Health Insurance Coverage among Diabetic Adults from Three Major Ethnic Groups in the United States

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Objective: The lack of adequate health insurance may result in a downward spiral of the diabetic condition, imposing an increased financial strain on family and the society as a whole. The objective of our study was to assess the insurance type and coverage among diabetic adults from three major ethnic groups.

Design and setting: We used data of two cross-sectional national surveys to estimate insurance coverage among diabetic adults aged 20–64 years, 1988–1994 and 2003–2008.

Results: The prevalence of doctor-diagnosed diabetes has increased by 120%, 178% and 135% respectively among non-Hispanic Whites (NHWs), non-Hispanic Blacks (NHBs), and Mexicans & other Hispanics (M&OHs) from 1988–94 to 2003–08. However, during the same period, the percentages of diabetic adults covered by health insurance declined for all three groups. In the 2003–08 period, 15%, 19% and 40% of NHWs, NHBs and M&OHs, respectively, had no insurance. Diabetic NHBs and NHWs had an equal likelihood to be covered by government-sponsored programs. However, 70% of NHWs, in contrast to 37% of NHBs, were covered by private programs exclusively. Diabetic M&OHs remained at the lowest likelihood to be covered by government-sponsored programs. The diabetic citizen's probability of being insured was more than tripled compared with the non-citizens (OR= 3.40, 95%=1.42–8.14).

Conclusion: Increasing percentages of diabetics had no insurance. Diabetic Whites were more likely to be covered by private programs than diabetic Blacks. Hispanics were the group falling through the cracks between private programs due to low income and government programs because of immigration status. (*Ethn Dis.* 2012;22[4]:486–491)

Key Words: Health Insurance, Race, Ethnicity, Diabetes

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Introduction

Diabetes is one of the leading chronic and disabling conditions, and the presence of diabetes often results in a more complex treatment regimen for a number of other conditions including heart disease, cerebral and peripheral vascular disease, kidney disease and blindness. Overwhelming evidence suggests that the effective management of diabetes can significantly reduce the risks of complications associated with these other diseases. However, access and utilization of these services have been shown to be significantly limited by an individual's insurance status, and the uninsured diabetic individual can be less likely to receive adequate care,[1,2] thereby leading to uncontrolled blood sugar levels, greater risk of hospitalization, and elevated risk of complications and possibly death.[2,3] Moreover, the lack of adequate health insurance may result in a downward spiral of the patient's condition by imposing an increased financial strain on family and the society as a whole.

The literature suggests the presence of a persistent racial disparity in recorded death rates of diabetes. Among African Americans, the aggregate age-adjusted death rate of diabetes from 2003 to 2007 was 53.1 deaths per 100,000 population as compared to a death rate of 20.5 per 100,000 for Whites.[4] In addition to a genetic predisposition for diabetes, differences in the care management of diabetes among certain racial groups may influence overall death rates. Although limited access to health services is related to a number of factors, this barrier is often the result of lack of adequate, appropriate, and affordable health insurance. However, limited information is available pertaining to the racial disparities related to health insurance among diabetic adults.[4] To the best of our knowledge, the last study examining this issue using national representative data was published nearly ten years ago.[5] Since then, dramatic social changes have been taking place, including the epidemiology of diabetes, and the availability, financing, and access to health services. In an attempt to address the gap in knowledge as it relates to the disparity in health insurance among diabetic patients, we analyzed the latest data released from the National Health and Nutrition Examination Survey (NHANES).

Methods

Study Population

NHANES is an ongoing stratified, multistage probability sample of the US non-institutionalized population designed to represent the health and nutritional status of general populations of all ages. A unique feature of NHANES is that the sampling approaches, interviews, and examination methods are standardized across surveys.[6] For this study, outcomes of interest (diabetes and the prevalence and health insurance coverage) from two separate sampling cycles (1988–1994 and 2003–2008) were compared. The study population for this project was limited to adults aged 20–64 years. After excluding respondents who were from races/ethnicities other than three major groups (n=1,592), with missing data on insurance (n=1,592) or