate Meals on Individual Characteristics

	All Elders			Hispanics Only		
	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
If Hispanic	-0.762	0.151	0.467	—	—	—
If male	-0.320	0.445	0.726	-0.700	0.205	0.497
Age	0.052	0.039	1.054	0.084	0.013	1.088
Has mobility limitation	-0.562	0.161	0.570	-0.763	0.141	0.466
Education						
≥12 yrs.	-0.696	0.270	0.499	-1.222	0.738	1.228
5–11 yrs.	-0.010	0.984	0.990	0.206	0.265	0.295
0–6 yrs.	—	—	—	—	—	—
Married, lives with spouse	-0.126	0.795	0.882	-0.252	0.674	0.777
Not married, lives with others	-1.561	0.016	0.210	-1.536	0.027	0.215
Not married, lives alone	—	—	—	—	—	—
Lives in poverty	1.407	0.002	4.085	1.806	0.007	6.089
Social activities count	0.123	0.156	1.131	0.193	0.091	1.213
Constant	-6.502	0.003		-10.009	0.000	

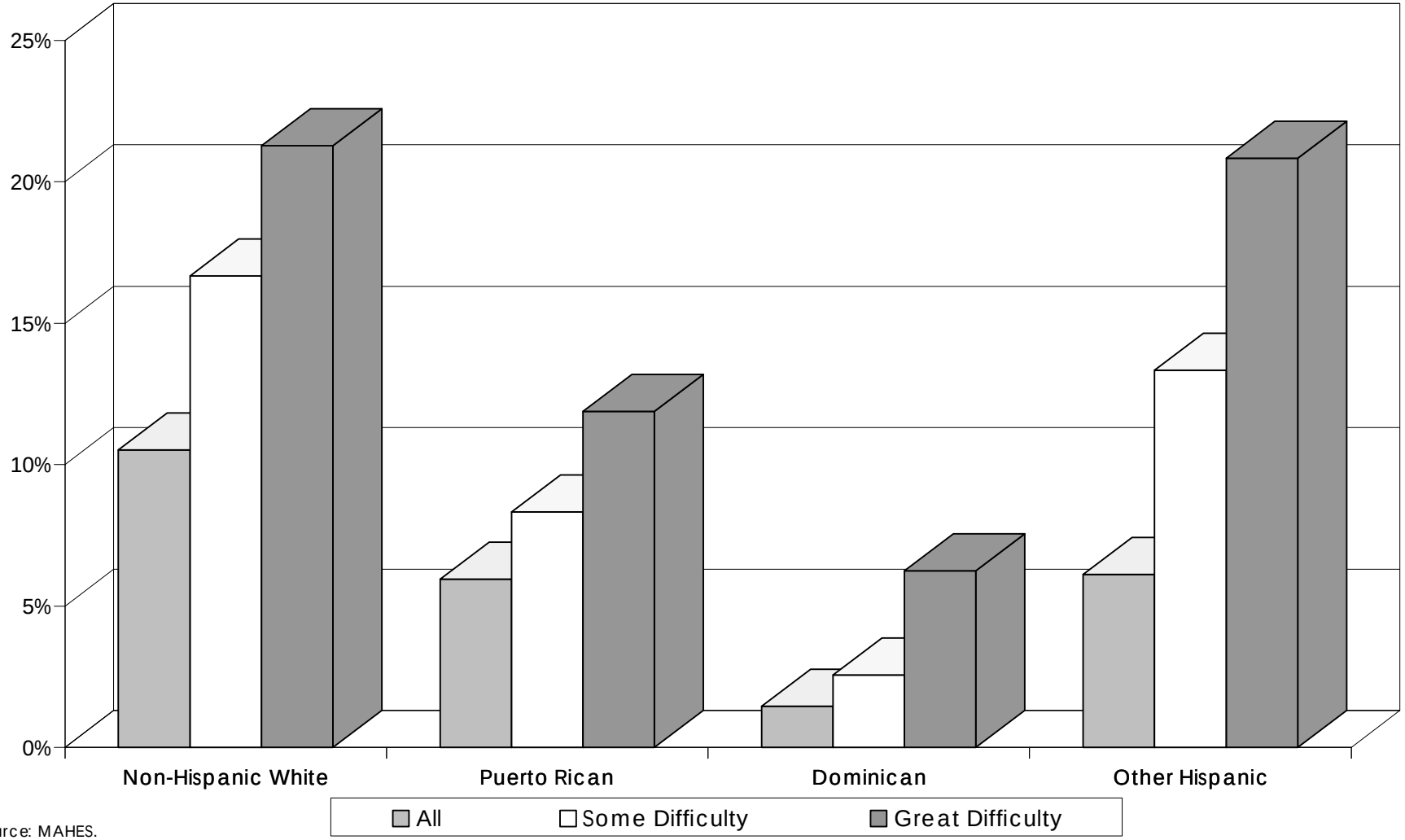
strongly associated with attending congregate meals—those in poverty were four times more likely to attend. The factors related to congregate meals attendance are similar when the analysis is restricted to Hispanics. However, the relationship between poverty and attendance is far stronger among Hispanics and the social activities variable is significant. Consistent with other findings in the literature, Hispanic elders who reported a higher number of social activities were more likely to attend congregate meals. In general, these findings are also consistent with those of a recent report by the Administration on Aging that described participants as more likely to be poor and to live alone, but with a higher level of social activities than nonparticipants (Ponza, Ohls, and Millen 1996).

