Evaluation of behaviors and attitudes regarding oral health among students

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Abstract

The purpose of this study is to evaluate behaviors and attitudes towards oral health among first-year students at the Faculty of Dentistry at the "Carol Davila" University of Medicine and Pharmacy in Bucharest, and among first-year students at the Faculty of Management in Pitești, specializing in Educational Management at the master's level, and to compare the results between the two groups. The study is a descriptive cross-sectional one and includes a total of 256 students, 156 from the Faculty of Dentistry (Group I) and 100 from the Faculty of Educational Management (Group II). The sociological survey method based on a questionnaire was used. The questionnaires used were anonymous, and the same questionnaire was used in both groups, allowing for comparative evaluation. Students provided demographic information regarding gender and age, and the data were processed using Microsoft Excel. According to the respondents, dental and gingival health is generally good, with a percentage of 51.9% for students at the Faculty of Dentistry (Group I) and 66% for students in Group II. The assessment with an excellent rating was only 3% in both groups participating in the study. Behavior can be changed either through individual efforts, educators promoting health, opinion leaders, or as a result of changes in the economic, political, social, technological, and environmental fields.

Keywords: oral health, habits, knowledge, health education

INTRODUCTION

Social factors, overlaid with personal decision-making, can determine individual behavior change [1,2]. In contemporary society, individuals need to be informed and motivated, enabling them to positively influence their health and thereby reduce the incidence of oral and general conditions [3,4]. Maintaining oral health requires sustained and repeated efforts from individuals, dentists, as well as the entire community. Health promotion is the science that allows individuals and communities to increase control over health determinants and thus improve their health status [5,6]. In the post-pandemic period, concern for health and medical knowledge among the population has increased and influences individuals' behavior [7]. For students at the Faculty of Dentistry, interest in health is high, as they represent role models for family, peers, patients, and the community in which they live [3,8]. Although cross-sectional studies highlight a weak link between knowledge and behaviors, oral health knowledge conditions healthy habits [9]. Individual efforts are effective when accompanied by societal changes. The perspective of health benefits provides weak motivation for change until society adopts it as a new behavioral rule. From that moment on, motivation to adhere to the rule imposed by society becomes strong and leads to significant changes in individuals' behaviors [10-12]. The behavior of medical personnel towards their own health reflects an understanding of the importance of preventive approaches and the improvement and preservation of patients' health [4,13].

Aim and objectives

The purpose of the study is to evaluate behaviors and attitudes towards oral health among first-year students at the Faculty of Dentistry at the "Carol Davila" University of Medicine and Pharmacy in Bucharest, and among first-year students at the Public Faculty in Piteşti, specializing in Educational Management at the master's level, and to compare the results between the two groups.

The authors start from the premise that the level of knowledge regarding oral health is higher in the group of students from the Faculty of Dentistry. To assess the level of concerns related to oral health among both students from the Faculty of Dentistry and first-year Master's students from the Faculty of Educational Management, who are not particularly interested in health, we will compare the obtained results.

MATERIAL AND METHODS

The study is a descriptive cross-sectional one and includes a total of 256 students, of which 156 are from the Faculty of Dentistry (Group I) and 100 are from the Faculty of Educational Management (Group II). The survey method based on an anonymous questionnaire was used. The questionnaires used were the same for both groups, allowing the comparative evaluation. Students provided demographic information regarding gender and age, and the data were processed using Microsoft Excel.

RESULTS

Comparing the student groups, the authors found the following results: The respondents generally perceive their own dental and gingival health to be good, with a percentage of 51.9% for students at the Faculty of Dentistry (Group I) and 66% for students in Group II. The appreciation with an excellent rating was only 3% in both groups participating in the study. The perceived need for dental treatment varies: dental students believe they

need orthodontic treatment in 13% of cases (Master's students obtain a percentage of only 3%), 1.9% need extractions, unlike 4% in the Master's group, and the need for cleaning treatment is higher in the opinion of dental students - 27.5% versus 12% (Fig. 1 and Fig. 2).

