REVISTA DA

Lack of hospital experience in the predoctoral dental curriculum is a cause for concern

Brazil's 4-5 year Dental School curriculum leading to the Doctor of Dental Surgery (DDS) degree has traditionally been taught almost in its entirety in the school's clinics and primary care external units with a strong emphasis on mastery of technical skills required to diagnose and treat diseases of the teeth and supporting structures¹. This long-standing educational model has been shown to adequately instruct general dentists on how to best care for healthy patients². However, this constricted educational outcome does not sufficiently prepare the graduate to comprehensively care for pediatric patients with special needs, adults with medical and/or psychiatric illnesses, and elderly patients having multiple systemic disorders. Consequently, many compromised pediatric and adult patients are unable to locate competent general dentists to care for them³.

These structural and pedagogical weaknesses require remediation. We therefore suggest providing a component of the Brazilian predoctoral dental curriculum in a hospital setting. We believe that the addition of an education component provided by hospital dentists caring for impaired patients as well as consequent in-hospital interprofessional interactions with medical and nursing students, and other health care professionals will provide a more comprehensive dental education⁴. Implementation of this model will also simultaneously augment the number of clinicians in the hospital's dental service thereby enhancing patient access to treatment in the medical center's dental clinic, inpatient bed services, operating rooms or intensive care units⁵. To maximize chances of success, the hospital's educational environment must include cooperative and willing hospital-based dentists, physicians and nurses capable of fostering positive cooperation between students in the various healthcare disciplines in order to avoid conflict and enhance each profession's unique skill sets. It must also be emphasized that these hospital-based educators must join together with the University granting the dental degree in curriculum development, teaching content, and length of the hospital training period⁴.

It is essential to point out that currently in Brazil, Oral and Maxillofacial Surgery and Stomatology are the dental care specialty services most often offered in the hospital setting. However, these specialties are unable to provide the full gamut of needed care such as Endodontics, Periodontics, and Prosthodontics tailored to the patient's compromised systemic health. The curriculum reform that we advocate, namely the predoctoral exposure of dental students to the hospital environment will also likely entice a cadre of Dental School graduates to provide medical center-based care. These trained individuals would then be qualified to supervise nurses in intensive care units to provide oral hygiene care, a validated service shown to prevent pneumonia and bacterial endocarditis^{3,6}.

Such well-designed predoctoral hospital rotations (also known as clerkships)⁷ will also equip dental school graduates who enter private general practice with both the desire and competence to better care for ambulatory patients who are medically and psychiatrically compromised⁵⁻⁸. Lastly, the

involvement of dental students in the hospital environment will likely foster their interest in exploring research areas relating dentistry to medicine while simultaneously broadening the scope of their dental education^{9,10}.

Paulo Henrique Couto-Souza

Full Professor, Curso de Odontologia, Escola de Ciências da Vida, Pontifícia Universidade Católica, Curitiba, Brasil.

Arthur H. Friedlander

Professor Oral and Maxillofacial Surgery UCLA Dental School

Soraya de Azambuja Berti-Couto

Associate Professor, Curso de Odontologia, Escola de Ciências da Vida, Pontifícia Universidade Católica, Curitiba, Brasil.

REFERENCES

- 1. Licari FW, Evans CA. Clinical and Community-Based Education in U.S. Dental Schools. J Dent Educ. 2017;81(8):eS81-7.
- 2. McKenzie CT, Tilashalski K, Abou-Arraj R, Peterson DT, White ML. Students' evaluations of simulations in dentistry: a multiple cohort study at a U.S. Dental School. J Dent Educ. 2019;83(10):1142-50.
- 3. Fenton SJ, Hood H, Holder M, May PB Jr, Mouradian WE. The American Academy of Developmental Medicine and Dentistry: eliminating health disparities for individuals with mental retardation and other developmental disabilities. J Dent Educ. 2003;67(12):1337-44.
- 4. Wang Z, Feng F, Gao S, Yang J. A systematic meta-analysis of the effect of Interprofessional Education on health professions students' attitudes. J Dent Educ. 2019;83(12):1361-9.
- 5. DiBiaggio JA. Hospital training for dental student: problems and potentials. J Dent Educ. 1973;37(3):13-6.
- 6. Souza LCD, Mota VBRD, Carvalho AVDSZ, Corrêa RDGCF, Libério SA, Lopes FF. Association between pathogens from tracheal aspirate and oral biofilm of patients on mechanical ventilation. Braz Oral Res. 2017;31:e38.
- 7. Kassebaum DK, Tedesco LA. The 21st-Century dental curriculum: a framework for understanding current models. J Dent Educ. 2017;81(8):eS13-eS21.
- 8. Rose LF, Brown IS, Lynch MA. An interdisciplinary dental training program in a hospital. J Dent Educ. 1974;38(3):156-60.
- 9. Leadbeatter D, Peck C. Are dental students ready for supercomplex dental practice? Eur J Dent Educ. 2018;22(1):e116-21.
- 10. Franzén C. The undergraduate degree project-preparing dental students for professional work and postgraduate studies? Eur J Dent Educ. 2014;18(4):207-13.