

The age of technical-scientific advances and reduction of class hours in dental schools: what are the perspectives in the students' training?

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Schools of Dentistry are responsible for the scientific, clinical and humanistic education, training and preparation of students to work as confident and responsible dentists. In the last decades, several instruments and materials have been developed to facilitate endodontic treatments. Changes have been drastic, and a very large knowledge base has been built for the dental student. However, these developments have not been accompanied by changes in Endodontics curricula or the number of hours assigned to teaching. Most schools have an integrated curriculum with few hours to teach this specialty. Students receive a large amount of information and most times have very little time for practical activities. Current economic conditions require that the number of hours be kept to a minimum, so that costs are reduced. Moreover, because of curricular integration, students may graduate having treated only one, or even no patient that needed clinical endodontic treatment. Curricula do not include this requirement, and the patients seen in this integrated context may not need an endodontic treatment.

Several Departments of Endodontics have reduced their curricular items to a mere “how to perform a root canal treatment”. There is no time for comprehensive education about important points, such as diagnosis and treatment planning, which are essential for learning in clinical dentistry. A poorly defined diagnosis may often lead to incorrect treatment plans and unnecessary treatments. The skills and competencies necessary to diagnose, plan and perform treatments are the result of a lengthy learning process; it is necessary to spend a long time in contact with the patient to collect information, analyze data and reach a conclusion. This process also requires access to competent professors, who have the time to teach and provide support.

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There are many good Endodontics professors in Brazil, but it has become harder to recruit them. Curricular restructuring in several Schools of Dentistry has not promoted that, and part of teaching has been carried out in the distance learning modality, which, when not well organized, may fail to cover part of the contents. Moreover, teaching staff has been reduced to cut costs. Some schools rely on non-specialized lecturers to teach and be responsible for the learning of clinical Endodontics. This is counterproductive, because students fail to have the necessary contact with good behavior models and appropriate techniques. Moreover, highly qualified professors improve leaning and understanding by students, as well as their techniques, because of their knowledge of endodontic science and biology.

The training of the technical aspects of Endodontics also requires enough time. “Technical” training has received more attention than endodontic “education”.

In recent years, there has been a slow but constant loss of biological content in clinical thinking and practice. Teaching has focused on “how to do it” rather than on “why to do it”. Endodontic research has advanced significantly, and the understanding of endodontic diseases has improved. At the same time, easy and oversimplifying pseudo-learning using electronic means and aesthetic radiographic appearances have set the course of clinical practice. This focus on technology has accelerated since the introduction of rotary instrumentation using NiTi files. These are fantastic tools, but that is all they are, tools. There should also be knowledge, and this cannot be bought at dental shops or online.

This looser connection between scientific knowledge and clinical practice has affected endodontic teaching negatively. To restrain such decline, the endodontic community and its leaders should work to improve the teaching of Endodontics and make it effective at all educational levels. They should also demand that professors be hired and that universities provide adequate conditions for the work of these professionals, motivating them to teach Endodontics with responsibility and excellence.

There are several paths for the improvement of the endodontic competence of graduates in Dentistry. Several cross-sectional studies that have investigated the results of endodontic treatments in the populations of most Western countries suggest that these changes should begin immediately. National and regional board examinations to grant certifications to clinicians may be a necessary measure to ensure quality. The Brazilian population claims for quality professionals imbued with technical, scientific and ethical knowledge.

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