



Improving Self-Efficacy for Adults with Type 2 Diabetes Mellitus in a Rural Community Setting

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Problem & PURPOSE

- Diabetes affects millions of Americans.
- Rural adults have higher diabetes prevalence but fewer diabetes education resources.
- No Diabetes Self-Management Education (DSME) program was available in this county.
- **Purpose:** Evaluate whether a four-week community diabetes education program improves self-efficacy among adults with T2DM living in a rural community.

Available Knowledge & Rationale

- Rural diabetes prevalence exceeds urban prevalence.
- 62% of rural counties lack DSME programs.
- Diabetes education improves knowledge and self-management.
- Higher self-efficacy is associated with improved diabetes outcomes.
- PDSA framework guided project implementation.

Methods

Context

- Rural Midwestern community
- Partnership with rural medical clinic and senior center
- Adults ≥ 19 years with T2DM
- Free community program

Intervention

- Weekly Topics: Diabetes Overview, Physical Activity, Medication Management, Nutrition
- Each session: 30-minute presentation, 15-minute interactive activity
- Guest Speakers: Physical Therapist, Registered Dietitian

Study of Intervention

- Pre-intervention survey
- Four educational sessions
- Post-intervention survey
- Attendance questionnaire

Measure

- Self-Efficacy for Diabetes Scale
- 8-item instrument
- Score range 8–80
- Higher scores = greater self-efficacy
- Pre/post comparison

Data Analysis

- Matched pre/post analysis
- Dependent samples t-test
- Descriptive statistics
- Significance level: $p < .05$

Results

Participants

- 15 participants enrolled
- 11 matched surveys analyzed

Statistical Results

- Pre: $M = 58.7$
- Post: $M = 68.2$
- Mean improvement = 9.5 points
- $t(10) = 2.77$
- $p = 0.02$

Correlation

- $r = .20$

Discussion

- Self-efficacy significantly improved following the intervention.
- Community-based education is feasible in rural settings.
- Interactive learning may increase participant engagement.
- Partnerships with community healthcare professionals strengthened program success.

Clinical Implications

- Improves access to diabetes education.
- Supports chronic disease self-management.
- Promotes interdisciplinary collaboration.
- Demonstrates an evidence-based model for rural healthcare.

Conclusions

- Community diabetes education improved self-efficacy.
- Low-cost intervention is feasible in rural communities.
- Supports expanded diabetes education initiatives.
- Future projects should include larger samples and long-term follow-up.

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