

## Competencies in dental education

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### Abstract

Competency is ability to do something successfully or efficiently. To evaluate competency of dental professional in Indian scenario, without discussing much about the merits and demerits about the traditional curriculum, we can look a step ahead, i.e., towards competency based dental education, which emphasizes more on the competency (quality) rather than the minimum clinical requirement (quantity). Mastering a discipline happens in five stages, viz., novice, beginner, competent, proficiency and expertise or mastery. Competency is the third stage in which the student is independently able to perform the expected procedures to a predetermined standard and is ready for graduation.

Core competencies can be decided by the governing body, i.e., the Dental Council or can be decided by the University or can be borrowed from the literature. To address, multinational student issues, competencies need to be based on the basic or guiding principles rather than discussing the culture and values of host institution. Cross-cultural variations occur, if we adapt competencies from other countries and it is best to decide on the list of competencies where it is concerned with ethics.

**Keywords:** Competencies, Dental education, Dental profession.

Dental schools in India are following the traditional curriculum which give importance to the minimum clinical requirement which is quantitative. For example, a student has to perform 50 extractions before he/she can appear for the professional exam. Here we, as a teacher, assume that the student will become competent if he has completed the minimum clinical requirement and these assumptions may not be true always. Without discussing much about the merits and demerits about the traditional curriculum, we can look a step ahead, i.e., towards competency based dental education, which emphasizes more on the competency (quality) rather than the minimum clinical requirement (quantity).

Mastering a discipline happens in five stages, viz., novice, beginner, competent, proficiency and expertise or mastery. Competency is the third stage in which the student is independently able to perform the expected procedures to a predetermined standard and is ready for graduation. These competencies can be either clinical or procedural.<sup>1</sup>

Many dental professional bodies and schools have listed the core competencies that a dental graduate should possess and these range from 33 to 60 in numbers. The concept of competency based dental education revolves around teaching and assessing these core competencies. Unlike the traditional curriculum, here, after completing the minimum clinical requirement, the student invites the teacher to test his competency. This test need not be on a scheduled date or month as we see in conventional curriculum. If the student fails to prove his competency, the teacher gives him few days/weeks of time to improve the skills and retest is conducted till the deadline for professional exam application submission. Incompetent students will thus not appear the professional exams.

There is an alternate option to the failed student as practiced by some of the universities. Passing a competency exam is considered as a graduation requirement in these universities, as the competency assessment covers the core mandatory skills for a dental graduate. The student can appear his professional exams, however, he will get his graduation certificate only after passing the competency exams.

Assessment of competencies are to be done using rubrics and qualitatively. Rubrics need to be clear and objective. Assessment should be done by two examiners. The end result of any competency exam should be 'competent' or non-competent'. Global rating scales are also used by some of the universities which ultimately declares the similar result.

Core competencies can be decided by the governing body, i.e., the Dental Council or can be decided by the University or can be borrowed from the literature. However, such borrowed competencies should be acceptable and useful for local clientele. Care should be taken to frame the list of competencies in terms of patient outcomes and not to describe specific technical procedures.<sup>1</sup>

Examples of core competencies for a dental graduate are:

1. Intraoral examination
2. Basic periodontal examination
3. Prescription of antibiotics and analgesics
4. Demonstration of brushing technique
5. Intraoral radiography
6. Infiltration local anesthesia technique
7. Preoperative assessment & partial denture design
8. Smoking cessation counseling

Applying the acceptability issue to the globalization of our population, a relatively new dimension of cultural

competency has been introduced. Cultural competence in healthcare refers to the ability for healthcare professionals to demonstrate cultural competence toward patients with diverse values, beliefs, and feelings.<sup>2</sup> To address, multinational student issues, competencies need to be based on the basic or guiding principles rather than discussing the culture and values of host institution. Cross-cultural variations occur, if we adapt competencies from other countries and it is best to decide on the list of competencies where it is concerned with ethics.

Competency based education challenges the notion that learning only takes place within the time and space of the classroom.<sup>3</sup> It is a strong belief that students who emerge from such curriculum would be more consistent in standard of learning and faculty members would be more engaged in teaching/ assessing the competencies. However, there are believers who blame competency based education as a reductionist approach to the dental curriculum where in a student can be just concentrating on the core competencies. Future studies evaluating graduates from such curriculum can throw more light on the implications of competencies and competency based education in the field of Dentistry.

### References

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