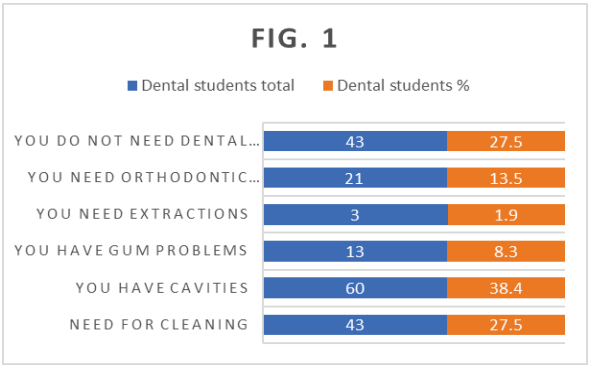

Figure 1. Self-perceived Treatment Need According to First-Year Dental Students (%)

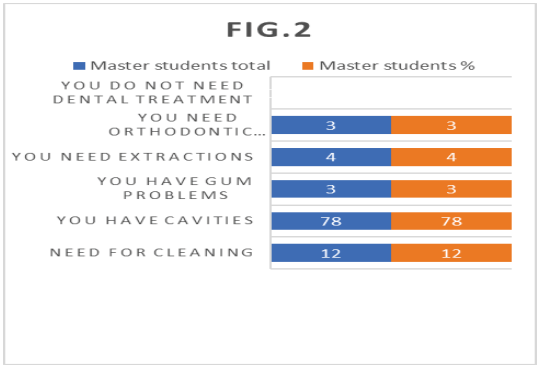

Figure 2. Self-assessed Treatment Need Among of Master's Students (%)

Results diametrically opposed were obtained regarding the level of knowledge regarding oral health. Paradoxically, dental students believe that tooth brushing does not prevent cavities (92.9% compared to 83% of master's students who assert that brushing plays a primary role) (Fig. 3).

Additionally, 41.3% of dental students believe that dental problems affect facial appearance, compared to 77% in group II (Fig. 4).

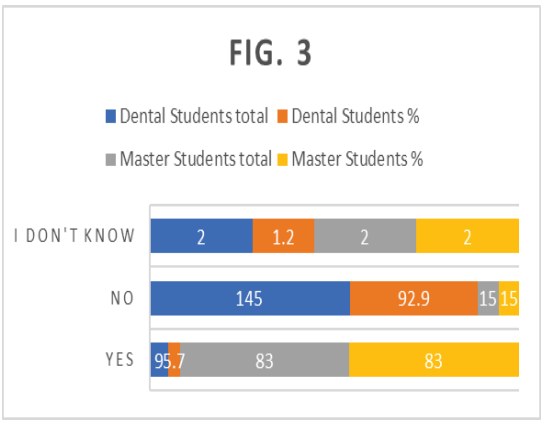

Figure 3. Respondents' Opinion Regarding the Role of Tooth Brushing in Dental Cavities Formation

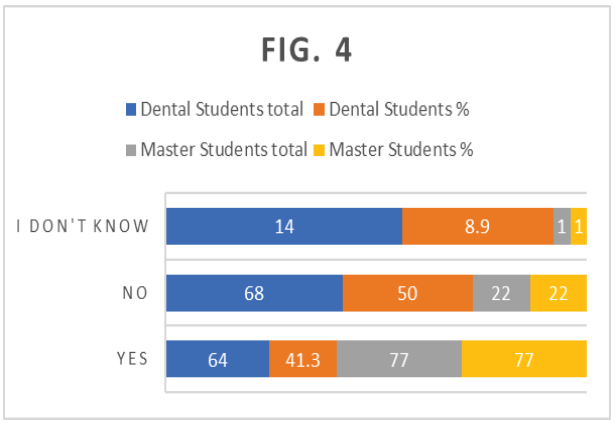

Figure 4. Opinion of Students from Both Groups Regarding the relation between dental problems and facial appearance