Meals on Wheels

A fourth program examined in this analysis is the Meals on Wheels program, the second component of the ENP. Figure 8 shows the proportion within each group that utilized the Meals on Wheels program during the previous year. Non-Hispanic whites make up the highest proportion of users at around 11 percent, while other Hispanics had a 6.1 percent use and Puerto Ricans 6 percent. Only 1.5 percent of the Dominicans in our sample reported using the Meals on Wheels program. Since Meals on Wheels is designed to serve elders who are homebound, we also include the proportions of those with a mobility or self-care limitation who used the program. The relative pattern of usage across groups is unchanged whether disability is measured by those reporting some difficulty or great difficulty with an ADL item. Given the high levels of ADL limitations reported by both Puerto Rican and Dominican elders, their minimal use of Meals on Wheels is notable.

Logistic regression models predicting use of the Meals on Wheels program are presented in Table 9. Dominicans are excluded from this analysis because of their overall low use of Meals on Wheels. In the first model, we find significant differences in the probability of use between Puerto Ricans and the non-Hispanic whites. Puerto Ricans were 46 percent less likely to use the program; there was no difference in program use between other Hispanics and non-Hispanic whites. Controlling for

FIGURE 8
Percentage Using Meals on Wheels, by Ethnic Group
and Stated Level of ADL Disability



Source: MAHES.

TABLE 9
Logistic Regression of Using Meals on Wheels on Individual Characteristics

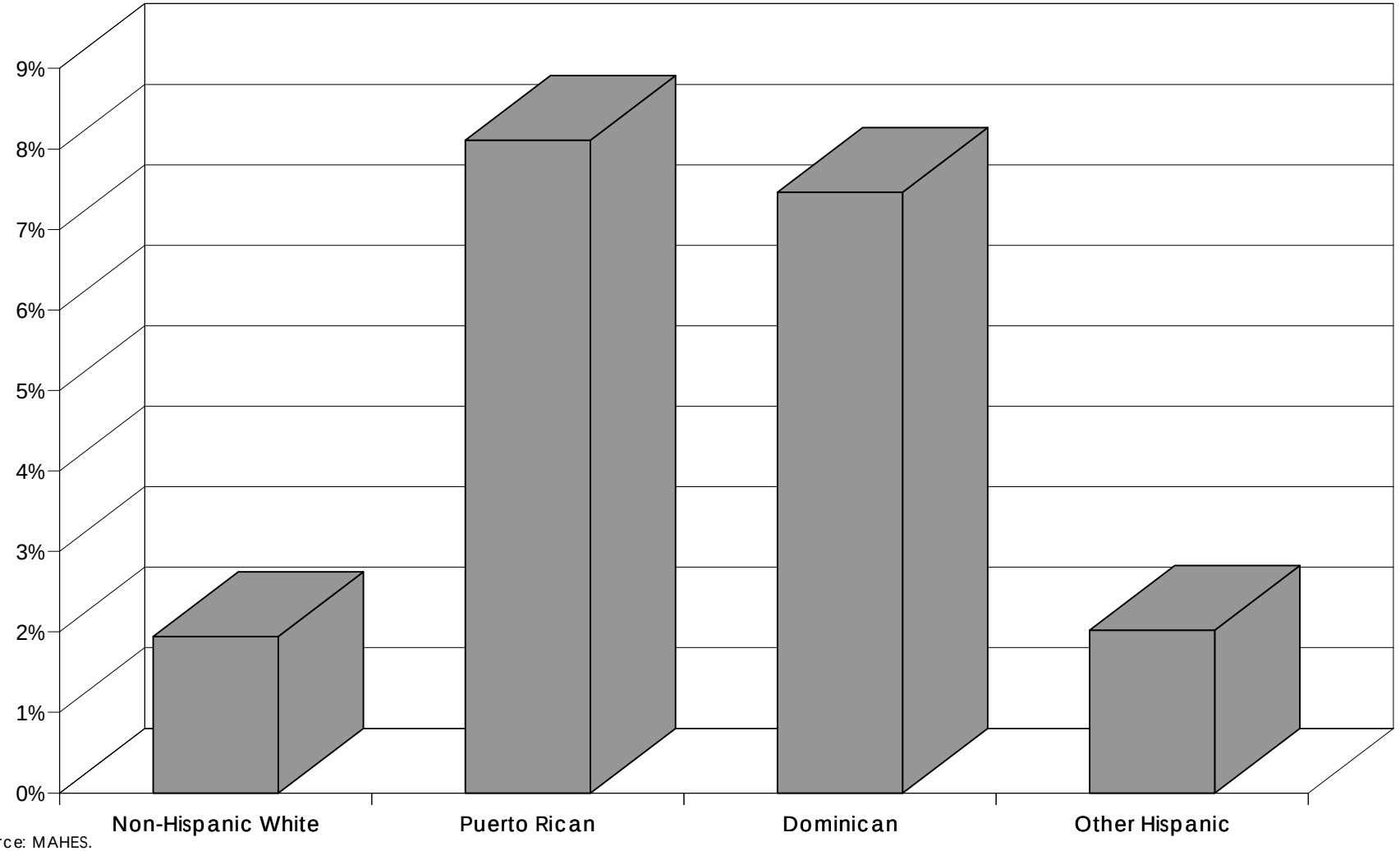
	Model 1			Model 2			Model 3		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	-0.619	0.094	0.538	-0.731	0.058	0.482	-0.560	0.302	0.571
Other Hispanic	-0.582	0.242	0.559	-0.438	0.394	0.645	-0.260	0.656	0.771
NHW	--	--	--	--	--	--	--	--	--
If male				0.654	0.064	1.923	0.652	0.078	1.920
Age				0.018	0.382	1.018	0.018	0.427	1.018
Has mobility or self-care imitation				2.069	0.000	7.917	2.041	0.000	7.699
Married, lives with spouse							-0.777	0.086	0.460
Not married, lives with others							-1.868	0.003	0.154
Not married, lives alone							--	--	--
Education									
≥12 yrs.							-0.298	0.600	0.742
5–11 yrs.							-0.125	0.807	0.882
0–6 yrs.							--	--	--
Constant	-2.125	0.000		-5.237	0.001		-4.645	0.010	

