ABSTRACT

Objectives: Patients’ diet/nutrition is clearly associated with their systemic and oral health. The objectives were to assess dental students’ diet/nutrition-related personal experiences in elementary/middle school, high school and college and while shadowing dentists prior to dental school; their diet-related subjective and objective knowledge and professional behavior. The relationships between these constructs will be explored as well.

Methods: Anonymous survey data were collected from 692 dental students.

Results: The majority of respondents reported that it was important to their family to have a healthy diet in elementary/middle school (66.5%), high school (61.6%) and college (72%). While the majority agreed (87.4%) that dentists should provide diet/nutrition education for their patients and should educate them about the role of diet for their general and oral health, their current professional behavior focused mainly on the relationship between diet/nutrition and caries. Talking about sugar intake (87.4%) was the most widely reported diet-related professional behavior. While personal diet-related experiences and knowledge correlated with current professional behavior, objectively assessed knowledge did not correlate with their knowledge nor was it associated with the respondents’ diet-related professional behavior.

Conclusions: Respondents’ diet/nutrition-related subjective and objective knowledge were not correlated. While their subjective knowledge correlated with their current behavior, their objective knowledge did not correlate with their professional behavior.

BACKGROUND

- Research demonstrated convincingly that patients’ diet/nutrition is clearly associated with their systemic and oral health (1).
- The positive correlation between carbohydrate intake and cariesogenesis has been well explored (2).
- The protective effects of protein, non-fermentable carbohydrates and vitamin D were as well supported by research (3,4).
- Patients from different backgrounds and with different special health care needs have their specific nutrition needs and oral concerns (4). Future dentists need to be prepared to educate their patients optimally and in an evidence-based fashion about constructive diet-related oral health promotion.

OBJECTIVES

The objectives were to assess dental students’ diet/nutrition-related personal experiences in elementary/middle school, high school and college and while shadowing dentists prior to dental school; a. personal experiences in elementary, middle and high school and college and while shadowing dentists prior to dental school, b. subjective and objective knowledge, c. professional behavior; and d. the relationships between these constructs.

METHODS

This research was determined to exempt from Institutional Review Board (IRB) oversight by the Health Sciences and Behavioral Sciences IRB of the University of Michigan.

Respondents
- Anonymous survey data were collected from 692 dental students.

Procedure
- Dental students received a recruitment email that informed them about the study and asked them to use a web-link provided in the email to respond to the anonymous web-based survey.

RESULTS

The first objective was to assess dental students’ diet/nutrition-related personal experiences in elementary, middle and high school and college and while shadowing dentists prior to dental school. Table 1 shows that the majority reported that it was important to their family to have a healthy diet (66.5%) when they were in elementary/middle school. In high school, it was important to 61.6% and in college to 72% that they had a healthy diet.

The second objective was to assess students’ diet/nutrition-related subjective and objective knowledge. Table 3 shows that the majority of students were moderately confident in their diet-related and nutritional knowledge (98.9%) and their answers to the objective questions (b-g) agreed with what was shown and suggested in the literature.

The third objective was to assess dental students’ professional behavior. Figures 1 and 2 show that students supported diet-related patient education at first patient visits and when there was a life style change. Sugar intake was the most common acknowledged topic of diet/nutrition patient education.

The fourth objective was to assess the the relationships between these constructs. Table 4 shows that subjective knowledge correlated with both of the behavior indices.

DISCUSSION & CONCLUSIONS

While earlier personal diet-related experiences and self-reported diet-related knowledge correlated with current professional behavior, objectively assessed knowledge did not correlate with the self-reported subjective knowledge nor was it associated with the diet-related professional behavior. A lack of relevance of objective diet-related knowledge raises concerns about the respondents’ diet/nutrition-related education. Dental students educated their patients about the influence of sugar intake on caries, while the impact of other diet components and oral health remains unexplained. Future research should explore how diet/nutrition-related dental education has to be revised to assure evidence-based patient education about diet/nutrition.

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REFERENCES


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