

# Commentary on Current Literature

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## Abdominal Obesity and Ethnic Differences in Diabetes Awareness, Treatment, and Glycemic Control

Okosun IS, Dever GEA. *Obes Res.* 2002;10:1241-1250.

**Objective:** To compare racial/ethnic differences in diabetes awareness, treatment, and glycemic control between non-Hispanic white, non-Hispanic black, and Hispanic Americans. We also determined the impact of abdominal obesity on racial/ethnic differences in diabetes awareness, treatment, and glycemic control between these population groups.

**Research Methods and Procedures:** Third National Health and Nutrition Examination Survey (NHANES III) data were utilized for this study. Diabetes awareness was defined as acknowledging diabetic status. Diabetes treatment was defined as current use of anti-diabetic medications, good glycemic control as  $HbA_{1c} < 8\%$ , and abdominal obesity as waist circumference larger than expected. The impacts of abdominal obesity on racial/ethnic differences in diabetes awareness, treatment, and glycemic control were assessed using logistic regression analyses. Adjustments were made for age, education, smoking, alcohol intake, and health insurance. **Results:** Rates of diabetes awareness in whites, blacks, and Hispanics suffering from

abdominal obesity were 74%, 30%, and 21% in men and 77%, 32%, and 19% in women, respectively. Rates of diabetes treatment were 70%, 23%, and 14% in men and 57%, 45%, and 23% in women, respectively. In men, rates of glycemic control were 64%, 40%, and 30%, and in women, they were 62%, 51%, and 27%, respectively.

Abdominal obesity was associated with decreased diabetes awareness and glycemic control in women.

**Discussion:** Subjects with abdominal obesity were found to have poorer glycemic controls compared to those without abdominal obesity. Because diabetes prevalences were partially explained by racial/ethnic differences in diabetes awareness, treatment, and glycemic control, there is a need to craft diabetes awareness, treatment, and control programs along racial/ethnic origins.

**Key Words:** diabetes awareness, race, abdominal obesity, glycemic control, diabetes treatment

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### COMMENTARY

**This investigation into the relationship of diabetes awareness, treatment, and glycemic control across 3 different ethnic groups, as a function of abdominal adiposity, further underscores the dangers of abdominal obesity. Abdominal adiposity is more prevalent in black and Hispanic ethnic groups, as this study shows. The implication is that abdominal adiposity requires heightened efforts at prevention, reduction, and medical understanding in the black and Hispanic populations. The study does not speculate as to the causes of these racial differences, but no doubt, as with many health care problems, socioeconomic and genetic issues are contributing factors.**