Race, Socioeconomic Status, and Rurality Influences on Type 2 Diabetes Management Among North Carolina Adults

Abstract

Background: Type 2 diabetes is a chronic disease that causes long term complications if not managed properly. According to the National Standards for Diabetes Self-Management Education, education is an intricate component to improving patient outcomes. This study examined the association between race, socioeconomic status (SES) and geographic location and its effects on Type 2 diabetes education among North Carolina adults.

Methods: Using a cross-sectional study of the 2008 Behavioral Risk Factor Surveillance System, we examined the association between race, SES, and rurality and its effect on Type 2 diabetes education among adults in North Carolina. The relationship between Type 2 diabetes education and the covariates was assessed using univariate, bivariate, and multivariate analysis. Unadjusted and adjusted odds ratios (ORs) and 95% confidence intervals (CIs) were determined using survey logistic regression analyses.

Results: The majority of the participants (63%) did not have good diabetes education. Non-Whites had higher odds than Whites of good diabetes education (OR=1.56, 95%CI: 1.19, 2.03). Individuals in rural North Carolina had lower odds of having good diabetes education than their urban counterparts, but the results remained insignificant (OR= 0.88, CI: 0.67, 1.15). Individuals with a low SES had poorer diabetes education than individuals identified as being high SES, but the results were insignificant (OR=0.81, CI: 0.60, 1.09).

Conclusions: The results of this study could be used for policy recommendations for health organizations. Healthcare practices guidelines should make diabetes education mandatory for individuals diagnosed with diabetes. Future studies with a more accurate measurement of diabetes education are needed