

ABSTRACT

Purpose: The purpose of this study was to investigate current nutrition counseling practices of pediatric dentists in the United States and examine factors i.e., facilitators and barriers associated with those practices.

Methods: A survey consisting of 27 questions was sent via SurveyMonkey to 6,081 active members of the American Academy of Pediatric Dentistry. The data was collected over a 30-day period. The survey investigated participants’ demographics, attitude, knowledge, and practices around nutrition counseling.

Results: Out of 6,081 surveys sent, 438 responses were obtained (RR=7.2%). Of the survey takers, close to 100% agree that nutrition is a vital component in the overall health and well being of an individual. When asked if participants received general nutrition training during residency, 59.8% answered ‘no.’ The top perceived barrier to offering nutrition counseling to patients was “lack of patient interest.” Female responders were found to offer nutrition counseling more than male. A Chi-square test of independent variables was conducted and revealed no association between providing nutrition counseling and any independent variable, including demographics, education, and attitudes.

Conclusion: Respondents agreed that nutrition is a vital component of the overall health and well-being of an individual. Most agreed that additional emphasis should be placed on non-caries associated general nutrition counseling within residency. The majority of respondents (69%) are interested to learn more about nutrition counseling. The low response rate could be reflective of disinterest; but in general given the low response rate the results must be assessed with caution.

INTRODUCTION

Nutrition is an acknowledged determinant in 3 (i.e., diseases of the heart, malignant neoplasms, cerebrovascular diseases) of the top 4 leading causes of death in the United States.¹ However, many health care providers, such as pediatric dentists, are not sufficiently educated/trained to offer nutritional lifestyle recommendations in a manner that could alleviate general disease development or progression. This creates a compelling need to markedly improve nutrition education for health care professionals and to establish curricular standards and necessary nutrition competencies in the education, training, and continuing education for pediatric dentists.²

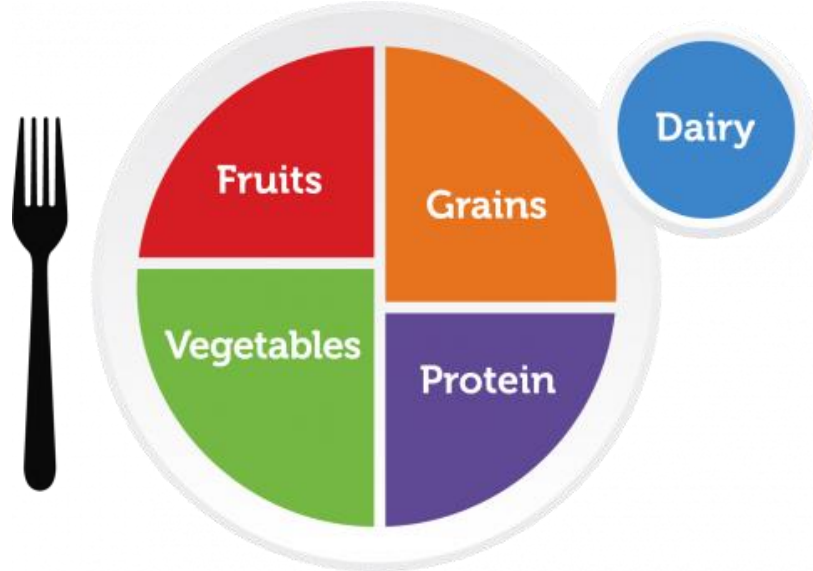
A study by Sanjani-Oommen (2006) examined the comparison of nutritional counseling between provider types: pediatricians and pediatric dentists. The study found that while pediatric dentists made slightly better recommendations than pediatricians regarding cariogenic foods, both provider types demonstrated a need for more education regarding nutrition counseling.³

Additional emphasis should be placed on non-carious general nutrition counseling in the curricula of pediatric dentistry residency programs⁴ Although significant consideration is given to counseling overweight and obese children, Huang et al suggested that failure to counsel less obese and disease-free patients may represent a missed opportunity for primary prevention of obesity- related diseases, such as heart disease and type 2 diabetes.⁵

For the pediatric population to receive optimal oral and general health care, adequate training at the predoctoral and postdoctoral level in dental education is required. Previous studies have found inadequacies in predoctoral education that led to dentists’ lack of confidence in providing patients with nutrition information. Most of the time, nutrition counsellors are dieticians or nutritionists. However, other healthcare professionals such as nurses, community health workers, or dentists play a crucial role in nutritional counselling.⁶ The purpose of this study is to determine the attitude and willingness of pediatric dentists and residents to provide nutritional counseling to their patients and the factors that influence that decision.

