

MEDICAL SCIENCES

KNOWLEDGE, ATTITUDE AND AWARENESS OF DENTAL STUDENTS ON HEALTH RISKS RELATED TO ORAL PIERCING

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The purposeful alteration of normal human anatomy to achieve a desired appearance, is a popular practice that has led to a rise in the prevalence of oral piercings [3, p. 887].

Oral piercings are associated with numerous complications [1, p. 64; 5, p. 688], and it is possible that the incidence of complications may increase as the prevalence of oral piercings rises in the Ukraine population.

Complications of oral piercings have been discussed in scientific literature and include local and systemic complication, with potentially severe health consequences [2, p. 37; 6, p. 3033]. These include cross-infection (HIV, HCV, HAV, HBV and HSV), bacterial and viral problems (endocarditis, focal disease, gingivitis, lingual abscess), short and long-term local issues related to piercings (pain, swelling, haemorrhage, chipping or dental fracture, gingival recession, tissue hyperplasia, plaque accumulation, galvanic reaction, sialorrhea, soft tissue trauma, taste disturbances, dysphagia, ingestion of piercing) and allergic reactions to the jewelry materials [1, p. 66; 3, p. 890; 5, p. 690].

Dental students should educate patients with oral piercings or those who plan to have this type of body art performed about potential side effects and possible oral, dental, and systemic complications. Considering the continuous increase in the youth population of oral piercings, it is important that awareness of health risks associated with practice of oral piercing is supported with adequate training and information to dental students. The unawareness of dental students about the potential complications of oral piercing on health constitutes a further health risk factor for users.

A literature search was carried out with studies related to knowledge, attitude and awareness of dental students towards health risks linked to the practices of oral piercing and the result found to be futile. Considering this, a

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questionnaire was a self-prepared, pilot-tested and it was specially designed for the study.

The study sample included 200 students (89 final year dental students and 111 first year medical students) of Dnipropetrovsk medical academy. Dental students of final year formed the study group and the first year medical students served as controls. Controls selection based on the assertion that freshmen do not have professional knowledge and are approaching oral piercing users.

The anonymous questionnaire included different sets of questions regarding practice of oral piercing. Some questions allowed «yes» / «no» / «don't know» / «your answer» response options (e.g. «Does oral piercing cause local health problems?»; «Does oral piercing cause systemic health problems?»; «What is your attitude to oral piercing»). Other questions included the possibility of multiple choices (e.g. «What is the main motivation to have oral piercings?»). The participant's responses for questions «Do you have oral piercing?»; «If you don't have oral piercing, would you consider it in the future?» were recorded dichotomously and given as «yes» and «no».

A copy of the questionnaire was given to each student personally and student was requested to answer it before being collected back from them after 20 minutes.

The data was analyzed using statistical tests (unpaired students t-test) and p value of less than 0.05 was considered to be statistically significant [4, p. 124].

The study was carried out in the second half of the academic year 2018-2019. All students agreed to participate in the study and therefore they did sign the consent form.

Classification of the participants based on gender showed a predominance of female participants 142(71%) with a higher percentage 87(78.4%) was noticed with medical students.

Of the 200 students included in the analysis, 128(64%) recognize the risks of oral piercing practice, 35(17.6%) consider it not risky to undergo this practice, and 37(18.5%) do not know if it is risky or not. Significant differences were showed in the data distribution when comparing freshmen from dental students of final year.

From the current study, it is arguable that the participants were aware of the possible local risk of oral piercing and it is more so with the dental students. 76 (85.4%) of them indicates oral piercing as a possible local risk. It might seem obvious that dental students know more of the aspects of an irritant on oral tissue, if we did not consider the fact that the oral piercing practice is quite new in Ukraine. 11(12.4%) of them were not assumed of the local risks of oral piercing and according to 1.1% of the dental students oral

piercing is a harmless. While only 78(70.3%) of the medical students were assumed that oral piercing falls under the category of risky procedure.

A clear consensus was noticed among dental students and freshmen in medicine to question – Does oral piercing cause systemic health problems? 44 (49.4%) of the dental students and 55 (49.5%) of the medical students agreed about the adverse systemic effects of oral piercing. 17(19.1%) of the dental students and 23 (20.7%) of the medical students believed that oral piercing does not carry the risk of developing systemic complications. However, almost a third (31.5%) of the dental students were not aware of the systemic complications associated with the practice of oral piercing and showed a neutral response (option «I don't know») which shows considerable doubt in the minds of many graduates about the systemic dangers of oral piercing. Medical students were two times less likely to check the option «I don't know». The results of the study showed insufficient knowledge of dental students towards of the systemic complications linked to the practices of oral piercing.

Although 85.4% of dental students conscious of local health risks related to oral piercing, and half of them conscious of systemic health risks of oral piercing, 40(44.9%) of graduates were unable to shape their negative attitude towards oral piercings (option «I don't know»), and 12(13.5%) of graduates were even positive about oral piercing. Interestingly, freshman in medicine have a greater negative attitude towards oral piercing, 60(54.1%) of them responded that they were negative about oral piercings. Contrary to this only 36(40.4%) of the dental students have a negative attitude towards this type of body art.

In our study, the main motivation of oral piercing, which students indicated, was related to the image management (58.4%); smaller percentages are related to fashion (40.5%) and to improvement of aesthetic aspect (23%).

Fortunately, our investigation shows that only a limited number of students have oral piercing (2.5% of total). Nevertheless, dental students are about twice as many as medical students had oral piercings (3.4% and 1.8%, respectively). Among the interviewed who have stated that they do not have oral piercings, to the question «If you don't have oral piercings, would you consider it in the future?», 187 (93.5%) answered «no» and 13(6.5%) marked the option «yes». A significant difference resulted between dental students and freshmen: dental students have showed a higher interest than freshmen in future oral piercings (7.9% and 5.4%, respectively).

A high level (85.4%) of awareness of the dental students about local oral piercing-risks has been established. Just over half of the dental students believed that oral piercing are associated with systemic complications, but contrary to this around 60% of the dental students do not have a negative

attitude towards oral piercings. This disagreement in knowledge and awareness of the threat to the health of oral piercing could be considered an a problem of the deficit health-saving competency, in particular because the dental students are not sufficiently motivated to a healthy lifestyle.

Being a recent field of interest, the level of oral piercing knowledge is insufficient and needs to be increased in order to raise dental students' awareness of health risks related to oral piercing.

To the best of our knowledge, this is the first study to examine the knowledge, awareness of health risks related to oral piercing among Ukraine dental students. However, further studies with a larger sample size are required to validate our hypotheses.

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