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Editorial

Aligning with global standards requires a 5-year dental curriculum in Pakistan

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Dentistry, as a dynamic branch of healthcare, has undergone significant advancements globally over the past few decades.[1] However, the dental education system in Pakistan continues to lag due to its old-fashioned curriculum, which has remained essentially unchanged for years. The existing 4-year Bachelor of Dental Surgery (BDS) program is insufficient to meet the evolving demands of modern dentistry.[2] To bring dental education in Pakistan at par with international standards, the course content needs to be aligned with the rest of the world.[3] It, therefore, becomes imperative to transition to a 5-year dental curriculum. This extended duration would not only allow for the inclusion of new and relevant courses but also ensure that dental graduates are better equipped to address contemporary challenges in oral healthcare.

The current 4-year BDS curriculum in Pakistan was designed decades ago and has seen minimal updates despite the rapid advancements in dental science and technology. This old framework lacks the flexibility to incorporate emerging fields such as Forensic Dentistry, Implantology, Cosmetic Dentistry, Pediatric Dentistry, and Digital Dentistry. In many countries, forensic dentistry is classified into three branches, with specialists trained to perform specific tasks with a high degree of proficiency. Although a survey indicates that most dentists in Pakistan recognize the importance of this field, its teaching, training, and practical application in the country remain virtually nonexistent, and this vital discipline continues to struggle for acceptance.[4] Despite growing interest among students and increasing demand from patients, Implantology has not yet been integrated as a core component of the undergraduate curriculum in Pakistan.[5] The survey findings reveal that, unlike in many other countries, oral radiology receives limited attention in the curriculum.[6] This leaves clinical students and future graduate dentists inadequately trained in this crucial area of dentistry. The BDS curriculum remains under criticism for insufficient incorporation of training in new technologies, such as Caries Detection Devices, Artificial Intelligence, computer-aided design & computer-assisted manufacturing (CAD/CAM) systems, Cone-Beam Computed Tomography (CBCT), and Laser Dentistry. At the same time, its necessity has been questioned or seriously debated.[7]

Dental lasers are highly valuable tools that enable graduate dentists to perform a wide range of procedures with greater effectiveness and efficiency. To familiarize dental students in Pakistan with this technology, a one-semester course on the Basic Science and Principles of Lasers in Dentistry could be incorporated into the BDS curriculum. This course would introduce the fundamental science and principles of laser technology, covering topics such as laser physics, tissue interactions, laser safety, and the various types of lasers used in dental practice.[8]

The curriculum places insufficient emphasis on critical areas, including research methodology, practice management, and interdisciplinary collaboration, all of which are essential to a holistic dental practice. In the existing PMDC-approved curriculum, four examination subjects are taught each year, leaving no room to incorporate the aforementioned missing disciplines. As a consequence, dental graduates lack knowledge and skills regarding various technological innovations and clinical management.

Globally, dental education has evolved to keep pace with the advancements in medical science and technology. Many countries, including the United States, the United Kingdom, and European nations, have adopted 5-year or longer curricula for dental degrees. These programs provide students with a more comprehensive education, including hands-on

clinical training, research opportunities, and exposure to cutting-edge technologies. By contrast, the 4-year program in Pakistan condenses a substantial body of theoretical and practical knowledge into a shorter timeframe, leaving little room for in-depth learning or skill development. A 5-year dental curriculum, therefore, is not just a necessity but a responsibility to ensure that Pakistani dental graduates are equipped with the knowledge, skills, and competencies required in the 21st century. By embracing this change, Pakistan can elevate its standards of dental education and improve patient care. The time to act is now, for the sake of the future of dentistry and the oral health of the nation. Transitioning to a 5-year dental curriculum will not be without its challenges. It would require significant investment in infrastructure, faculty training, and educational resources. There may be resistance from stakeholders who are accustomed to the existing system. However, these challenges can be overcome through strategic planning, collaboration with international institutions, and government support. The long-term benefits of producing highly skilled and competent dental professionals far outweigh the initial hurdles.

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