

**Knowledge, Practice and Attitude of Oral Piercing Among Third and Final year Dental Students of Faridabad District- A Survey Study**

<sup>1</sup>Dr. Kapila Chakarvarty, BDS, Lecturer, Manav Rachna Dental College and Hospital, MRIIRS, Faridabad, Haryana.

<sup>2</sup>Dr. Shivam Singh Tomar, MDS, Reader, Manav Rachna Dental College and Hospital, MRIIRS, Faridabad, Haryana.

<sup>3</sup>Dr. Anchal Varshnay, MDS, Senior Lecturer, Manav Rachna Dental College and Hospital, MRIIRS, Faridabad, Haryana.

<sup>4</sup>Dr. Indu Tanwar, BDS, Lecturer, Manav Rachna Dental College and Hospital, MRIIRS, Faridabad, Haryana.

**Corresponding Author:** Dr. Kapila Chakarvarty, BDS, Lecturer, Manav Rachna Dental College and Hospital, MRIIRS, Faridabad, Haryana.

**Citation of this Article:** Dr. Kapila Chakarvarty, Dr. Shivam Singh Tomar , Dr. Anchal Varshnay, Dr. Indu Tanwar, “Knowledge, Practice and Attitude of Oral Piercing Among Third and Final year Dental Students of Faridabad District- A Survey Study”, IJDSIR- June - 2020, Vol. – 3, Issue -3, P. No. 515 – 521.

**Copyright:** © 2020, Dr. Kapila Chakarvarty, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License. Which allows others to remix, tweak, and build upon the work non commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Type of Publication:** Original Research Article

**Conflicts of Interest:** Nil

**Abstract**

**Aims and Objective:** The aim of this study is to evaluate the knowledge and attitude of third year, final year, and interns students of dental colleges in Faridabad toward oral piercing.

**Material and Methods:** The study was carried out using a self structured questionnaire. The questionnaire was designed to assess KAP regarding oral piercing. The third year, final year and intern’s students of dental college of Faridabad district were involved in the study. The students who gave their consent were included in the study. The questionnaire was designed using goggle forms and was distributed via mail ids/what’s app contact. The data was then analyzed.

**Results:** Three hundred questionnaires were distributed among dental students of Faridabad district out of which 251 responded. 51.4% of students think that female

prefers oral piercing, while majority of students says that fashion is the reason people go for piercing. Almost 70.9% of students don’t know about materials used for oral piercing, approx 66.4% of students think that it is risky to go for oral piercing. Only 11% of students know how to clean piercing site and 13.8% know about aftercare piercing instructions. Only 7.7% wants to practice piercing in future.

**Conclusion:** The result of this survey tells that knowledge of dental students regarding oral piercing needs to be upgraded. To address this various programs should be conducted to increase awareness about oral piercing.

**Keywords:** Oral piercing, lip piercing, tongue piercing

**Introduction**

Oral piercing is piercing of oral cavity and its parts for the purpose of wearing jewelry. It is a risky fashion which is gaining popularity now days. Piercing of oral cavity has

gained popularity in western countries especially among the youth but has been documented globally. Oral piercing sites include lips, tongue, lingual frenum and cheeks, but tongue piercing is gaining popularity. The piercing procedure is performed by non medico professionals having little or no knowledge of human anatomy and thus leads to complications.

What we think is a fashion, is invasion of body part for insertion of jewelry with a little or no concern for health. It is a mixed blessing, on one hand it increases aesthetic value while on the other hand it is an invasive procedure associated with risks some of which may require hospitalization. Most common sites include tongue and lip. Other sites include floor of mouth, gingival and frenums<sup>1</sup>. The jewelry is made up of non toxic and hypo allergic material like gold, niobium, stainless steel, wood, acrylic, bone or ivory<sup>2, 3</sup>. Severe complications as complications during procedure, primary post operative complications and secondary post operative complications both local and systemic are associated with oral piercing.<sup>4</sup> The increase demand for oral piercing and its risk factor associated make it necessary for dental professional to have knowledge of oral piercing and its complications.

### History

Piercing has been found in preserved bodies of people who lived between 4000-5000 years ago<sup>5</sup>. Historically enough evidence is available that body piercing was in practice in both the sexes and is documented as far as back as 1500 BC. Oral piercing history dates back to Indonesia, African and South American tribe peoples for cultural, religious or spiritual values. There is a history of tongue piercing as a ritual of Mayans, Aztec, Tlingit and the Haida tribes. Aleuts and Eskimos pierced lower lip of boys as a passage to puberty and infant female lower lip as a act of purification. Tembata, a lip piercing was common in pre-Columbian culture of South America. In African

countries like Sara women and Lobi of Chad, Makonde of Tanzania and Mozambique, Surma and Mursi women of Ethiopia, Amazonian tribe's males wear lip plate on upper lip as sign of social and economical importance in some tribes. The lip and tongue piercing has also found a place in history of Hindus and Chinese culture.<sup>6</sup> Among Hindus tongue piercing takes place at time of Thaipusam festival on a belief that piercing give them greater power.<sup>7</sup>

