CULTURAL BASIS FOR DIABETES-RELATED BELIEFS AMONG LOW- AND HIGH-EDUCATION AFRICAN AMERICAN, AMERICAN INDIAN, AND WHITE OLDER ADULTS

Objectives: Racial and ethnic disparities in diabetes and subsequent complications are often attributed to culture; however, previous diabetes disparities research is restricted to in-depth ethnic-specific samples or to comparative study designs with limited belief assessment. The goal of our study was to improve understanding of the cultural basis for variation in diabetes beliefs.

Design: Cross-sectional.

Setting: Rural North Carolina.

Participants: Older adults (aged 60+) with diabetes, equally divided by ethnicity (White, African American, American Indian) and sex (N=593).

Interventions: Guided by Explanatory Models of Illness and Cultural Consensus research traditions, trained interviewers collected data using 38 items in four diabetes belief domains: causes, symptoms, consequences, and medical management. Items were obtained from the Common Sense Model of Diabetes Inventory (CSMDI).

Main Outcome: Beliefs about diabetes. Response options for each diabetes belief item were “agree,” “disagree” and “don’t know.” Collected data were analyzed using Anthropac (version 4.98) and Latent Gold (version 4.5) programs.

Results: There is substantial similarity in diabetes beliefs among African Americans, American Indians and Whites. Diabetes beliefs were most similar in the symptoms and consequences domains compared to beliefs pertaining to causes and medical management. Although some discrete beliefs differed by ethnicity, systematic differences by ethnicity were observed for specific educational groups.

Conclusions: Socioeconomic conditions influence diabetes beliefs rather than ethnicity per se. (Ethn Dis. 2012;22[4]:466–472)

Key Words: Diabetes Beliefs, Explanatory Models of Illness, Cultural Consensus, Ethnic Differences, Health Disparities

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INTRODUCTION

The literature is replete with studies describing ethnic disparities in diabetes and its complications. Members of ethnic minority groups, such as African Americans and American Indians, are more likely to be diagnosed with diabetes, and are less likely to maintain effective glucose control or self-management than are Whites. Less consistent self-management of diabetes by ethnic minorities contributes to disparities in disease burden and medical complications.

Effective diabetes self-management requires adherence to a complex regimen. Cultural differences in beliefs about diabetes and related self-management behaviors likely underlie racial and ethnic differences in glucose control. Such cultural explanations are compelling because previous research indicates that socioeconomic status, access to health care and genetic variability are unable to explain racial and ethnic differences in effective glucose control. Unfortunately, most studies exploring the cultural basis of diabetes beliefs and its potential implications for self-management have used ethnic-specific samples. Although in-depth analysis of one ethnic group’s understanding of diabetes is valuable, comparative research is needed to determine whether “culture” or diabetes belief systems systematically differ between ethnic groups.

The goal of this study is to improve understanding of the cultural basis for variation in diabetes beliefs. This study integrates the Explanatory Models of Illness and Cultural Consensus traditions. Data are used to compare diabetes-related beliefs by ethnicity, and explore the role that education plays in shaping diabetes-related beliefs. These analyses offer insight into the cultural origins of disparities in effective diabetes self-management documented in the literature, and may help explain ethnic disparities in diabetes-related complications. Further, like others, we submit that understanding the complex belief systems individuals hold about health and disease is essential for creating and implementing culturally appropriate interventions and treatments.

Theoretical Foundations

Derived from the work of Kleinman and colleagues, the Explanatory Models of Illness (EM) tradition suggests that individuals develop conceptual models to make sense of an illness or condition, and that cultural groups share similar models. The models are created through group members’ interactions with people, objects, and symbols in their daily lives. Each disease model has

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