



Place of Residence, Acculturation, and the Use of Preventive Services among Hispanic Subgroups

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Study Objective

- ❑ Explore the use of preventive health services by Hispanic subgroup and its relationship to acculturation and place of residence (rural v. urban)
- ❑ Articulate the role of acculturation in preventive services use among Hispanic subgroups



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Demographic Trends in U.S. Latino Populations

- ❑ In 2004, there were about 40.4 million Latinos in the United States (Census, 2004)
 - 14.2% of the U.S. population
 - Population projected to increase to 47.7 by 2010
- ❑ Largest minority group, and the fastest growing population segment in the U.S.
 - Between 1990 and 2000, the Hispanic population increased by 57.9%
 - During this time, the overall U.S. population increased by only 13.2%
- ❑ Hispanic subgroup population with diverse origins
 - 66.9% Mexican
 - 14.3% Central & SA
 - 8.6% Puerto Rican
 - 3.7% Cuba
 - 6.5% Other



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Hispanics and Preventive Services

- ❑ Differing cultural backgrounds and ethno-regional differences result in differing access to and use of health services (Freeman, 2006; Palmer 2000)
- ❑ In general, Hispanics are less likely than White population to be screened for breast, cervical, or colorectal cancers, and to receive pneumococcal or influenza vaccinations (CDC, 2004)



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Study Methods

- ❑ Analyzed reported receipt of six preventive services among age-appropriate populations:
 - Pap test, clinical breast examination (CBE), mammogram, PSA (prostate specific antigen) test, flu vaccination, and pneumonia vaccination.
- ❑ ACS recommendations, rather than US Preventive Services Task Force, used for appropriate screening in study
 - ACS generally more conservative ~ require earlier or more frequent screening
- ❑ USPTF recommendations used to define adequate vaccination



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Data Sources

□ Secondary data

- National Health Interview Survey (NHIS), 1998-2000
- Nationally representative, annual survey by the CDC

□ Data merged from 1998-2000

- Prevention adult file (1998)
- Sample adult files (1999-2000)



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Preventive Services Studied

❑ Women:

- Pap Test
- Clinical Breast Exam
- Mammogram

❑ Men:

- PSA (prostate) test

❑ All:

- Flu shots
- Pneumonia vaccination



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Sample

□ Sample

- Non-Hispanic Whites (63,731), Non-Hispanic AA (13,131)
 - Mexican-Americans (8,799), “Other” Hispanics (4,151), Puerto Ricans (1659), and Cuban-Americans (947)
- Rural residents defined as those living in non-metropolitan areas with the remainder urban
- N= 92,418 respondents



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Results



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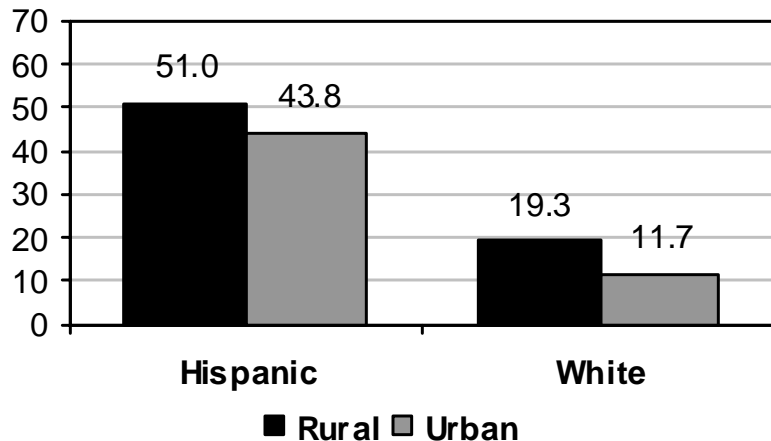
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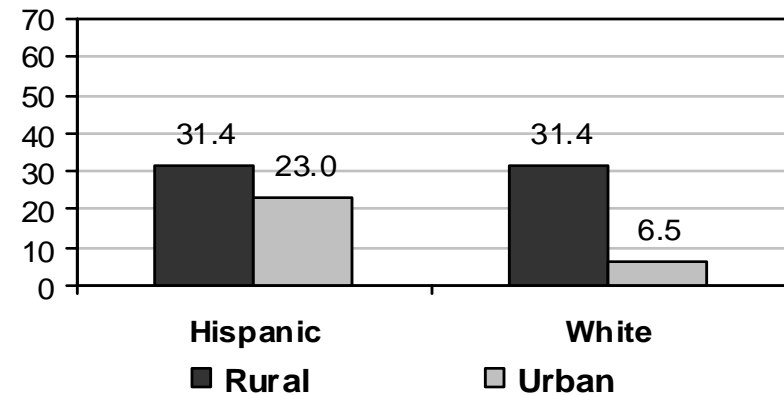
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Demographics

Persons lacking a high school diploma,
by race/ethnicity and residence, in percent



Persons living in poverty (<100% FPL)
by race/ethnicity and residence, in percent



- ❑ Hispanic and White populations were largely urban, approximately 22% rural overall.
- ❑ More urban Hispanics reported having a high school diploma while more rural Hispanics reported living below the federal poverty level.