### Prevalence

The prevalence of oral piercing/ peri-oral piercing as estimated by searching comprehensive database varies from 0.8% to 12% with mean prevalence of 5.2%. Most common site of piercing being tongue with a prevalence rate of 5.6% followed by lip with a prevalence rate of 1.5% and cheek with a prevalence rate of 0.1% and rarely uvula.<sup>4</sup> It is more prevalent in women than men with a rate of 5% and 1.6% respectively with M: F = 3:11.<sup>4</sup>

### Methodology

The present study was conducted among third year, final year and inters of all dental colleges in Faridabad district. Two hundred and fifty one students participated in the study. A survey questionnaire was designed using goggle forms and was sent among the students via their mail ids/what's app contact. A brief introduction was given to the students before distributing/ mailing the survey. The survey was made anonymous to maintain the anonymity of the students.

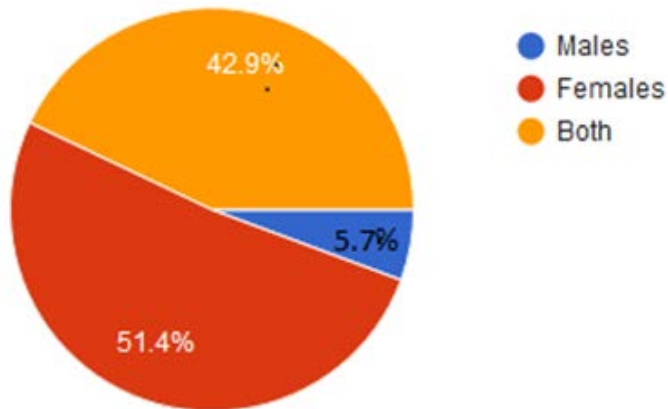
There were 21 questionnaires in all: related to knowledge, related to attitude and practice, one question regarding sex preference and one question was asked to determine the reason people go for oral piercing. The responses were then analyzed and data was obtained.

### Result

**Gender Preferences:** 247 students responded. 51.4% of students say that female as compared to males prefer to go for oral piercing. While 5.7% of students says that males

prefer to go for oral piercing. 42.9% were of view that there are no genders preferences both male and female go for piercing. The details are summarized in Table 1.

Table 1



**Why people go for Piercing?** 248 students responded. The varied reason students think people go for oral piercing is summarized in Table 2. 85.1% of student's views fashion is the key to go for oral piercing. It is the way to express your style while 4.4% thinks people go for oral piercing for religious reasons. Acc to 8.9% of student's aesthetics appeal may be the reason people go for piercing.

Table 2



**Knowledge**

245 students responded to question regarding knowledge. There were thirteen questions in all to test the knowledge of students regarding oral piercing. The knowledge related questions and correct/incorrect responses and yes/no responses are summarized in Table 3. The knowledge of

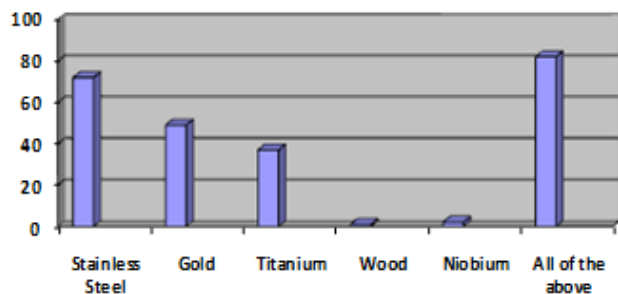
students about the material used for piercing is depicted in Table 4. According to 29.8% of students stainless steel is the most commonly used material piercing, 15.3% of students think titanium as material of choice, 20.2% think gold, 0.8% think niobium is used as piercing material while 33.9% thinks all of the above mentioned materials can be used for piercing.

Table 3

S.no	Questions	Correct Response/Yes (in %age)	Incorrect Response/No (in %age)
1	Have you ever heard of Oral piercing?	83.1	16.9
2	What sites in oral cavity can be pierced?	76.2	23.8
3	Do you know about the material used for piercing?	29.1	70.9
4	Are these materials biocompatible?	38.8	61.2
5	Do you think oral piercing affect oral hygiene?	78	22
6	Is it risky to go for oral piercing?	66.4	33.6
7	Are you aware of oral piercing complications?	42	58
8	Can oral	63.6	36.4

	piercing transmit infectious diseases?		
9	Does oral piercing alter speech?	43.7	56.3
10	Do you think oral piercing has any advantage?	4.5	95.5
11	Do you know how to clean oral piercing?	11	89
12	Are you aware of aftercare/post piercing instructions?	13.8	86.2

Table 4



**Practice**

247 students responded to the question related to practicing in oral piercing. There were 5 questions in all. The practice related questions and its responses are summarized in Table 5. When asked will they practice in piercing in future, only 7.7% of students were interested in practicing oral piercing while only 4.1% students have knowledge of code of practice put forward by British body piercing association. Only 10.2% of students were aware of age limit for piercing put forward by British body piercing association.

