

CORRELATES OF ELEVATED DEPRESSIVE SYMPTOMS AMONG RURAL AFRICAN AMERICAN ADULTS WITH TYPE 2 DIABETES

Objective: The study objective was to examine the health-related and sociocontextual correlates of elevated depressive symptoms among rural African American adults with type 2 diabetes mellitus.

Design: Cross sectional, observational study.

Setting: Rural communities in central Georgia, United States.

Participants: African American patients with type 2 diabetes mellitus ($N = 200$) were recruited from eight rural counties in Georgia by using community-based procedures.

Methods: Participants were assessed on demographics (age, sex, and education), diabetes-related characteristics (health status, time since diagnosis, blood glucose control problems, and hemoglobin A1C level), and psychosocial variables (financial stress, community disadvantage, community support, social support, and patient-healthcare provider relationship quality). Elevated depressive symptoms, as assessed via the Center for Epidemiologic Studies–Depression scale, constituted the dependent variable.

Results: Elevated depressive symptoms were present in 30% of the sample. Multiple logistic analysis of the contributors to depression predicted 57% of the variability in depression. Sex, neighborhood disadvantage, health status, hyperglycemic symptoms, social support, and patient-healthcare provider relationship quality predicted depression in multivariate analyses.

Conclusions: Both health-related and psychosocial stressors contribute to depressive symptoms among rural African Americans. Problems in patient-healthcare provider relationships may impede identification of depressive symptoms among these patients. Providers require training and support to identify and treat depression among rural African Americans. (*Ethn Dis.* 2007;17:106–112)

Key Words: African Americans, Depression, Rural Population, Type 2 Diabetes Mellitus

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INTRODUCTION

African Americans are disproportionately affected by type 2 diabetes mellitus and its complications compared with European Americans.^{1–4} African Americans are approximately twice as likely as European Americans to have diabetes, and African Americans experience a greater burden of diabetes-related morbidity and mortality. Data from the third National Health and Nutrition Examination Survey⁵ indicated that African Americans who live in rural areas are particularly vulnerable to increased morbidity and mortality from poor control of their blood glucose. Among persons with diagnosed diabetes, rural African Americans were significantly more likely to have a hemoglobin A1C (HbA1C) level $\geq 8\%$ (61%) than urban African Americans (45%), rural European Americans (33%), or urban European Americans (43%). Consistent with findings on chronic diseases that require extensive self-management regimens or lifestyle changes, diabetes-related morbidity and mortality have been linked with lower socioeconomic status and residence in communities characterized by poverty, crime, disorganization, and lack of access to health-related resources.⁶ Although few studies have examined rural African Americans, this group faces considerable sociocontextual adversity, particularly in the rural South, where persistent poverty and a lack of health-

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related resources contribute to chronic illness.⁷

Depression is a common comorbidity of diabetes. Meta-analysis indicates that persons with diabetes are approximately twice as likely as matched control subjects to exhibit depressive symptoms or meet clinical criteria for depression.⁸ This association was not affected by type of diabetes (type 1 or type 2), sex, or source of assessment, though prevalence rates were higher for women and in studies that used self-report. The combination of diabetes and depression confers a poor prognosis on affected individuals, increasing morbidity and economic costs and decreasing quality of life.⁹ Depression in diabetes is linked with hyperglycemia and increased risk for macrovascular and microvascular complications.¹⁰ Depression also affects patients' ability to adhere to lifestyle and self-care regimens crucial for maintaining tight control of blood glucose.¹¹

Despite the disproportionate burden diabetes places on rural African Americans, few studies have addressed the prevalence and correlates of depression among minority patients. In one meta-analysis of the association between diabetes and depression, only 3% of

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