JOURNAL OF SCIENTIFIC DENTISTRY

From the Editor's desk....

Bruce J. Baum suggested that dental schools should aim to produce a graduate who:

1. Is a lifelong learner, capable of being able to grow and adapt as change occurs in our science base and health care systems;
2. Has a sense of community responsibility;
3. Is technically competent at dental surgical procedures;
4. Is competent at managing oral medical disorders; and
5. Is competent treating ambulatory, medically compromised individuals.

Such a graduate will be able to function in a health care system in which oral health truly is integrated with total health.

Interest in competencies and measuring specific learning is accelerating throughout the world. Many dental schools in the west are gradually undergoing a paradigm shift and transitioning to a competency based education (CBE) curriculum. Schools must be released from departmental courses, a fixed 4-year time course, technical requirements, and classical lecture formats; i.e., schools must move from a teacher-centered curriculum to a student-centered one. To accomplish this change, dental school faculty members need to become educational professionals, learning how to educate adults for a professional career.

In order to introduce CBE, Hendricson and Smith have described three questions:

1. What knowledge, skills, and values must the student possess at the time of graduation, so that he/she is ready for the next level (PG/practice)?
2. What learning experience will enable the student to acquire these competencies?
3. What proof or evidence is needed to establish that the student has attained these competencies?

Three models of competency-based curricula have been described in literature: Top down planning, readiness model, and horizontal curriculum structure. The top down planning is a need-based approach in which the needs of the community drive the curriculum and learning. The readiness model moves away from the traditional calendar-based system; in this system, no fixed time is allotted to attain competencies. The students remain in training until he/she demonstrates the skills required for patient care without assistance. The horizontal curriculum incorporates integration across disciplines.

The Association for Dental Education in Europe (ADEE) has prepared a document with competency statements for the graduating dentist. This document was prepared to promote convergence of standards of dental education in Europe. This report titled Profile and Competencies for the Graduating European Dentist (PCD) — update 2009 has defined seven domains which are:

1. Professionalism.
2. Interpersonal, communication, and social skills.
3. Knowledge base, information and information literacy.
4. Clinical information gathering.
5. Diagnosis and treatment planning.
6. Therapy: Establishing and maintaining oral health.
7. Prevention and health promotion.

Faculty must dedicate time to work together to convert the haphazard curriculum of the past to the now-accepted organized, competency-based curriculum. This process of conversion includes examination of course content for gaps, redundancies, and proper sequencing, and the consideration of teaching methods which integrate scientific principles with clinical practice. Formative and summative assessment of student performance need to be criterion based; the integral parts of clinical practice must be evaluated in addition to the end product. Furthermore, the means of evaluating program effectiveness must give direction to the ongoing process of revision as technology and consumer demands change. The use of competencies in curriculum design provides direction for program course goals whose achievement produces a competent graduate.

Prof. R. Saravana Kumar
Editor-in-chief
Journal of Scientific Dentistry