2.4% of students were interested in going for body piercing.

Table 5

S.No	Questions	Correct Response/Yes	Incorrect Response/No
1	Would you practice oral piercing in future?	7.7	92.3
2	Would you go for oral piercing in future?	2.4	97.6
3	Would you feel comfortable if person with body piercing treat you?	36	64
4	Do you know about code of practice put forward by British Body piercing Association?	4.1	95.9
5	What is the minimum age limit for piercing?	10.2	89.8

**Discussion**

The result of our study showed that 83.1% of dental students know about the oral piercing but at the same time their knowledge about the oral piercing and its complications and rules to practice piercing and their role as dentist in piercing treatment is still not enough. Dentists

are often first to notice the piercing effects on oral mucosa. They can provide information to those people who are going or planning to go for oral piercing in future. Hennequin-Hoenderdos et al also supported that dentists are ideal to provide information regarding pros and cons of oral piercing<sup>8</sup>. In his studies he also said that more number of females go for piercing than males<sup>8</sup>. A Boardman R and Smith R A in their study also indicate that the side effects are numerous enough to alert the dentist<sup>9</sup>. In this study 51.4% of student's also think that more number of females goes for piercing than males.

Materials used for oral piercing jewelry is mostly metals like stainless steel, gold, titanium and niobium. Stainless steel which is nickel free rarely cause allergic reactions<sup>10</sup>. Recently Teflon, nylon or plastics have also been used as piercing material<sup>11</sup>. As directed by European Union the amount of nickel in all products that are in direct contact with human tissue, should be reduced to 0.05% in oral/perioral piercing jewelry. It also recommends that gold used for this purpose should be at least 14-18K<sup>12</sup>. However in this study only 38.8% of students are aware of the biocompatibility of materials.

78% of students think that people with oral piercing doesn't have good oral hygiene. The oral piercing people are at high risk to develop oral infections<sup>13, 14, 15</sup>. Infections can be accelerated by deposition of biofilm and calculus<sup>16</sup>. Oral piercing causes both local and systemic risks and complications, some of which may be immediate, acute and chronic, because of long-term display<sup>17, 18</sup>. According to Vieira et al oral piercing site serves as a reservoir of infection for pathogenic bacteria. He also stated that dental pain, trauma, gingival recession, tooth fracture and injury to surrounding structure due to oral piercing<sup>19</sup>. In this study 42% of students were aware of piercing complications, 63.6% agree that piercing can transmit infectious diseases while 66.4% were aware that piercing

can be risky. Systemic risks involves cross transmission of infectious diseases such as AIDS, Hepatitis B, C and D, endocarditis, bacteremia and sepsis<sup>20, 21</sup>. Piercing may also cause motor and sensitive nerve lesion, more frequently nerve damage in dorsolateral tongue piercing<sup>20, 22</sup>. Piercing can also cause lingual artery damage with bleeding to hematoma and suffocation<sup>24</sup>.

Piercing affect the speech quality but the effect is temporary, people perfectly adapt to long term tongue piercing<sup>23</sup>. In this study 43.7% of students think piercing can alter speech and 95.5% of students think that there are no advantages of oral piercing. Only 13.8% of students were aware of aftercare piercing instructions. According to Julia et al after care piercing instructions are very important to promote wound healing and prevent the site to act as a source of infection<sup>25</sup>.

When asked about practicing piercing in 97.6% students have negative attitude toward practicing oral piercing. Most of the students i.e. 95.9% of them were not aware of code of practice put forward by British piercing association, only 10.2% of students know about the minimum age limit for piercing put forward by British piercing association. This code of practice is summarized in the document 'Advice and Safe Practice for Body Piercing – Guidance for Operators' produced by the British Body Piercing Association<sup>26</sup>. Now a day's legislation and licensing varies between various countries. They enforce their own laws to set a minimum age for various type of piercing. However in India there are no specific rules/codes to practice oral piercing.

### **Conclusion**

Oral piercing is a fashion or trend- a form of self expression, supported by many popular celebrities like Drew Barrymore, Pete Wentz, Samantha Maria, Ariana Grande and Sonam Kapoor. Today it is very popular among young adults and adolescence. Dental professional

play important role in oral piercing infact they are first to notice the oral tissue changes. As we came to know that knowledge regarding oral piercing is poor, there is need to educate dental students in their budding stage about the area to be pierced, materials used for piercing, after care instructions and complications. They must be aware of code of practice put forward by British piercing association. With the increasing trend they as dentists must be able address or solve queries and complications on the patient's oral/systemic health.

