

Teaching the 'Comprehensive Dental Care' in formative years of education and training: A new model for dental internship

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Abstract

There is a need of a new model of education and training to be implemented in the Bachelors of Dental Surgery curriculum in the relevant Pakistani institutions. The current review article was planned to suggest such a model in the light of literature aimed at building the capacity of dental graduates in a competency-driven approach with the objective of offering safe, efficient and comprehensive care to dental patients. The outcome of the reforms suggested shall prepare dental graduates suitably geared towards providing community-oriented family dental care right from their formative years. Moreover, the suggested internship model can also help to address the issue of inefficiency related to patient-care.

Keywords: Dental care, Curriculum, Training, Dental education.

Introduction

Historically, the system of dental education follows the footprint of medical education. Both are influenced by traditional pedagogical methods of teaching and training practiced in the medical and dental colleges of the United Kingdom. In this system, the students are inducted in dental schools after 12 years of high school education. In the first 2 years, they are exposed to the basic biomedical sciences, and clinical subjects are introduced in the senior years. Students are assessed annually in cognitive knowledge and procedural skills in both summative and formative manners, and the successful completion of the course of studies results in the award of bachelor's in dental surgery (BDS) degree. Then they undergo a 12-month internship, called house job, in dental clinics/hospital affiliated with the dental college to satisfy the mandatory requirements set up by the statutory council of the country, which, formerly, was the Pakistan Medical & Dental Council (PMDC), and, presently, is the Pakistan Medical Council (PMC). This yields them the

license to practise dentistry in all parts of the country.

However, there are a few developments on the medical side that dentistry has failed to catch up with. These include integration of problem-based learning (PBL), introduction of clinical subjects in early years of teaching and exposing the students to the patients, especially, Family Medicine patients, in an escalating manner from year 1. This approach has resulted in medical graduates being more competent in identifying common diseases in the communities and getting better trained in managing them in their formative years.¹

The traditional clinical teaching in dental education is too compartmentalised. Patients who are screened at the dental diagnostics department are routed to the departments of Oral Surgery for tooth extraction, Operative Dentistry for fillings, and Endodontics for root canal treatment etc. Although this compartment-based organisation looks neat with respect to the rationing of clinical workload, such divisions do not exist in real life. In the real world, the dental patients expect comprehensive dental care from their dentist. They will only accept a referral when there is a substantial problem which cannot be dealt with by the primary dentist. The dental specialties were originally designed to train super-specialists who can offer superior clinical outcomes. But for general dental practitioners, who constitute the majority of dental graduates, compartmentalised training and super-specialisation is of no practical utility. The compartmentalised dental education certainly has more value in terms of producing consultants who can attend to complex cases or as subject specialist faculty members to serve in academia. However, it fails to address the needs of the population, majority of which presents with common dental problems, such as caries, sensitive teeth, gum disease, tooth mobility or missing teeth, and expects to be managed in a more integrated manner.²

Limitations of the current model

The students and interns are rotated through clinical departments in a block of 2-3 months where they cater to patients who need care in that particular domain only. Firstly, a block rotation does not give enough time to keep a

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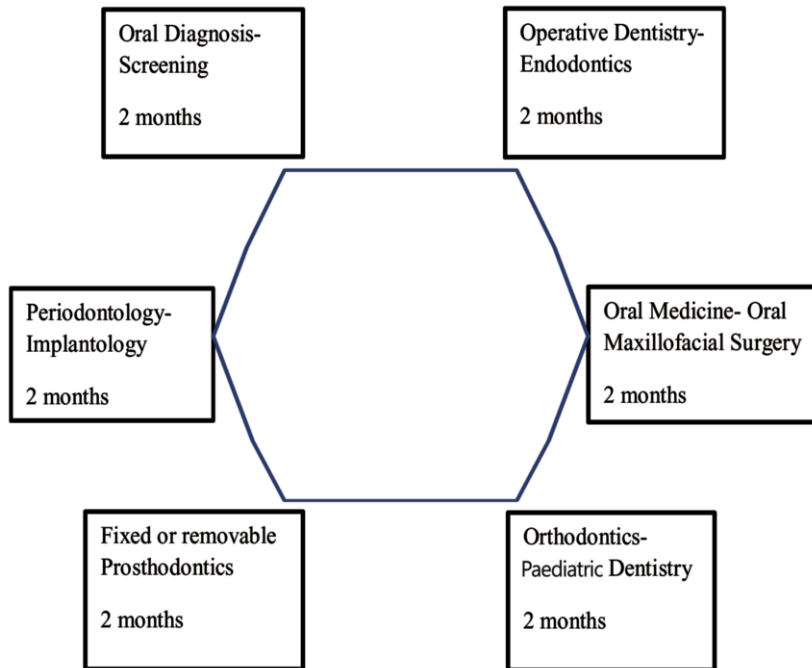


Figure-1: The present model of dental internship with compartmentalised rotations.