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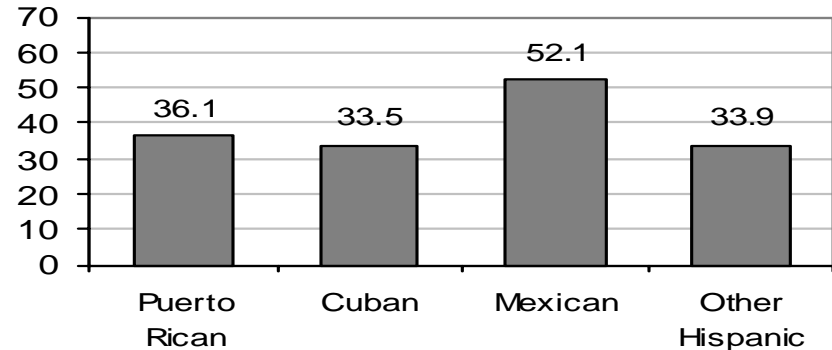


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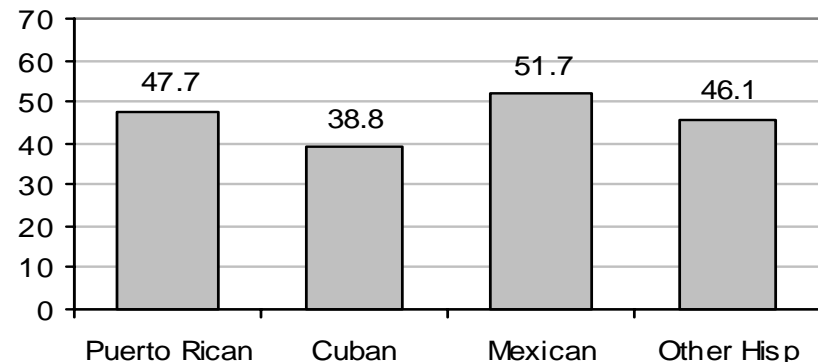
Demographics, cont.

- Over half of the Mexican respondents lacked a high school diploma.
- Mexican-Americans reported the highest and Cubans the lowest levels of poverty.

Hispanics with less than high school education, by national origin, in percent



Hispanics below 200% FPL, by National Origin in percent



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Acculturation Definition

- ❑ Immigrants adopting the attitudes, values, customs, beliefs, and behaviors of a new culture (Abraído-Lanza et al, 2004)
- ❑ We measured acculturation by the number of years the foreign-born respondent had lived in the US and language of interview
 - Used in earlier NHIS preventive services analysis (Abraído-Lanza et al, 2005)
- ❑ Two categories
 - High - People who answered the interview in English AND those who have been in the US for 10 years or longer
 - Low - People who used any Spanish during the interview OR people who had been in the US for less than 10 years



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Acculturation

- ❑ Virtually all of the White respondents were highly acculturated.
- ❑ Among the high-acculturation Hispanic respondents, Puerto-Ricans were the most acculturated (95.2%) followed by other Hispanics (82.4%)
- ❑ Cubans had the highest proportion of low-acculturation respondents (37%) followed by Mexicans (20%).
- ❑ Rural and urban Hispanics reported similar levels of acculturation with over 82% highly acculturated



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ACS Pap Test Guidelines

- ACS guidelines for Pap test:
 - At age 21 or three years after first vaginal intercourse encounter, whichever comes first
 - Annual screening with a traditional Pap test
 - Bi-annual screening with liquid-based Pap test



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Cervical Cancer Screening

- ❑ Rural women of all races were less likely to report a Pap smear than urban women.
- ❑ In adjusted analysis, Hispanic women were significantly *more* likely to meet the ACS guidelines for Pap screening than were white women, [[AOR] =1.19; 95% confidence interval [CI], (1.08, 1.32)].
 - Controlling for independent sociodemographic variables
- ❑ Within the Hispanic population alone, there were no significant differences associated with country of origin



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ACS Breast Cancer Guidelines

- ACS guidelines for Mammogram:
 - <40 within 3 years
 - Age 40 or older annually
- ACS guidelines for CBE:
 - Age 20-39 within 3 years
 - Age 40 or older within one year



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Breast Cancer Screening

- ❑ Fewer than a third of all groups of women across race, ethnicity, and geographic location failed to receive a clinical breast exam.
- ❑ More than two of every five women failed to report age-appropriate mammograms.
- ❑ Examining ethnicity without considering residence, Mexican women had the highest percentage of women who failed to receive the preventive service (48.5%) and white women the lowest (42.9%).
- ❑ Rural Hispanics were more likely to report no clinical breast exam and mammograms than were urban Hispanic women, however these differences were not significant.



