

Dental Students' Experiences Integrating Nutritional Assessment and Counseling in Practice

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Background

- Dental caries and diet are inextricably linked (Marshall 2019); the Academy of Nutrition and Dietetics holds the position that collaboration between dietitians and oral health care practitioners is critical for oral health promotion, disease prevention, and intervention (Touger-Decker 2013)
- Collaboration between dietitians and dental professionals remains uncommon despite various organizations and peer-review articles highlighting the importance of collaboration between these professionals (Liefers 2021)
- Currently, students at the College of Dental Medicine (CDM) do not regularly implement nutritional screening or nutritional counseling in their routine examinations or encounters with patients, nor do they routinely collaborate with registered dietitians in clinic
- One study showed that dental residents who are exposed to nutrition-related content in their training later found it relevant in their current practice. Those who were open to learning about nutrition during their training were likely to include questions about their patient's dietary habits as a component of a comprehensive examination in their practice (Nandi 2023).
- Despite this, barriers to integrating nutritional screening, risk assessment, and counseling in daily dental practices do exist
- Third year dental students enrolled in Population Oral Health Management (POHM) are tasked with acquainting themselves with a mock, then real-life, patient of record, and evaluating the patient's caries risk. Students provide food/diet recommendations and set specific goals with patients to reduce risk to a patient of record in clinic. Students then determine if a referral to a registered dietitian may be necessary, and if so, students write the appropriate referral.

Purpose

To evaluate dental student's experiences conducting dietary caries risk assessments, setting goals, and making registered dietitian referrals for CDM patients as a POHM course assignment. Our objective is threefold:

- To better understand the experiences of students integrating nutritional counseling in the dental school clinic
- To elucidate barriers preventing students from making appropriate referrals to a registered dietitian
- To receive assignment feedback to improve this POHM course assignment for future classes of CDM students. Findings will inform course improvements

Methods

Third-year CDM students were recruited to complete an online survey (multiple-choice and open-ended questions) assessing assignment outcomes and experience. Quantitative data and coded qualitative responses were descriptively analyzed.

Findings

- Of 98 enrolled students, 64 (65.3%) initiated and 28 (28.6%) completed surveys
- Patients assessed were mostly female (n = 22; 75.9%) with an average age of 34.31 years (range: 11-68; 24% age 18 or under)
- Five students referred patients to dietitians; two patients reported high sugary drink and snack consumption
- Lack of patient interest (n=17; 55%), time (n=10; 32%), unclear protocol (n=8; 26%), and fear of hurting patient's feelings (n=7; 23%) were top barriers to completing assignment; 19% (n=6) reported no barriers
- Among barriers to dietitian referrals, time (n=9; 36%) and patient motivation (n=8; 32%) were most cited. No students previously placed referrals; 15 students (53.6%) had previously asked a patient about diet.
- Students expressed positive attitudes (n=16; 57.1% agree/strongly agree) regarding future dietitian collaboration

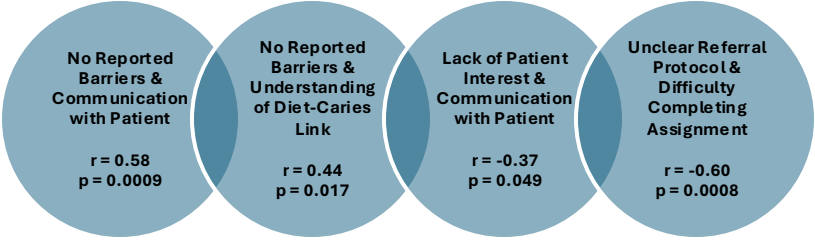


Figure 1. Significant Correlations (p<0.05) Amongst Barriers to Completing Assignment

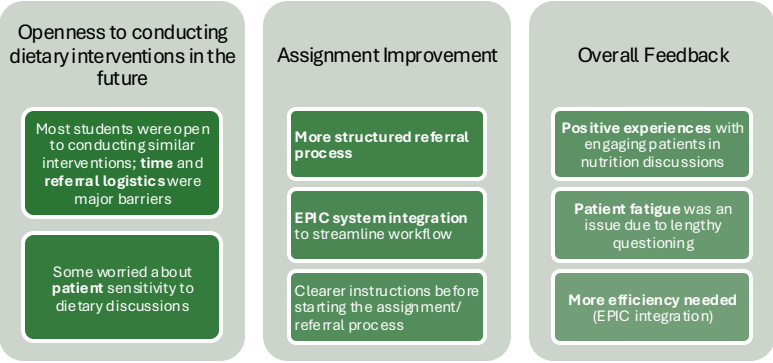
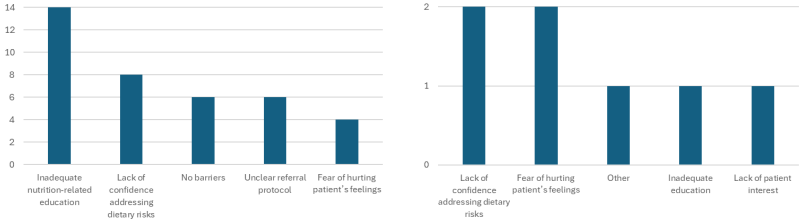


Figure 2. Thematic Descriptive Analysis of Open-Ended Survey Questions



Figures 3, 4. Top Barriers Amongst Those Who Did and Did Not Refer a Patient to a Dietitian, Respectively

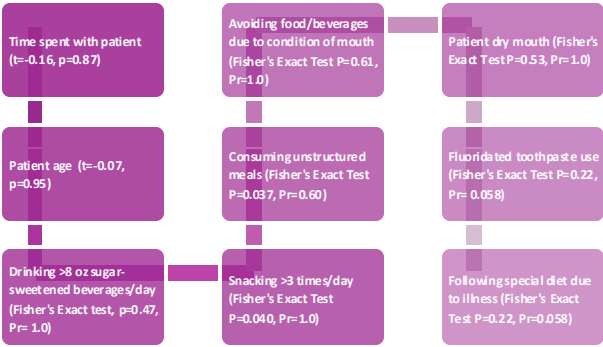


Figure 5. Non-Significant Correlations (p>0.05) Between Placing a Dietitian Referral and Listed Variables

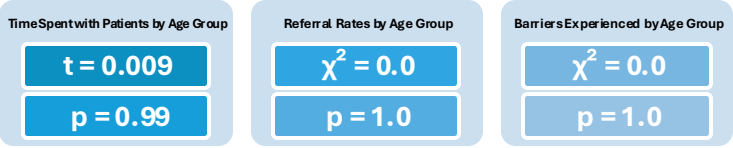


Figure 6. Non-Significant (p>0.05) Differences in Results by Age Groups (<18yo vs >18yo)

Limitations

- Low response rate (28.6%) and high survey incompletion rate (56.2%)
- Future data collection may include interviews with those who placed referrals to learn more about individual experiences

Conclusions

- Similar barriers existed in preventing dental students from referring patients to a registered dietitian and from completing a course assignment doing so
- Future studies may aim to evaluate ways to enhance integration of nutritional counseling and dietitian referrals, which may be particularly beneficial in pediatric populations

IRB protocol #AAAV3020; determined to be exempt