Regarding anxiety about dental treatments, the results are approximately equal; both groups of students claim to be afraid to go to the dentist (86.5% Faculty of Dentistry versus 63% Master), and some of them only go to the dentist when they have problems or pain (22.4% Dentistry versus 46% Master) (Fig. 5)

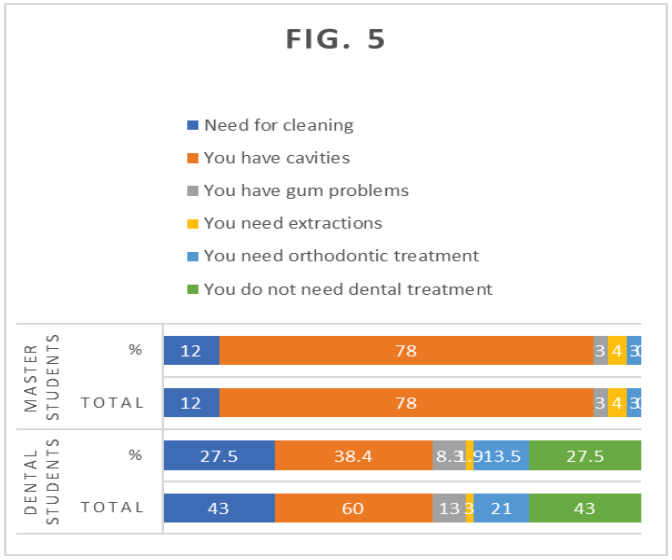

Figure 5. Reason for Visiting the Dentist among students from both groups

Similar results were obtained regarding the question about experiencing dental pain in the last year, with the majority experiencing frequent pain (34.6% and 63%, respectively). The dental treatment received so far differs between the two groups; dental students have undergone dental (76.9%) and preventive treatment (41.6%) (Fig. 6), while master's students have received prosthetic treatment (35%), dental treatment (26%), surgical treatment (15%), and only 3% orthodontic treatment (Fig. 7).

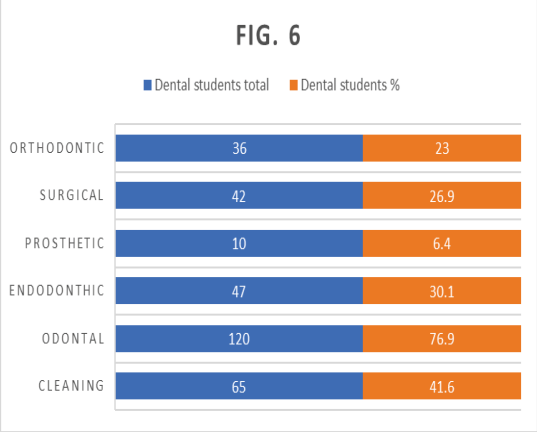

Figure 6. Type of Dental Treatment in the History of Dental Students

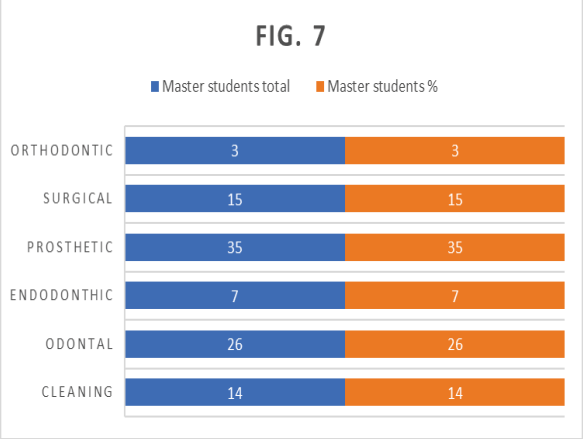

Figure 7. Type of Dental Treatment in the History of Master's Students

In terms of dental check-up frequency, the vast majority of students go twice a year (approximately 22%). The frequency of tooth brushing is twice a day, with subjects using fluoride toothpaste in approximately 90% of cases and a manual toothbrush.