gender, age, and mobility or self-care limitation does not eliminate the differences between Puerto Ricans and non-Hispanic whites. Being male is associated with higher use of Meals on Wheels, with males almost twice as likely as females to use the program. Having a mobility or self-care limitation has a very large effect on program use; those who reported a limitation were almost eight times more likely to use Meals on Wheels. Including living arrangements and education in the last model makes the Puerto Rican coefficient insignificant. In general, use of the Meals on Wheels program was higher among males, those with a mobility or self-care limitation, and those who live alone.

Given the overall low use of food programs (Food Commodity and Meals on Wheels) by Hispanics, concurrent with the high poverty and rates of disability they experience, it is of interest to examine if they are more likely to experience food insecurity. In the MAHES, elders were asked: “During the last month, did you skip any meals because there was not enough food or money to buy food?” Figure 9 illustrates the percentage who skipped any meals during the previous month by group. Only 2 percent of non-Hispanic whites and other Hispanics reported skipping meals, whereas the percentage among Puerto Ricans was almost four times as large (8 percent).

Logistic regression models are presented in Table 10. The first model shows that Puerto Ricans, when compared to non-Hispanic whites, were 3.4 times more likely to report having skipped meals during the previous month from lack of money or food. For Dominicans the odds ratio was 3.8. Model two introduces controls for gender, age, and living arrangements. Both Puerto Rican and Dominican ethnicity continue to show independent effects on the likelihood of skipping meals; none of the three control variables show significant independent effects. The third model introduces mobility or self-care limitation, poverty, and education. Net of these additional variables there is no longer an independent effect of Puerto Rican or Dominican ethnicity on skipping meals. Interestingly, being in poverty had no independent effect on the outcome. Those with a mobility or self-care limitation, however, were 2.7 times more likely to have skipped meals.

FIGURE 9
Percentage Who Skipped Any Meals during the Previous Month, by Ethnic Group



Source: MAHES.

TABLE 10
Logistic Regression of Skipping Meals on Individual Characteristics, Including Mobility, Disability, and Poverty

	Model 1			Model 2			Model 3		
Variable	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio	β	Sig.	Odds Ratio
Puerto Rican	1.220	0.055	3.387	1.225	0.062	3.405	0.727	0.366	2.070
Dominican	1.360	0.069	3.896	1.379	0.078	3.971	0.922	0.311	2.513
Other Hispanic	0.100	0.914	1.105	0.115	0.902	1.122	-0.139	0.891	0.870
NHW									
If male				-0.632	0.186	0.532	-0.431	0.382	0.650
Age				-0.010	0.722	0.990	-0.017	0.531	0.983
Married, lives with spouse				-0.259	0.632	0.772	-0.228	0.687	0.796
Not married, lives with others				-0.016	0.974	0.984	-0.066	0.895	0.936
Not married, lives alone									
Has mobility or self-care limitation							1.016	0.054	2.762
Under poverty line							-0.124	0.780	0.883
Education									
≥12 yrs.							-0.920	0.300	0.399
5–11 yrs.							-0.266	0.652	0.767
0–6 yrs.									
Constant	-3.776	0.000		-2.809	0.172		-2.427	0.279	

