

Editorial

Digitalization in Dentistry

Like any other medical field, dentistry has not remained untouched by technological advancements. The advent of digital dentistry has been the greatest breakthrough in the field of dentistry in recent years. The Digital revolution in dentistry has opened up a new vistas of opportunities for dentists and patients alike. Digital dentistry may be defined as "any dental technology or equipment that comprises digital or computer-regulated components in contrast to that of mechanical or electrical alone". Computer technology has significantly enhanced the clinician's capability to provide more accurate diagnosis and treatment outcomes, reduce risks and attain better results. For detecting and managing dental diseases, dentists are increasingly relying on digital technologies such as Laser Fluorescence, Cone Beam Computed Tomography (CBCT), Computed Tomography (CT), Ultrasonography, Nuclear Magnetic Resonance (NMR)) including clinical techniques such as CAD/CAM technologies, optical impression, stereo lithography, and 3D printers.

In recent years, digital smile design tools have become essential for creating natural and personalized esthetics. Contemporary digital methods encompass all clinical phases, from diagnosis to the creation of a smile aligned with the patient's facial features, and the completion of the restorations. Digital technologies not only streamline treatment planning, smile designing, and the creation of restorations but also result in effective and efficient collaboration among different dental specialists and dental technicians, enhancing overall patient care. The use of contemporary digital tools in interdisciplinary esthetic treatments further emphasizes the role of high magnification for precision, implant placement, minimal invasiveness, and clinical effectiveness.

In developed nations, digital dentistry has gradually replaced the conventional dental workflow in a growing number of developed countries. The digital dental workflow benefits by saving time for patients, dentists and dental technicians alike. In India, digitalization of dentistry has been occurring at a rapid pace. In years to come, it is very probable that digitalization may take over traditional forms of dentistry entirely, thus rendering dental practices more efficient and precise.