Abstract

It is well-demonstrated that patients with type 2 diabetes mellitus (T2DM) are at increased risk for periodontal disease (periodontitis). Conversely, people with periodontitis and diabetes have poorer glycemic control. Objectives: This Schweitzer Fellows project aimed to: 1) assess the oral health screening practices at East Carolina Family Medicine Center (ECFMC); 2) measure the oral health-related quality of life and self-reported periodontal disease among patients with T2DM and managed by physicians and diabetes educators at ECFMC; 3) counsel and educate patients with T2DM on oral disease prevention and nutrition; 4) formulate an oral health counseling best practice (intervention) in collaboration with physicians (PCPs), residents and diabetes educators at ECFMC; and 5) create a sustainable referral pipeline for the co-management of patients with T2DM between the ECFMC and ECU School of Dental Medicine (SoDM). Methods: Patients with T2DM were recruited for this project along with PCPs, residents and diabetes educators at ECFMC. This report focuses on patient demographics, acceptance of the patient education intervention and preliminary findings on the effect on glycemic control.

Results: Twenty-seven patients were recruited from ECFMC and referred to ECU SoDM for a “dental home.” The majority of the patients identified as female (76.9%) versus male (23.1%). Regarding race, 84.6% identified as Black, 11.5% identified as White, and 3.8% identified as multiracial. The age of participants ranged from 22-81 years with a mean of 56 years. The majority of the participants were single or never married. Approximately one-third of patients reported monitoring blood sugar daily. Fifteen PCPs, residents and diabetes educators received oral health training. Overall project recruitment outcomes were met despite the COVID-19 pandemic and clinic closures. Preliminary data on changes in hemoglobin A1c indicated no clear trend in altering glycemic control with the educational intervention alone.

Conclusions: Overall, this project demonstrates the feasibility of establishing a referral pipeline for patients with T2DM between ECFMC and SoDM for improved oral and overall health.

Methods

- Patient recruitment
- One-on-one education and OHP/14 responses
- Patient referral
- Screening at ECU SoDM with complimentary radiographs
- EHR report of HbA1c

Discussion and Conclusions

Due to COVID-19 closures, the continuity of care and follow up with PCPs was disrupted. When clinical activities resumed, patient attitudes toward clinic safety and their increased susceptibility to contraction led many to decline treatment in the clinic for the foreseeable future. As a result of these disruptions, the timeline for this study has been extended indefinitely.

In conclusion, the data do not contradict the need for oral care but rather reveal the multifactorial treatment required for patients with diabetes.

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