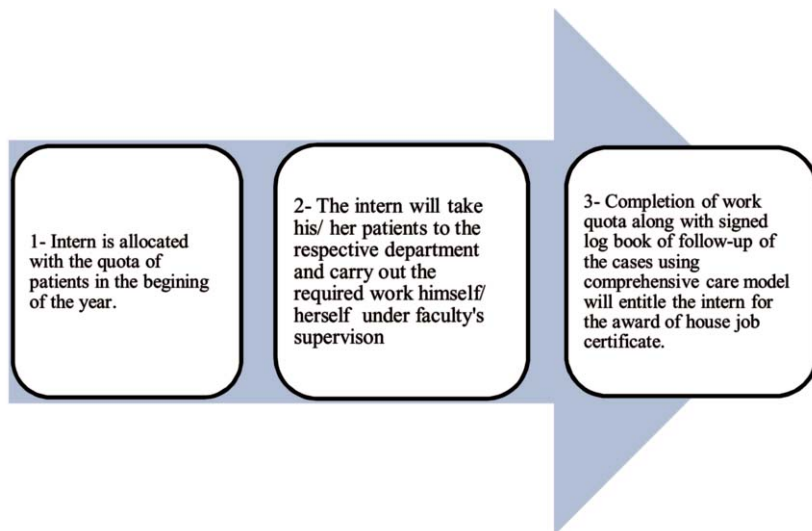


Figure-2: The proposed model of dental internship with integrated and comprehensive patient-care.

follow-up on the patients they have treated so that they may observe the outcomes of the interventions. Secondly, there is no continuity of care. In other words, if interns are posted in, say, Prosthodontics department, they will only provide services related to the making and fitting of dentures. By the time, the denture is made or inserted, the rotation is already over, leaving no scope for follow-up and continued care. Moreover, the present format of clinical training encourages the interns to be responsible in their

part of treatment only, which means neglecting the patient as a whole. Dental patients should be looked upon as individuals presenting with oral care needs. The inter-departmental referral of patients make them see different interns for different needs, which is cumbersome for the patient and is counterproductive for the purpose of training interns. This is a major limitation of the present compartmentalised training (Figure-1).

In another scenario, interns assigned to the Endodontics department attending to, say, a 60-year-old male with a carious premolar tooth and has some other teeth missing. In the present model, interns are supposed to carry out root canal treatment of the patient when the patient can easily be managed with an extraction followed by cast partial dentures which were needed anyways. Thus, the provision of root canal services in this case represents mere waste of time of both the patient and the intern, energy and resources. In essence, the present model of patient services in dental institutions goes against the philosophy of global dental care (Figure-2).

Objectives of comprehensive care model

In the proposed model, interns will be assigned a work quota in the first phase of the posing and then they will be made responsible for the continued comprehensive care of all the patients assigned to the through the year-long internship. It means the primary care provider will remain the same regardless of the treatment needed. This will help dentists in the formative year to be trained as a Family Dentist. This will not only help them learn the ownership of patients, but inculcate the sense of responsibility regarding the care they provide.³ Consequently, by the time they complete their internship, they will be competent in family dentistry, which is the service they are supposed to provide throughout their careers. Those who opt to become specialists can still go through residency or university-level masters' programme where the comprehensive dental care training they received in their formative year will become a foundation stone that could help them understand treatment planning in an integrated manner, providing

holistic care to dental patients. In the long run, the same comprehensive care model can be extended to dental students as well, but that would entail modification in the curriculum.

Conclusions

The patient-centric clinical training along with a patient-centric curriculum will definitely lead to superior outcomes. The proposed reforms in dentistry training will not only bring in more responsibility and professionalism among the future dentists, but will also contribute towards addressing the needs of patients who visit dental institutions for oral healthcare needs.

Acknowledgements: The idea of this new format of internship was conceived and proposed by Dr Mahmood Haider, former Principal, Karachi Medical & Dental College, Karachi, Pakistan.

Disclaimer: None.

Conflict of Interests: None.

Source of Funding: None.

References

1. Glasser M, Hunsaker M, Sweet K, MacDowell M, Meurer M. A comprehensive medical education program response to rural primary care needs. *Acad Med* 2008;83:952-61. doi: 10.1097/ACM.0b013e3181850a02.
2. Nadershahi NA, Bender DJ, Beck L, Alexander S. A case study on development of an integrated, multidisciplinary dental curriculum. *J Dent Educ* 2013;77:679-87.
3. Tan CE, Jaffar A, Tong SF, Hamzah MS, Mohamad N. Comprehensive Healthcare module: medical and pharmacy students' shared learning experiences. *Med Educ Online* 2014;19:e25605. doi: 10.3402/meo.v19.25605.