

Introduction

- Diabetes affects millions of individuals worldwide.
- It is a disease where lifestyle modification and self-care modalities are key to preventing the debilitating complications of the disease.
- Current practice does not require healthcare providers to utilize an assessment tool to evaluate an individual's self-care behaviors.
- The use of Diabetes Self-Management Education and Support (DSMES) services are recommended for all patients diagnosed with diabetes to help manage the disease (American Diabetes Association, 2019).

Background & Significance

Diabetes

- It is predicted by 2050, that 1 in 3 Americans will develop Diabetes (Boyle et al., 2010, Powers et al., 2017).
- The average annual cost of medical expenditures for those living with diabetes was around \$9,601, which is a 14% increase from 2012 (National Library of Medicine, 2018).

Assessment Tool

- The Summary of Diabetes Self-Care Activities (SDSCA) questionnaire ask the patient to evaluate his/her self-care activities over the past 7 days.
- The self-care activities include:
 - Diet
 - Exercise
 - Blood glucose
 - Foot care
 - Smoking
- The SDSCA can aide in the referral for the patient to attend DSMES services.

DSMES

- Evidence-based process that provides knowledge and assistance to guide the patient to change self-care behaviors (Beck et al., 2018).
- Benefits include:
 - Reduction in A1C by 0.6%-1%,
 - Increase quality of life
 - Lower healthcare costs and hospitalizations.
- DSMES are covered services by most insurance plans. Only 5% of Medicare and 6.8% of privately insured patients are being referred (Centers for Disease Control, 2018).

PICO Question

In adult patients age 18-75, will the use of the SDSCA questionnaire increase the number of referrals for DSMES services?

Methodology

Design: Pre-post intervention study.

Sample:

- Inclusion criteria:
- Adult patients between the ages of 18-75
 - Male or Female
 - Diagnosed with Diabetes Mellitus type 1 or type 2
 - Currently receiving treatment for his/her diabetes
 - Able to read and understand the English language
 - Cognitively intact.

Setting:

- Single provider primary care practice in Union County, NJ.
- The practice only treats adult patients with either private insurance or Medicare.

Measures:

- Retrospective chart review of those individuals who were previously referred or attended DSMES services.
- Completion and scoring of the 25 question SDSCA questionnaire.
- The number of referrals made to DSMES after taking the SDSCA questionnaire.

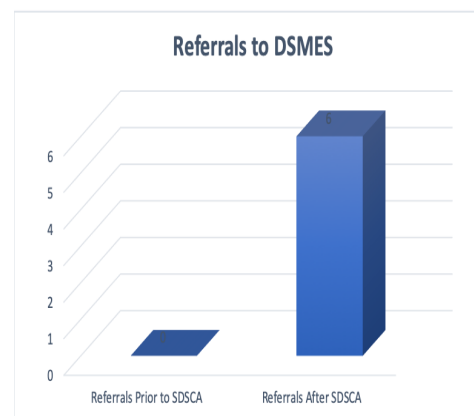
Analysis:

- Univariate analysis of categorical and continuous data.
- Bivariate analysis using Wilcoxon Rank Sum Test to compare referral rates.



Results

- Twenty-five individuals consented to participate.
- Twenty-five charts were reviewed.
- Most participants were white males with a long history of diabetes (more than 5 years).
- Number of referrals to DSMES prior to implementation were zero.
- Six participants were referred to DSMES services after performing the SDSCA questionnaire.



Discussion

- The objective was reached by increasing referrals from 0 (0%) to 6 patients (24%), $p = 0.014$.
- The SDSCA demonstrated patient knowledge gaps when it came to self-care behaviors and diabetes.

Limitations

- Time limitation for implementation
- Convenience sample which could lead to selection bias
- Age of screening and the patient population of the practice could lead to generalizability of the results.
- The use of the 25-question SDSCA questionnaire was lengthy and some questions were repetitive.
- Limited availability and times of DSMES services.

Implications

- This project showed the importance of assessing self-management behaviors in all diabetes patients.
- Future scholarly work should determine whether implementing the SDSCA and referring to DSMES reduce diabetes-related complications and decrease the burden of the disease.

Reference List

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- **Contact Information**
- Holly Gonzalez: hq240@sn.rutgers.edu
- Irina Benenson: benensir@sn.rutgers.edu
- Cara Padovano: padovacm@sn.rutgers.edu