MATERIALS AND METHODS

A survey consisting of 27 questions was sent via SurveyMonkey to 6,081 pediatric dentists in the United States. The survey investigated thee experience and comfort of pediatric dentists with various modalities of offering nutrition counseling, as well as the extent it is offered. The data was collected over a 30-day period. The list of the emails was obtained from American Academy of Pediatric Dentistry (AAPD). A cover letter was sent via e-mail along with the survey. The cover letter included the purpose of the study, as well as the fact that the completion of the survey was voluntary, incurring no potential physical, social, psychological, or legal risks to the participants. There were no costs or expenses incurred to the participants associated with this research study. Institutional Review Board approval (#2021-13266) was obtained from Albert Einstein College of Medicine prior to electronic distribution of the survey.



Perceived Barriers to Providing Nutrition Counseling	n	mean	SD	Rank
Lack of patient interest	438	3.79	0.90	1st
Fear of offending parent	438	3.72	1.06	2nd
Disinterested and/or unappreciated parents	438	3.71	0.97	3rd
Fear of appearing judgmental	438	3.67	1.04	4th
Inadequate reimbursement	438	3.66	1.19	5th
Inability to charge for service	438	3.57	1.21	6th
Lack of time	438	3.56	1.14	7th
Lack of adequate office facility/properly trained staff	438	3.48	1.01	8th
Patient education level	438	3.15	1.01	9th
Lack of confidence	438	2.98	1.07	10th

Table 1. Questionnaire showing the number of responses (n), mean scores, standard deviation (SD), and ranking of the perceived barriers to offering nutrition counseling. This is out of a scale of 1-5 with 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree.

RESULTS

Out of 6,081 surveys sent, 438 responses were obtained for a response rate (RR) of 7.2%. A Chi-square test of independent variables was conducted and revealed no significant association between providing nutrition counseling and any independent variable, including attitude, behavior, education and demographics.

Attitude

Close to 100% of pediatric dentists believe that nutrition is important to the overall health and well being of an individual. Almost half of respondents (45%) agree that pediatric dentists have an essential role in helping children attain and maintain a healthy weight. Just over ¾ of respondents agree that both pediatric dentists and pediatricians should be offering nutrition counseling. The majority of respondents are extremely comfortable in their ability to offer caries related nutrition counseling, but only 19% are extremely comfortable with providing general/non-caries related counseling. For the perceived barriers to offering nutrition counseling to patients, the data for individual barriers are shown in Table 1. “Lack of patient interest,” “Fear of offending parent,” and “Disinterested and/or unappreciative parents” were found to be the top 3 barriers. “Lack of adequate office facility/properly trained staff,” “Patient education level,” and “Lack of confidence” were the bottom 3 barriers of those listed. The scale had an acceptable level of internal consistency as determined by a Cronbach’s alpha of 0.7494.

Behavior

When asked to what extent nutrition counseling is offered in their practice, of the female respondents (60%) offer nutrition counseling more than males (46%). Almost half of respondents (43%) have referred a patient to their pediatrician for non-caries associated nutrition counseling. When asked if parents have asked for nutrition advice in the office: 71.2% answered yes, while 14.2% are currently offering childhood obesity information or other healthy weight interventions for patients. Seventeen percent are regularly calculating BMI for their patients.

Education/Training

The majority of respondents (59.8%) did not receive general nutrition training during residency and just over three-quarters of respondents agree that additional emphasis should be placed on the topic during residency. The majority of respondents (69%) are interested to learn more about nutrition counseling.

CONCLUSIONS

- Respondents agreed that nutrition is a vital component of the overall health and well-being of an individual.
- The vast majority of respondents agree that pediatricians and pediatric dentists should both offer general nutrition counseling to patients.
- The top perceived barrier to offering nutrition counseling was “Lack of patient interest,” while the least perceived barrier was “Lack of confidence.”
- Further analysis is required to examine the extent of nutrition counseling curricula in residency programs. The vast majority of respondents agree that additional emphasis should be placed on non-caries associated nutrition in pediatric dentistry programs.
- The majority of respondents are interested to learn more about nutrition counseling.
- The results of this survey must be interpreted with caution because of the small sample size and low response rate.

BIBLIOGRAPHY

References available upon request.