

Effect of group diabetes education class on clinical outcomes and patient satisfaction in a family medicine clinic

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Background

- Diabetes self-management education (DSME) is an ongoing process of teaching patients the knowledge, skills, and abilities necessary for diabetes self-care.
- Currently, there is no required format for providing DSME.
- Approaches to diabetes education that are interactive and patient-centered have been associated with positive patient outcomes.
- Conversation maps are interactive educational tools used to guide provider-patient conversations.

Purpose

- To determine the effect of group diabetes education classes on patient's hemoglobin A1c (Hgb A1c), blood pressure (BP) and low-density lipoprotein (LDL) cholesterol.
- To determine patient satisfaction with the group diabetes education classes compared to other learning methods.

Methods

- Four group diabetes education classes were held over the course of one calendar year, starting from July 2010 to June 2011.
- Classes were taught using the American Diabetes Association's Diabetes Conversation Maps®.
- Participants were patients from the family medicine clinic who had been referred by their primary care physician to clinical pharmacists for further diabetes education.
- Patients' Hgb A1c, BP and LDL were monitored, if available, before and after each class attended.
- Patient satisfaction surveys were administered to each participant at the end of the year, either in person or over the phone.
- Approved by the MUSC Institutional Review Board.

Table 1. Demographics (n = 31)

Race, n (%)	
Caucasian	1 (3.2)
Black	30 (96.8)
Sex, n (%)	
Female	23 (74.2)
Male	8 (25.8)
Age (years)	
Mean	56.5
Range	22 - 77

Figure 2. Comparison of patient satisfaction with conversation maps

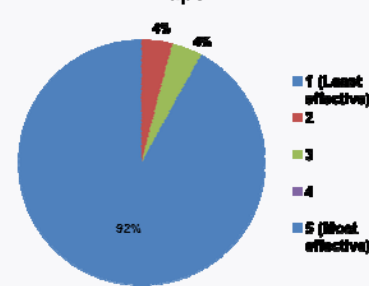
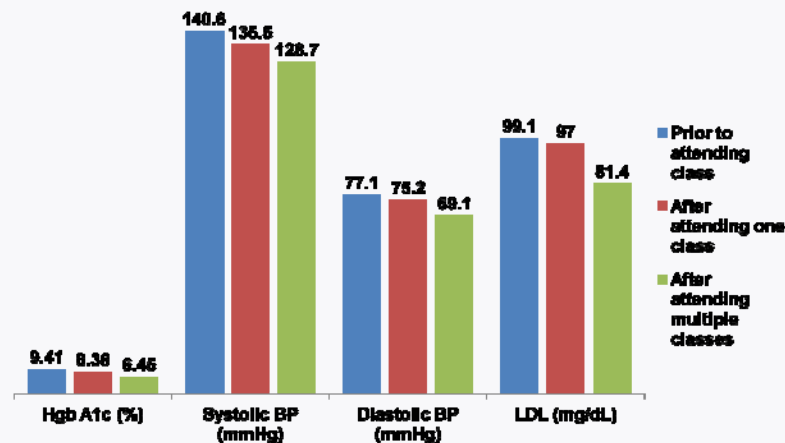


Figure 1. Mean differences in clinical outcomes (n = 31)



Results

- 32 people attended at least one group diabetes class during the study period.
- Nine returned for more than one class
- One was excluded due to incomplete data as participant was not a patient at the family medicine clinic
- Baseline demographics are shown in Table 1.
- Figure 1 shows the differences in clinical outcomes for all patients and specifically, for those who attended multiple classes.
- Percent change of 1.05% in Hgb A1c for all patients trended towards statistical significance ($p = 0.0531$). Those who attended more than one class showed a statistically significant change in their Hgb A1c by 3.5% ($p < 0.05$).
- 80% ($n = 25$) of patients filled out a patient satisfaction survey at the end of the year.
- Figure 2 shows the comparison of those satisfied with the conversation maps versus other educational tools.
- Most patients ($n = 21$, 84%) reported more satisfaction with the group diabetes classes than with individual education sessions.
- In addition, the majority ($n = 22$, 88%) stated that they would most likely come back to another group diabetes class.

Conclusions

- Clinical outcomes including Hgb A1c, BP and LDL improved when patients attended group diabetes education classes led by pharmacists.
- Patients were satisfied with the group education class setting compared to other methods.
- These data support offering group diabetes education classes as a method of patient education at a family medicine clinic.

Conflict of Interest

- The authors have no conflicts to disclose.