

The Effects of a Diabetes Self-Management Education Program Among American Indian Adults
with Type 2 Diabetes Identified in the Emergency Department

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Abstract

Objective: This quality improvement project sought to evaluate the effect exposure to culturally adapted diabetes self-management education (DSME) had on glycated hemoglobin levels (A1C), body mass index measurements (BMI), and self-care behaviors associated with glycemic control among American Indian adults with Type II Diabetes Mellitus (T2DM) who were identified in a rural emergency department (ED).

Methods: This project utilized a 1-group pretest–posttest design comparing indicators of cardio-metabolic health at baseline (ED visit) and after the intervention. The intervention was attending five sessions using a culturally appropriate DSME curriculum.

Results: A total of 26 participants who met inclusion criteria were recruited from the ED. Sixteen participants were lost to follow-up, and 10 attended DSME sessions at the hospital. Statistically significant improvement was demonstrated among the final sample (n=10) in median serum A1C levels (11.1% vs 10.6%, $P=.005$) and median self-care behavior inventory scores (3.9 vs 4.8, $P=.011$). Changes in median BMI measurements approached significance, but did not demonstrate statistical significance (28.5 kg/m^2 vs 28.0 kg/m^2 , $P=0.66$).

Conclusions: This pilot study found that beyond immediate control of hyperglycemia during an ED visit, discussion of chronic disease management, establishing follow-up with a diabetes educator and enrollment into a culturally adapted DSME program prior to discharge improved self-care behaviors associated with glycemic control and serum A1C measurements.