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ACS Prostate Cancer Guidelines

- Annual screening beginning at age 50
 - Certain minority groups (African Americans) and those with family history of prostate cancer may begin earlier



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Prostate Cancer Screening

- ❑ Among Hispanic men surveyed, Mexicans had the lowest prevalence for age-appropriate receipt of a PSA test (64%).
- ❑ Contrary to the trend for other preventive services in the sample, urban Hispanics reported a failure to receive PSA tests (59.1%) more than rural Hispanics (57.7%).
- ❑ The lack of a usual source of care was significantly associated with failing to meet PSA screening guidelines [AOR=0.32; 95% CI, (0.20, 0.51)].
 - Controlling for independent sociodemographic variables



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USPTF Immunizations Guidelines

- Annually beginning at age 65
 - Earlier for high-risk groups, such as health care workers and caretakers for the elderly



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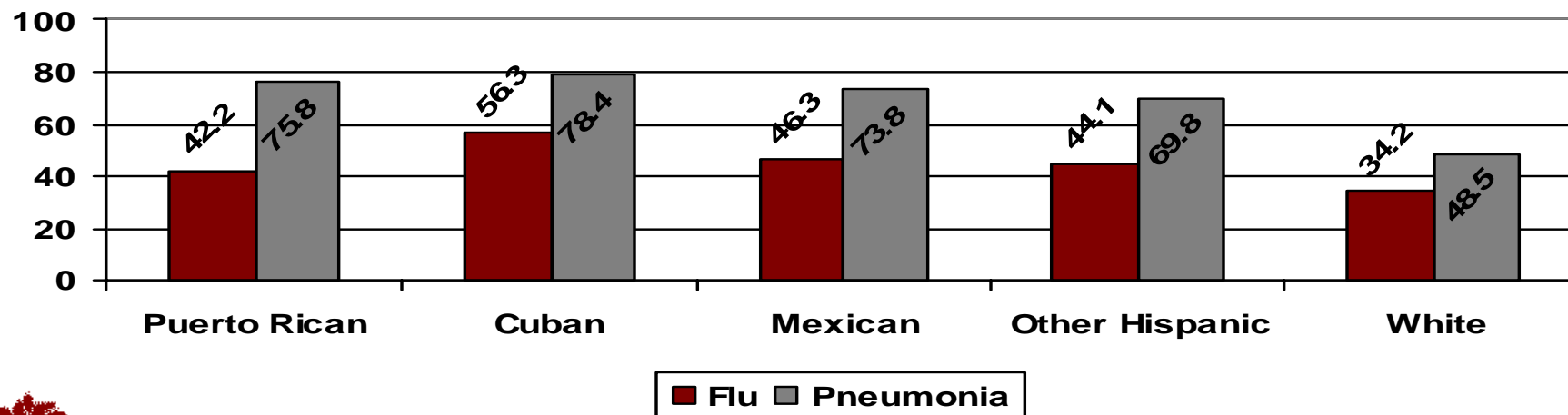
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Vaccinations

- ❑ Immunization across all racial and ethnic groups were low
- ❑ Those with no usual source of care less likely to meet the appropriate guideline in both models [AOR=0.29; 95% CI, (0.24, 0.34), AOR=0.19; 95% CI, (0.08, 0.45)]
 - Controlling for independent sociodemographic variables



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Conclusions

- ❑ Study results highlight an opportunity to tailor appropriate outreach and educational programs that promote the use of preventive health services by Hispanics, especially those in rural areas.
- ❑ The lack of preventive services use coupled with no usual source of care demand policies that facilitate access to the health care system.
- ❑ Our findings also support the need for further research on Hispanic subgroups, given the mixed findings of preventive health services needs by specific subgroups and varying levels of acculturation.



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Limitations

- ❑ While the NHIS sample included an adequate Hispanic sample, the relatively small Hispanic subgroup samples are a limitation in the study.
 - For example, there were less than 1,000 unweighted Cuban observations. Efforts to increase the inclusion of sufficient numbers of Hispanic respondents would be helpful in future acculturation subgroup analysis.
- ❑ Better measure of acculturation needed
- ❑ While we made the decision to use the ACS preventive services recommendations instead of the USPSTF recommendations, it is still a limitation to the study.



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Policy Recommendations

- ❑ An important finding from the study indicates that enabling factors, such as health insurance or having a usual source of care, have a greater effect on preventive services use than national origin.
 - Efforts to increase access to health care, especially for rural minority populations, would be useful to increase preventive services utilization.
- ❑ Linguistic isolation might serve as a barrier to preventive services use. Hispanics, especially Cubans, reported lower levels of English response to the survey than other groups in the sample.
 - In an effort to maintain CLAS compliance, hospital administrators should be aware of Hispanic population subgroups in the area and take appropriate steps to facilitate access.



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