Mindfulness-Based Stress Reduction Intervention With Type 2 Diabetic Patients at Beaufort Jasper Hampton Comprehensive Health Services, Inc.

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Our Challenge

Diabetes Mellitus Type 2 (DMT2) is an epidemic affecting over 30 million people in the US, with 1.5 million estimated new cases every year.[1] Socioeconomic stressors can worsen symptoms and lead to increasingly poor health outcomes among more socially disadvantaged patients with DMT2.[2] Research also shows a connection between high stress levels, high amounts of cortisol, and decreased insulin sensitivity with higher blood sugar/HbA1C levels.[3,4]

Our challenge was to develop a free and easy to use stress-reduction tool for DMT2 patients as a supplement to their pharmacological treatment.

Our Objective

To improve stress levels and increase medical regimen compliance in DMT2 patients through our daily meditation/mindfulness program.

Materials & Methods

Participants: patients of Beaufort Jasper Hampton Comprehensive Health Services (BJHCHS) in coastal (Low Country) South Carolina with Diabetes Mellitus Type 2.

Description of Innovation:
A 6 minute daily mindfulness/meditation exercise (adapted from a similar tool created by ATSU-SOMA Chicago Community Health Center) was provided and demonstrated to DMT2 patients in an introductory session while in clinic. Patients were given a preliminary survey to gauge the extent of their stressors, perception of their disease, and familiarity with mindfulness/meditation. Patients were also given a daily log sheet to keep track of how many times they practiced the meditation during the program duration. Recruitment into the program was facilitated by referrals from primary care providers, the Nutrition department, diabetes outreach staff, and clinic staff.

Assessment:
After 4 weeks, patients were asked to fill out a post-interventional survey documenting their experience with the program and to record stress levels and perception of their disease at the close of the intervention period. Pre and post intervention survey results were compared and scored to record differences.

Incentives for Participation:
Patients that completed both surveys were entered into a raffle to win a FitBit Versa Smartwatch for participating.

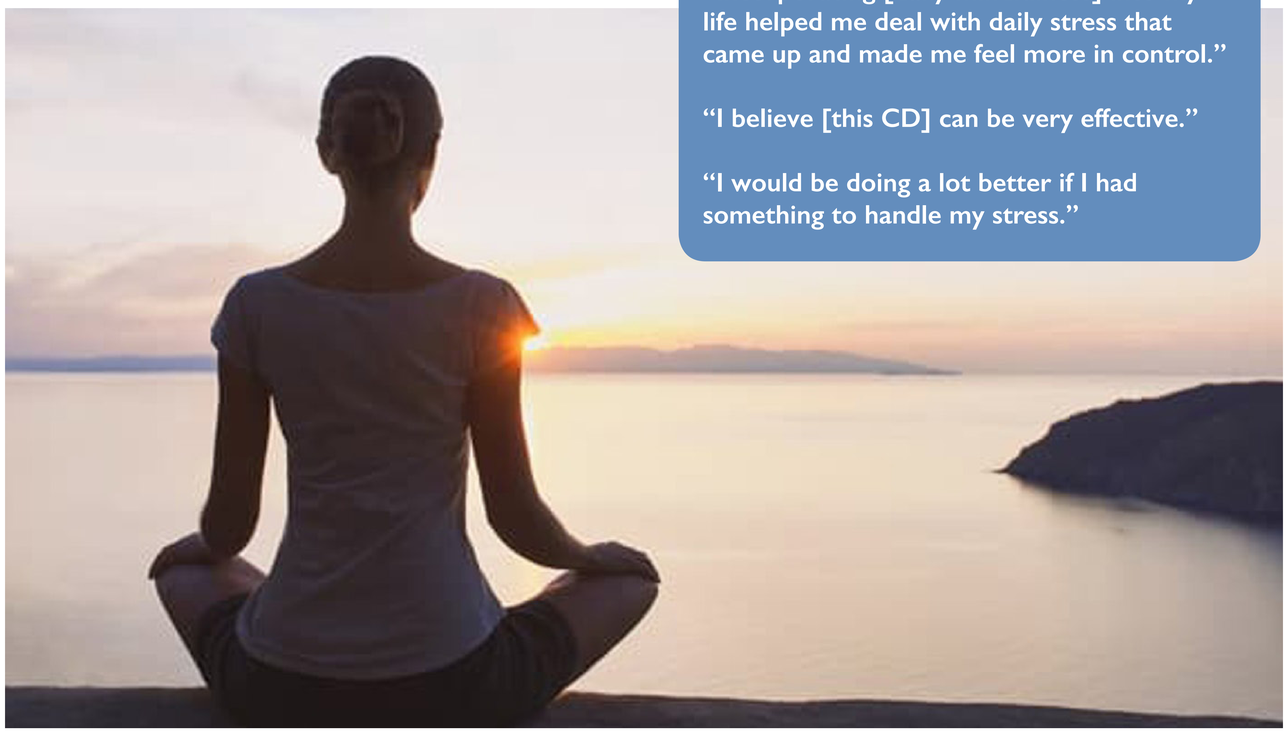
Limitations Lead to Adaptations

Limitations:
Implementation Time per Patient: preliminary survey completion time was 20-30 minutes, doubling or tripling patient appointment times.

Provider Participation: due to the time consuming and restrictive nature of survey measurement tools, providers (Primary Care/Nutrition) were unable to implement the program and keep their appointment schedules moving smoothly.

How We Adapted:
We suspended enrollment into the study and distributed the meditation audio file in the form of CDs to primary care providers and nutrition staff to give to any patient that was interested in it. To date, we have handed out over 30 copies of the recording within a 4 week period and are currently producing more.

Positive feedback from providers and patients through verbal questioning suggested undeniable intrinsic benefits in providing patients with easy to use, accessible daily meditation practice. Providers and staff were more receptive to distributing the tool when fewer constraints were associated with it.



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Impact

Results:
We do not have data from a significantly large enough sample size to provide statistical support for the use of this innovation at this time. Upon study completion, we expect the data to support our hypothesis that practicing daily mindfulness has beneficial impacts on patient well-being, compliance, and self-empowerment with their diabetes management. A decrease in stress, symptoms of anxiety, and depression based on answers to completion surveys after using the recording is also expected.

Preliminary feedback from Providers & Health System:

- Willingness to utilize and expand the use of daily meditation as an adjunct treatment for all chronic disease patients, not just DMT2.
- Incorporation of mindfulness audio file into stress education class is now offered by the Nutrition department for DMT2 patients receiving nutrition counseling.

Patient Quotes:

"Incorporating [daily mindfulness] into my life helped me deal with daily stress that came up and made me feel more in control."

"I believe [this CD] can be very effective."

"I would be doing a lot better if I had something to handle my stress."

How to Replicate & Sustain this Innovation

Benefits:
- **Minimal material/start up costs.**
- **Pre-made, accessible, short:** The guided mediation makes it easy for a wide variety of patients to understand and follow.
- **Easy to use, easy to distribute:** via audio file, CD, MP3, YouTube link, etc. depending on the needs of the institution and demographic.

Tips for Sustainability:
- Train providers on benefits of the program and encourage cooperation.
- Allow plenty of time for adoption of program and do not rush compliance.
- Facilitate staff, providers, and different departments' ability and interest in prescribing this tool to any patient.
- Include brief operational instructions with CDs so that they can be distributed by primary care providers to patients without an introduction session.
- Make program available to any patient that may benefit from stress reduction, not just chronic disease patients.
- Make program available as a free distributable item, like a brochure, where a link to download the file for free is located on a pamphlet or flyer in the clinic.

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