

Assessing the Impact of Health Literacy of Health Professionals Engaged in a Diabetes Self-Management Program:

“The Diabetes for Life Project”

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Background

Diabetes affects approximately 25.8 million people in the United States (8.% of the population) (1). The Southeastern region, including Tennessee, bears a disproportionate burden of the disease, and has been identified as a ‘diabetes belt’ with an estimated disease prevalence of 11.7% (2). The city of Memphis is predominantly African American (62.4%). When compared to the White population, African Americans have higher rates of diabetes, experience more serious diabetes complications (e.g. amputations), are less likely to receive needed clinical tests, and have higher diabetes related death rates (3,4).

Diabetes for Life (DFL) was self-management program aimed at reducing health disparities among African Americans with Type 2 diabetes in Memphis and Shelby County. This program is one of five national sites that constitute the Alliance to Reduce Disparities in Diabetes; a five-year grant funded initiative of The Merck Foundation.¹ Each site is charged with developing a multilevel intervention with three core components: patient, clinician, and system. Training for health care providers is a central component of the strategy.

Target Population: Healthcare professionals treating patients with Type 2 diabetes as part of the formalized collaboration with DFL who have committed to implement patient and clinic level changes in their practices (N=6)

Objective: To improve communication between health care provider and patient, thereby impacting patient outcomes.

Research Question: What is the impact of intensive provider training on the interaction between patient and health care provider?

Approach

The Diabetes for Life Program convened Quarterly Provider Practice Learning Collaborative training sessions from January 2012 through August 2013. Attendees included physicians, nurses, nurse practitioners, and other staff members from the six practice sites. The topics covered in the training sessions are listed in Table 1. Participants completed a pre-test and an immediate post-test after each session to assess for changes in knowledge.

Topic	Total # of Trainees
• The Importance of Multicultural Awareness and Competency in Diabetes Care	17
• The Patient Centered Medical Home	15
• The Chronic Care Model	13
• Public Reporting and the Value of Data	13
• Incorporating Cultural Awareness into Shared Decision Making in Diabetes Care	11



Providers were also responsible for referring patients to the DFL program. Patients were offered DSME education classes. They completed baseline and 12-month follow up surveys that assessed clinical (e.g. A1c, Cholesterol, and behavioral changes (self-care activities) and the patient-doctor relationship

Outcomes and Impact

Provider Outcomes: Salient changes in knowledge were found for the topics of Patient Centered Medical Home, the Chronic Care Model, and the Value of using data to improve performance.

Table 2: Change in Provider Knowledge

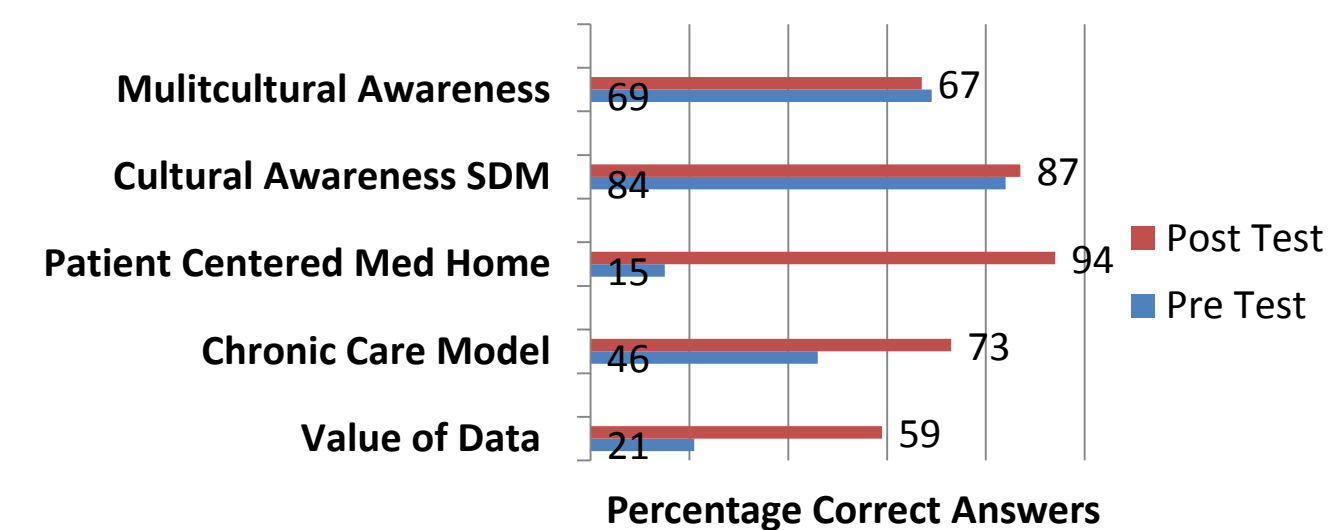


Table 3: Patient Outcomes: 12-month follow up data

shows that patients (N=120) seen by providers who participated in DFL training sessions (A) relative to the comparison group (B) had greater changes in the patient-doctor relationship; also patients seen by trained providers showed significant improvement in the major clinical outcomes: A1c and Cholesterol

Patient-Doctor Relationship	Group A	Group B	p
I trust my doctor’s judgments re: medical care	4.87	4.00	p<.001
ask questions about things I want to know/ don’t understand re: treatment?	4.41	2.92	p<.001
discuss personal problems related to illness?	3.67	2.11	*p<.05
Received the information I needed?	2.30	1.37	*p<.05;

Clinical Measures	Baseline	Follow-Up
Cholesterol	183.0	178.4**
A1C	7.5	7.4*

Implications for Delivery and Practice

1. Healthcare providers and staff who participate in training on the Chronic Care Model, patient-centered care, and cultural awareness have patients with improved diabetes self-efficacy scores, a higher level of trust in their providers, and improved clinical outcomes.
2. Healthcare provider training that is implemented in tandem with patient education has the potential to significantly improve overall outcomes for patients with Type 2 diabetes.
3. Healthcare provider training in a collaborative format creates an optimum space for shared and peer to peer learning.

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