



# Modifiable Risk Factors Associated with Hypertension in Women 50 Years and Older: Results from the 2005 Los Angeles County Health Survey.

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## Study Goals

- To assess the burden of hypertension among older women in Los Angeles County, California.
- To examine the association between sociodemographic and lifestyle factors and hypertension in our local population.

## Methods

We analyzed data from the Los Angeles County Health Survey, which is a periodic, population-based, random-digit-dialed telephone survey that collects self-reported information on sociodemographic characteristics, health status, health behaviors, and access to health services among adults and children in the county.

Survey respondents included 1,811 women 50 years or older representing 1,341,000 women in the county.

Multivariate logistic regression was used to determine the association between sociodemographic and lifestyle factors and hypertension.

## Key Findings and Implication

Forty-six percent or an estimated 621,000 women reported being diagnosed with hypertension.

As age increased, the odds of having hypertension significantly increased ( $p < 0.001$  for trend test). In other population samples (NHANES<sup>1</sup>, WHI<sup>2</sup>), the age-related increase in the prevalence of hypertension has been observed as well.

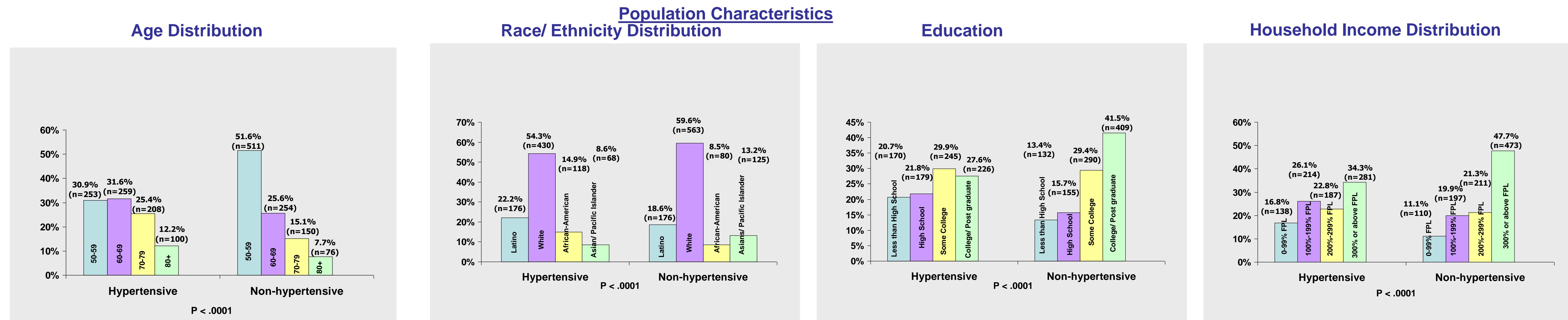
Racial/ethnic disparities in the prevalence of hypertension remain a challenge in Los Angeles County. The odds of having hypertension were highest among African-Americans and lowest among Asians/ Pacific Islanders.

As education and household incomes increase, the odds of having hypertension decrease ( $p < 0.001$  for age-adjusted trend test). Higher socioeconomic status may imply several factors, including awareness of a healthy lifestyle.