Regarding diet, for dental students, the consumption of fruits and vegetables daily is approximately 40%, which is equal to the consumption of sweets, with a frequency of two to three times a week. Carbonated juices and sugary drinks have a consumption frequency of 2-3 times a week at 29.4%. Fast food is consumed once a week (32.6%) (Fig. 8).

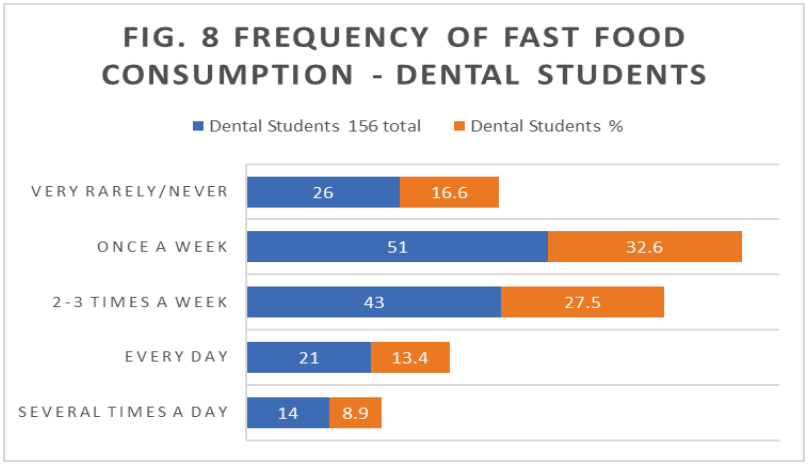

Figure 8. Frequency of Fast Food Consumption Among Dental Students

The diet of master's students includes a daily consumption frequency of fruits, vegetables (42%, respectively 45%), and sweets (51%). Carbonated juices are consumed several times a day (62%), while fast food is consumed once a week (30%) (Fig. 9).

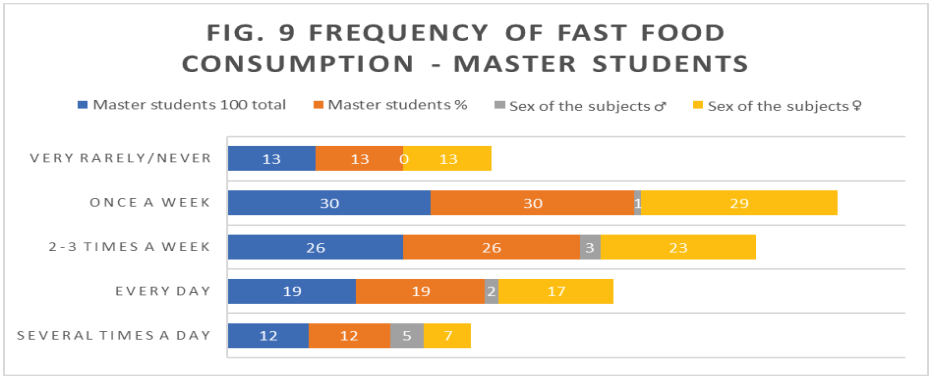

Figure 9. Consumption of Fast Food Among Master's Students

After meals, only 19.8% of dental students claim to brush their teeth. Master's students, on the other hand, chew gum in a percentage of 66%, while 19% brush their teeth (Fig. 10).