CONCLUSIONS

Despite the fast-paced growth of the elderly Hispanic population, their experiences are not yet a significant part of the national debate on health and aging. The cumulative evidence on the disadvantages faced by this population has increased over the last few years. This study provides evidence that poverty is a major problem for Hispanic elders in Massachusetts and identifies some of the factors associated with it, including ethnicity, age, education, and living arrangements. There is also evidence that limited income sources and immigrant background play a part in the high poverty rates of Hispanic elders. Our earlier discussion highlighted how, for many of these elders, immigration patterns and labor market experiences contributed to an environment of economic uncertainty in old age.

Furthermore, the Hispanic elders who arrived in the Northeast at a later age have the highest rates of poverty and food stamp use. Many of these elders migrated at an old age to be reunited with immediate family members: about 35 percent of Hispanic elders who arrived in Massachusetts after age 59 report that they did so in order to be closer to their children and about 9 percent to be closer to other family members. Twenty percent of Hispanics who arrived on the U.S. mainland between ages 40 and 59 came to be closer to their children. Although these elders were able to re-establish family contact, many are now living in poverty. Given current migratory flows—particularly from the Dominican Republic—we can anticipate that this elderly migration will continue as families attempt to reunify. Likewise, given the citizenship status of Puerto Ricans, there are no particular legal impediments to this flow. In the case of Dominican elders—a group facing even worse poverty conditions than Puerto Rican elders—further restrictions on immigration and eligibility for federally funded benefits may diminish the inflow but may worsen the conditions of those already here.

The convergence of unstable work histories, mobility limitations, ill health, and limited income combine to create a serious situation for a large number of these elders. That a significant number of Puerto Rican and Dominican elders report skipping meals because of lack of resources is but one of its

symptoms. Programs geared toward assisting elders with physical limitations are available and used to some extent by the non-Hispanic whites elders residing in the same neighborhoods as Hispanic elders. Because mobility limitations appear to be a factor in skipping of meals, it seems plausible that programs that provide meals are either not reaching out to the Hispanic elder population or the converse. Previous studies of Meals on Wheels programs have pointed to their inability to reach out to minority populations. That both ethnic and linguistic minorities seem to be underserved by the ENP has been noted by others (Balsam and Rogers 1991). Some evidence of programs that have successfully targeted ethnic and linguistic minorities exists in the literature, but there is a clear need for improved outreach. These Hispanic elders, particularly those who have arrived at an older age, need assistance in maneuvering the existing support system.

A population of elderly who exhibit such high rates of poverty are certainly at risk for health-related problems and nutritional deficiency. The finding of considerable food insecurity among Puerto Rican and Dominican elders is important. These groups have the highest rates of poverty and disability in our sample. Our results show a relationship between disability and food insecurity. Our experience throughout the study leads us to believe that, for segments of this population, variations in the access to food and in food quality is common and is connected to fluctuations in income throughout the month, particularly the high reliance on limited income sources.

Finally, and perhaps as important, this study underscores the heterogeneity of the Hispanic population. We find substantial variability in social and economic characteristics and in the participation in existing services among Hispanic groups. Any effort to address the concerns of this population must begin by recognizing that, despite sharing a common language and region of origin, different Hispanic groups face differing obstacles and limitations in their day-to-day experiences.

Endnotes

[1]The ADL scale consists of twelve items—five on mobility activities and seven on self-care. In this analysis, mobility activities include walking one-quarter of a mile, walking up ten steps without rest, getting outside, walking from one room to another, and getting out of chairs and beds. The self-care activities include eating (holding fork, cutting food, drinking), dressing (tying shoes, working zippers, and doing buttons), bathing and showering, and using the toilet.

[2]Households in which no person age 14 years or over speaks only English, and no person age 14 years or over who speaks a language other than English speaks English very well, are classified as linguistically isolated.

[3]There is some debate as to the role of culture in the self-rating of health and some who suggest that because of cultural expectations, Hispanics tend to overstate their poor health conditions. Nonetheless, more objective indicators of health status collected as part of MAHES suggest that the poorer health self-rating by Hispanics is substantiated to a large extent.

[4]In the PUMS, mobility limitation was defined as a health condition that had lasted for six months or more and which made it difficult to go outside the home alone. A self-care limitation was defined as a health condition that had lasted for six months or more and which made it difficult to take care of personal needs, such as dressing, bathing, or getting around inside the home.

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