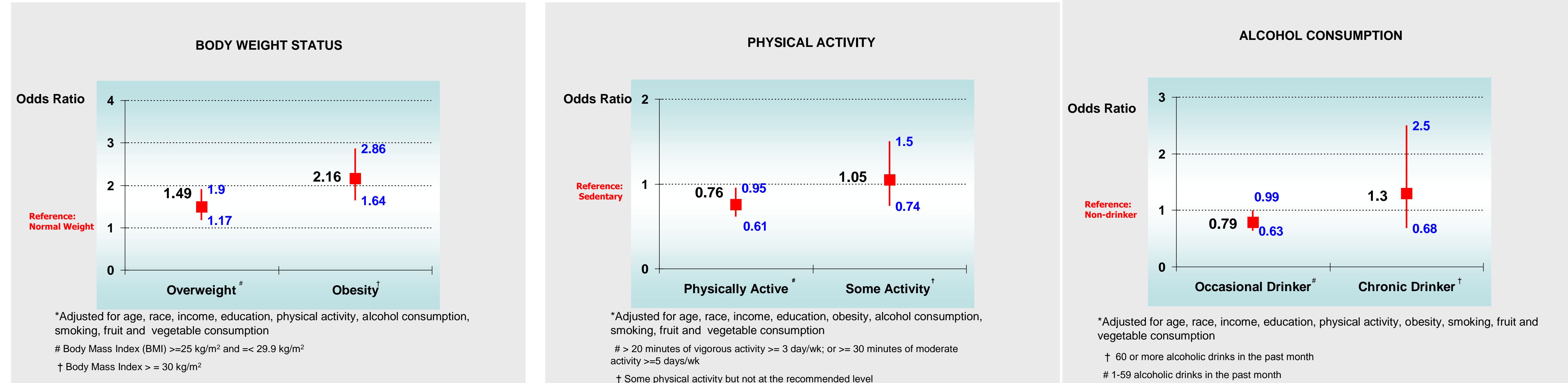
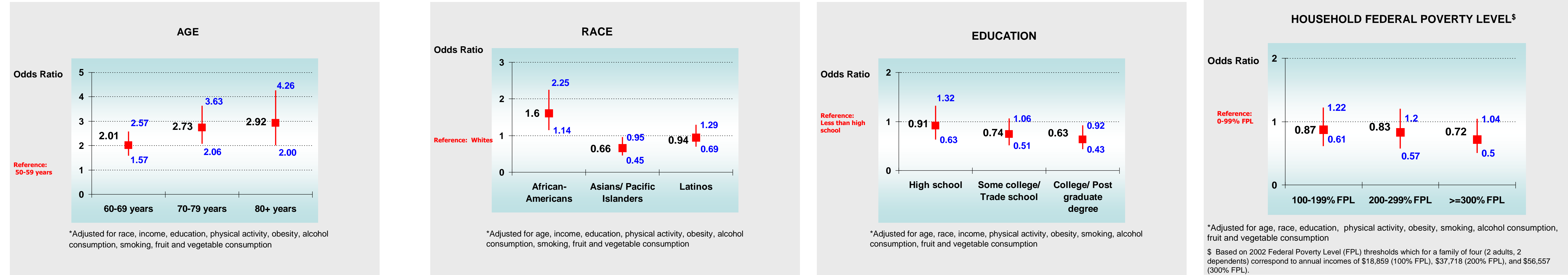
Obesity is a modifiable risk factor of hypertension. Weight reduction is an important step in managing and preventing hypertension.

Previous studies have shown that regular aerobic exercise can reduce blood pressure<sup>3</sup>. Also, people who are physically active tend to pursue a healthy lifestyle in general, and in doing so reap health benefits.

Consistent with the findings from WHI<sup>2</sup>, the protective effect of alcohol consumption against hypertension was also observed among “moderate drinkers” in our population. The association between moderate alcohol consumption and hypertension is not well defined.<sup>4</sup>



## Multivariate Logistic Regression Model\* for Hypertension Among Women 50 Years and Older



Smoking: In our population, we did not observe a harmful effect of smoking on the odds of hypertension (OR=0.95; 95%CI: 0.68-1.31).

Nutrition: We did not observe a protective effect of consuming five or more servings of fruits and vegetables daily on the odds of having hypertension (OR=1.1; 95%CI: 0.85-1.41).

## Conclusions

In Los Angeles County, hypertension remains a public health challenge. Disparities in hypertension prevalence due to race and socioeconomic status emphasize the necessity of increasing awareness of the disease, including its prevention and management. Fortunately, many risk factors for hypertension such as obesity, physical activity, alcohol consumption, smoking and dietary habits can be modified by adopting a healthy lifestyle.

## Limitations

The prevalence of hypertension in this study was obtained by self-report, through a questionnaire. However, one-third of people with hypertension are unaware of their condition<sup>5</sup>. The cross-sectional nature of this study does not allow one to establish a cause and effect between risk factors and disease. The survey sample was limited to respondents living in households; women in nursing homes were excluded. Survey respondents were also limited to those women who have home telephone.

## References

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