DEPRESSION, HEALTH BELIEFS, AND LOCUS OF CONTROL: RELATIONSHIPS TO GLYCEMIC CONTROL IN HISPANICS AND AFRICAN AMERICANS WITH DIABETES

This study evaluated the relationship between glycemic control in minority patients, their health beliefs, and mental health. This cross-sectional study recruited subjects from a randomized list of patients with diabetes in the King/Drew Medical Center. The subjects responded to Beck's depression inventory, health belief scale, and multidimensional health locus of control. Patients' HbA1C, fasting blood glucose, and fasting lipid panel from the last six months were extracted and recorded.

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METHODS

To determine the association between depression and glycemic control in African American and Hispanic patients with diabetes, we examined a cross-sectional random sample of 100 patients with diabetes at King/Drew Medical Center's diabetes clinic. Characteristics of study participants can be found in Table 1. Subjects were approached by research assistants, and the study was explained in detail. Those who accepted set up an appointment in the clinical trials unit. Subjects were given four face-to-face questionnaires: Beck depression inventory, health beliefs scale, and multidimensional locus of control scale forms B and C. They were paid $20 for participating. Their hemoglobin A1C (HbA1C), lipid panel, chemistry, and hematology laboratory results were extracted and recorded.

RESULTS

One hundred subjects participated. Most participants were women (n=61). Most were Hispanic (n=57). Sex and ethnic ratios are representative of the population of King/Drew Medical Center. Most were unemployed, disabled, or retired (n=80), most were of foreign origin (n=51), and nearly half were on insulin (n=47). Refusal rate was 24.8%. Trends in the study indicated that the more faith the patients had in doctors, the lower their levels of HbA1C were (P=.08). Trends also indicated that the higher the internal locus of control, the less depression patients had (P=.0045).

CONCLUSIONS

Assessing the support system and locus of control of individuals with diabetes may be important in determining if they are at risk for depression. Having a high internal locus of control may cause high levels of stress, thus diabetes education should focus on more creative ways of controlling the disease rather than stressing self-control. The improvement of patient-doctor relationships may lead to better diabetes control. Individuals with both depression and diabetes may be at risk of experiencing uncontrolled glycemic levels and should be assessed accordingly.

Table 1. Distribution of study sample characteristics

Characteristics	Mean	Range
Age (years)	51	19–78 years
Annual income	$13,180	$1,080–$63,000
Length of disease	9 years	.1–29 years
Hospitalizations	.58	0–12
HbA1C (%)	8.255%	5.2%–14.2%
Beck Depression Inventory Score	14.01 pts.	0–52 pts.

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