

Letter: Importance of Amalgamating Oral Anatomy with Dental Surgery

DAISY LOYOLA¹, SURRAJ SUSAI²
Keywords: Applied anatomy, Integration, Surgical dentistry

Sir,

With the growing rise in the number of dentists, it is seen that more and more dental professionals either opt for private practice after under-graduation or join post-graduation preferably by choosing a surgical dental course [1]. In either case, it has been observed that the knowledge acquired by them in anatomy is either inadequate or too traditional that may not be suited for them to handle the current challenging surgical practises in the field of Dentistry [1,2]. Studies have also shown that the neglect of anatomically oriented case-based approaches to patient-care setting in the final year and penultimate final year training sessions of dental under-graduate students has resulted in the expanding lacunae in anatomical knowledge for the dentists of the current generation [2,3]. The underlying error lies not on the dentists, per se, but in the mode of teaching of oral anatomy in the dental curriculum [2,3].

The methods of oral anatomy taught to dentists in India, the subcontinent nations, the middle-eastern gulf nations and even in some of the European nations are similar and are still in their naive stages owing to the fact that traditional dental anatomy is being preferred and taught only in the first year [4,5]. The use of traditional methods of anatomy in India and the like nations, still limits the expansive knowledge for the applications of surgical techniques to a dental surgeon [4-7]. Though Mitchell J and Brackett M [6] had shown in their study, the effectiveness of innovative flipped classroom techniques- where a portion of the students are exposed to a lecture and the remaining portion are given an assignment and vice versa and interactive feedback sessions – that may include quiz sessions, debates and webinars on hands-on anatomy skill-based training evenly to the first year and final year undergraduates in dentistry. These approaches still remain in their early testing stages and have not yet been applied to a larger and regular domain [5-7].

Though the situation in the medical curriculum is similar to that of the dental curriculum, the use of integrated modular sessions in the medical field, between the pre-clinical and clinical departments have marginally reduced the gap in clinically oriented anatomy among practicing medical surgeons as compared to dental surgeons [4-7]. However, this doesn't justify the credibility of the method of teaching anatomy in the medical curriculum as there are a lot of shortcomings in the methodology

of anatomical training in the medical field too, as pointed out by Lavelle CL in his study [4].

As highlighted by Habbal O in his article [3], this existing dearth in acquiring skill-based anatomical knowledge is further deepened, owing to the paucity of impetus bestowed upon anatomists as being mere basic medical researchers or medical teachers, by the students or other health care professionals both in medical and dental fields, that indirectly influences the working potential of anatomists to do basic innovative advancements in the field of medical education and applying them to advancements and techniques in the surgical and dental fields [3]. This in turn may affect the acquisition of appropriate skill-based anatomical knowledge to the dental surgeon for confidently performing common dental procedures or fixing implants [2-4,7].

In conclusion, the authors would like to admit that for a practicing dental surgeon to adapt, it requires a sound knowledge of practically applicable anatomy, that can be obtained only through a mutual co-operation between anatomists and dental surgeons in conducting skill-based workshops- that includes cadaveric oral mucosal flap repositioning workshops, oral and buccal arterial repair dissectional workshops on a cadaver and root canal workshops on cadaveric teeth [6,7] by implementing them throughout the dental curriculum.

REFERENCES

- [1] Yadav S, Rawal G. The current status of dental graduates in India. *Pan Afr Med J.* 2016;23:22. doi: 10.11604/pamj.2016.23.22.7381. PMID: 27200127; PMCID: PMC4856508
- [2] Rafai N, Lemos M, Kennes LN, Hawari A, Gerhardt-Szép S, Classen-Linke I. Anatomy meets dentistry! Linking anatomy and clinical practice in the preclinical dental curriculum. *BMC Med Educ.* 2016;16(1):305. doi: 10.1186/s12909-016-0825-8. PMID: 27887620; PMCID: PMC5123369
- [3] Habbal O. Anatomical research: Misconceptions and opportunities. *Sultan Qaboos Univ Med J.* 2017;17(1):e1-e2. doi: 10.18295/squmj.2016.17.01.001. Epub 2017 Mar 30. PMID: 28417020; PMCID: PMC5380403.
- [4] Lavelle CL. Letter: Anatomy in the future. *Can Med Assoc J.* 1976;115(2):109. PMID: 1277069; PMCID: PMC1878578.
- [5] Kellesarian SV. Flipping the dental anatomy classroom. *Dent J (Basel).* 2018;6(3):23. doi: 10.3390/dj6030023. PMID: 29933558; PMCID: PMC6162776
- [6] Mitchell J, Brackett M. Dental anatomy and occlusion: Mandibular incisors-flipped classroom learning module. *MedEdPORTAL.* 2017;13:10587. doi: 10.15766/mep_2374-8265.10587. PMID: 30800789; PMCID: PMC6338200.
- [7] de Azevedo RA, de O da Rosa WL, da Silva AF, Correa MB, Torriani MA, Lund RG. Comparative effectiveness of dental anatomy carving pedagogy: A systematic review. *J Dent Educ.* 2015;79(8):914-21.

PARTICULARS OF CONTRIBUTORS:

1. Consultant, Department of Oral and Maxillo-facial Surgery, "Spreading Smiles" Dental Clinic- A Unit of Rani Hospital, Puducherry, India.
2. Senior Resident, Department of Anatomy, JIPMER, Puducherry, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Surraj Susai,
53/54, Udayam Galaxy Apartment 2C, 1st Cross Street, Manakula Vinayagar
Nagar, Puducherry-605005, India.
E-mail: surraj18@gmail.com

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was informed consent obtained from the subjects involved in the study? No
- For any images presented appropriate consent has been obtained from the subjects. No

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: May 08, 2020
- Manual Googling: May 09, 2020
- iThenticate Software: Jun 26, 2020 (08%)

ETYMOLOGY: Author Origin

Date of Submission: **May 07, 2020**Date of Peer Review: **May 20, 2020**Date of Acceptance: **May 26, 2020**Date of Publishing: **Jul 01, 2020**