### References

1. Mini Guide: Types of oral piercings. Available at <https://www.tattoodo.com/a/2016/04/mini-guide-types-of-oral-piercings/>
2. C. Maspero et al. The complication of oral piercing and the role of dentist in their prevention: a literature review. *Stomatologija, Baltic Dental and Maxillofacial Journal*, 2014, Vol. 16, No. 3.
3. Ring ME. *Dentistry: An Illustrated History*. New York: Harry N. Abrams, Inc.; 1984. †
4. Dermata A, Arhakis A. Complications of oral piercing. *Balk J Stom* 2013; 17:117-121.
5. Hennequin-Hoenderdos, N & Slot, D & Weijden, G. (2012). The prevalence of oral and peri-oral piercings in young adults: a systematic review. *International journal of dental hygiene*. 10. 223-8. 10.1111/j.1601-5037.2012.00566.x.
6. Brennan M, O'Connell B, O'Sullivan M. Multiple dental fractures following tongue barbell placement: A case report. *Dent Traumatol* 2006; 22:41-3. †
7. <https://www.indianmirror.com/culture/indian-folklore/Tongue-Piercing.html>
8. Hennequin-Hoenderdos NL, Slot DE, Van der Weijden GA. The prevalence of oral and peri-oral piercings in young adults: a systematic review. *Int J Dent Hyg*, 2012; 10:223-228.
9. Boardman R, Smith R A. Dental implications of oral piercing. *J Calif Dent Assoc* 1997; 25: 200-7
10. Gawkrödger DJ. Nickel dermatitis: how much nickel is safe? *Contact Dermatitis*. 1996;35:267-71.
11. Ziebolz D, Hildebrand A, Proff P, Rinke S, Hornecker E, Mausberg RF. Long-term effects of tongue piercing - a case control study. *Clin Oral Investig*, 2012; 16:231-237.
12. De Urbiola Alís I, Viñals Iglesias H. Some considerations about oral piercings. *Av Odontoestomatol*, 2005; 21:259-269.
13. Brooks JK, Hooper KA, Reynolds MA. Formation of mucogingival defects associated with intraoral and perioral piercing: case reports. *J Am Dent Assoc*, 2003; 134:837-843.
14. Theodossy T. A complication of tongue piercing. A case report and review of the literature. *Br Dent J*, 2003; 194:551-552.
15. Zaharopoulos P. Fine-needle aspiration cytology in lesions related to ornamental body procedures (skin tattooing, intraoral piercing) and recreational use of drugs (intranasal route). *Diagn Cytopathol*, 2003; 28(5):258-263.
16. Shacham R, Zaguri A, Librus HZ, Bar T, Eliav E, Nahlieli O. Tongue piercing and its adverse effects. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*, 2003; 95:274-276.
17. Escudero-Castaño N, Perea-García MA, Campo-Trapero J, et al. Oral and perioral piercing complications. *Open Dent J*, 2008; 4:133-136.
18. Maheu-Robert LF, Andrian E, Grenier D. Overview of complications secondary to tongue and lip piercings. *J Can Dent Assoc*, 2007; 73:327-331.
19. Vieira EP, Ribeiro AL, Pinheiro Jde J, Alves Sde M Jr. Oral piercings: immediate and late complications. *J Oral Maxillofac Surg*, 2011; 69:3032-3037.

20. Küstner E.C, Travé I.B, Rengifo S.V, Carabaño T.G, Iglesias HV, Llabrés XR. Estética y cultura: patología bucal asociada a ciertas modas “actuales” (tatuajes, perforaciones bucales, etc.) *Med Oral*. 2003;8:197–206.
21. Akhondi H, Ali R. Rahimi Haemophilus aphrophilus Endocarditis after Tongue Piercing. *Emerg Infect Dis*. 2002;8(8):850–851
22. Kapferer I, Berger K, Stuerz K, Beier US. Self-reported complications with lip and tongue piercing. *Quintessence Int*. 2010;41:731–737.
23. Heinen E, Birkholz P, Willmes K & Neuschaefer-Rube C (2017) Do long-term tongue piercings affect speech quality?, *Logopedics Phoniatrics Vocology*, 42:3, 126-132, DOI: 10.1080/14015439.2016.1240830
24. Keogh IJ, O’Leary G. Serious complication of tongue piercing. *J Laryngol Otol* 2001;115:233–4.
25. Minocha JS, Holbrook JS, West DP, Ghovanloo M, Laumann AE. Development of a tongue-piercing method for use with assistive technology. *JAMA Dermatol*. 2014;150(4):453–454.
26. British Body Piercing Association. Advice and safe practice for body piercing – Guidance for operators. 2008.