

## Dentistry in the modern era

Digjeet Kaur Monga<sup>1\*</sup>, Sumit Bhateja<sup>2</sup>, Geetika Arora<sup>3</sup>

<sup>1</sup>Dental Surgeon, <sup>2</sup>HOD, <sup>3</sup>Reader, <sup>2</sup>Dept. of Oral Medicine & Radiology, <sup>3</sup>Dept. of Public Health Dentistry, <sup>1,2</sup>Manav Rachna Dental College, Faridabad, Haryana, <sup>3</sup>Inderprastha Dental College & Hospital, Ghaziabad, Uttar Pradesh, India

**\*Corresponding Author: Digjeet Kaur Monga**

Email: digjeetkaurmonga@gmail.com

---

### Abstract

The field of dentistry has come a long way. This branch of health & science has evolved from a primitive form to modern day use of preventive dentistry and modern age treatment. Basically, modern dentistry is the usage of high-quality scientific evidence for decision-making regarding the treatment and preventive measures.

**Keywords:** Modern era dentistry, Recent advances.

---

### Introduction

Modern dentistry is the art, science and technology that requires special skills & training for development. Modern dentistry involves medical procedures, focusing on the prevention and treatment of the oral cavity. Nowadays, dentistry offers routine and comprehensive procedures. The use of this modern technology has sped up and improved most dental procedures.

Modern dental practices involves new technologies such as Digital X-Rays, CEREC® CAD/CAM single-visit crowns, and many others.

Most dental treatments are now safer, faster, and minimally invasive than the earlier dental procedures. There is a substantial gap between what is known about effective health care and what is delivered routinely to patients. To cover this gap application of modern practices is required. The best patient outcomes tend to occur when professional discretion is informed by high-quality evidence and not by the dentist's personal preferences, habitual routines, or opinion-driven decisions based on traditional practices. Hence modern dental practices are required for best treatment outcomes.

### Modern Era Dentistry (1900-today)

Dental Health – focuses on collecting resources, mostly aimed at children.

Nutrition and Dental Health – certain resource which shows connection between good nutrition and good dental health.

Dental Hygiene – collection of resources on dental hygiene focusing on the importance of it and it's long term benefits.

Mouth and Tooth Disease – collection of clinical trials in dentistry mostly related with periodontal health of gingiva and oral cancer.

### Benefits of modern dentistry

It familiarise with the various options available, especially brand names that the public may read or hear about in the media.

High quality education regarding the field of dentistry, so you can deliver the care your patients deserve. Use of quality materials and laboratories to obtain results that are equal or superior to your patient's expectations. Practice done by taking advantage of new techniques and materials for enhancing the treatment done. To create value and educate your patients. Enthusiasm about how dentistry has modified in the last decade and how patients get the direct benefits of it.

### Following Services are provided in this modern era of dentistry

#### Dental Hygiene

Regular appointments & checkups with the dental hygienist is the way to good hygiene. Dental hygienists are the first line of defence in this field as

they provide various preventive measures and deep cleaning of the oral cavity. The more access to your teeth and gums the earlier the hygienist can discover the early signs of disease which saves you time, money, and pain and discomfort which can be avoided.

### Fillings

Dentists still perform tooth repairs, only now they are armed with the latest filling materials. The new filling materials are safer, and they have a various Colours to make a perfect match with the remaining teeth. These filling last longer and have much more strength than the previous one. Nowadays, fillings are better at preventing the spread of infection. When a tooth that is damaged due to fracture, decay or improper wear is filled properly, the healthy surrounding teeth are given a dose of protection too.

### Dental Crowns

Crowns are designed to restore a tooth (or teeth) after it get damage or removed. Hence it is made for the replacement of damaged teeth. The remarkable thing about modern dentistry is that today's crowns exceptionally matches the shape, size, and strength of the teeth being replaced.

### Emergency in Dentistry

Many modern day dental practices provide an elevated emergency services to avoid delays in treatment when emergency arises regarding the field of dentistry.

### Root Canals

Whenever a tooth is damaged or decayed at a certain severity where the tooth must be saved, modern dentists provide endodontic treatment, known as RCT(Root Canal Treatment).

Teeth Veneers: People choose veneers when they are looking for an immediate and long-lasting improvement regarding their smile. Today's veneers are thinner, stronger, and easier to apply. Veneers are custom-fitted and wafer-thin made of tooth-coloured porcelain.

The Wand (or STA — Single Tooth anaesthesia) System, was introduced by Milestone Scientific (1997), which delivers anaesthesia without the use of

traditional syringe. Pain and anxiety are reduced due to it.

Diagnodent- Tool for detection of early cavities. It uses sound pulse and laser to detect caries, limiting the amount of decay. It's very useful in preserving the maximum amount of natural tooth structure.

Velscope – It's a FDA approved screening system for oral cancer which uses incandescent light so that shows the anomalies which are not visible to naked eye.

It identifies the diseased tissue and gives a margin for surgical excision.

### Conclusion

The revolution in field of dentistry has led to better treatment approach which focuses more on prevention than cure. With all the modernisation, the treatment has become minimally invasive. Hence modern dentistry is all about prevention and minimally invasive treatment. Increased awareness among patients and higher education among dentists has contributed to the modern practices in dentistry.

### Source of Funding

None.

### Conflict of Interest

None.

### Reference

1. Koenigsberg A, Tech revolution in dentistry -Are you ready. 19.08.13. Available at: <https://www.dentaleconomics.com/science-tech/article/16393645/tech-revolution-in-dentistry-are-you-ready>
2. Guyatt G, Cairns J, Churchill D. Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. *JAMA* 1992;268:2420-2425
3. Hornbrook D. The benefits of modern dentistry.1.04.2008. Available at: <https://www.dentaleconomics.com/science-tech/cosmetic-dentistry-and-whitening/article/16387323/the-benefits-of-modern-dentistry>
4. Beata C. "The use of art technique in modern dental practice." *Journal of Dentistry*, Sept. 2006, p. 620. Gale Academic Onefile, Accessed 16 Nov. 2019
5. Alam, Dr. Mohammad & Sabir, Mohammad. (2015). Dental Science Review Article Multidisciplinary Approach

- in Modern Dentistry: An Innovation in Advance Dental Care. *EC Dent Sci* 2015;1(4):167-72.
6. Lynch C, O'Sullivan V. & McGillycuddy C. Pierre Fauchard: the 'Father of Modern Dentistry'. *Br Dent J* 2006;201:779–781. doi:10.1038/sj.bdj.4814350
  7. Koenigsberg A, Tech revolution in dentistry -- Are you ready. 19.08.13. Available at: <https://www.dentaleconomics.com/science-tech/article/16393645/tech-revolution-in-dentistry-are-you-ready>
  8. What is modern dentistry?. Cited on: 16.11.19. Available at: <https://www.revitin.com/SearchResult/q/What-is-Modern-Dentistry/>
  9. Guyatt G, Cairns J, Churchill D. Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. *JAMA* 1992;268:2420–2425
  10. Hornbrook D. The benefits of modern dentistry.1.04.2008. Available at: <https://www.dentaleconomics.com/science-tech/cosmetic-dentistry-and-whitening/article/16387323/the-benefits-of-modern-dentistry>

**How to cite this article:** Monga DK, Bhateja S, Arora G. Dentistry in the modern era. *J Surg Allied Sci* 2019;1(4):68-70.