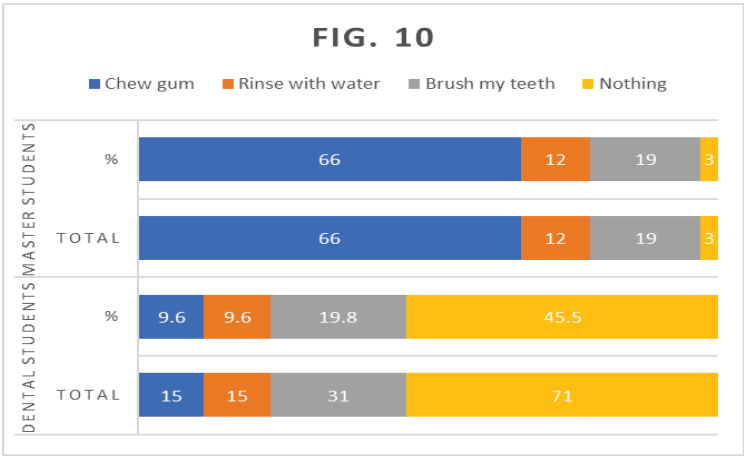

Figure 10. Post-Meal Behaviour Among Students from Both Groups

Tobacco consumption is low among students, with 58.5% not smoking (the group of dental students) versus 48% in the Master's group. A smaller percentage smoke between 5 and 10 cigarettes per day (11.5% in Group I and 21% for Group II) (Fig. 11).

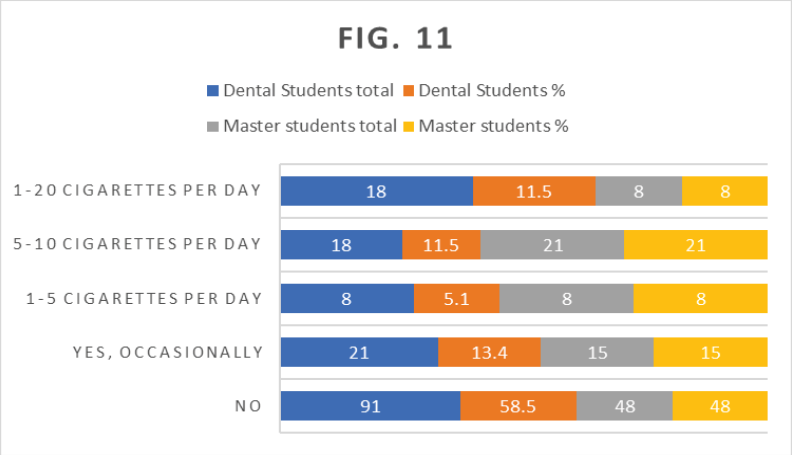

Figure 11. Tobacco Consumption in the Two Groups of students

DISCUSSIONS

Modifying behaviors and attitudes is a long process involving laborious educational efforts. Behavioral habits (dietary, hygiene, sexual, etc.) need to be monitored over time, sometimes for years, to draw valid conclusions regarding their formation, fixation, and consolidation.

Based on the results obtained, we conducted a comparison with similar studies in which both concerns and different behaviors regarding oral health were highlighted.

In one study, on a sample of 9203 subjects aged 12-21 years, it was shown that 93% had visited a dentist at least once, and 43% reported that their last dental visit was more than 1 year before the study [14]. For 7826 subjects, it was possible to classify the reason for the dental visit as symptomatic or asymptomatic, and 37% reported that symptoms were the reason for their last dental visit. In our study, 46% of Master students and 24% of Dental students go to the dental office when they have pain.

Another study conducted in Kuwait aimed to evaluate knowledge and behavior regarding oral health among 153 male students at the Health Sciences College [16]. The results showed that almost all students were aware of the role of fluoride in cavity prevention, the role of sugar in cavity etiology, and the fact that extraction is not the only treatment for dental pain. More than half of the students had visited the dentist for treatment, similar with the present study. 34% of students brush their teeth twice a day or more often, 45% once a day, and 20% less than once a day [15]. Their brushing practices are still far behind international recommendations (twice a day), and their oral health knowledge is also limited. Most students (70%) use fluoride toothpaste, whereas in our study (90%).

CONCLUSIONS

Oral health habits and knowledge needs to be improved in both groups. Behavior can be changed either through individual efforts, health-promoting educators, influencers, or as a result of the effects of changes in the economic, political, social, technological, and environmental domains.

For health education to be effective, it must encourage individuals to develop skills in implementing health-promoting practices, cultivate self-confidence, and shape perceptions rather than simply providing information.

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