

EDITORIAL

Indian Contribution in Medical Science – Dentistry

Manidip Pal✉

The history of dentistry dates back to prehistoric era. The earliest example of dentistry in the history of mankind, At University of Missouri-Columbia, Andrea Cucina & colleagues, have discovered earliest example of dentistry in mankind by Indian dentist about 9,000 years ago (7000 BC), while examining a fossils from Mehgarh, Indus river valley, now in Pakistan. They found tiny holes drilled into teeth on the biting surface of male molars establishing the fact that ancient Indian developed the technology to drill teeth and remove decay.¹

In Mahabharata epic also we could found the evidence of dentistry. Lord Krishna, in disguised of a Brahmin, asked dying Karna to give some donation to test his 'Danaveerata'. Karna had given his golden teeth in return – this provides the evidence of tooth feeling with gold during those age (2500 BC).

SHUSHRUTA in his **SAMHITA** (600 BC) clearly mentioned treatment procedures for dental caries, pain and tooth extraction. He has been considered as the first dental surgeon in the world.²

Prevention of dental caries and dental pain management was described in **CHARAKA SAMHITA** (2nd century BC).³

Rafiuddin Ahmed (1890 – 1965), first Indian Dental Surgeon, is known as Father of Modern Dentistry in India. He was graduated as Doctor of Dental Surgery from University of Iowa School of Dentistry, USA, in 1915. He was a great educator. He founded the first dental college of India and Asia “The Calcutta Dental College” in 1920; now known as “Dr R Ahmed Dental College & Hospital”. In 1925 he started the Indian Dental Journal. He was the key person in formulating the Bengal Dentist Act in 1939. The Bengal Dental Association was founded by him in 1946, now known as Indian Dental Association. He also served as minister in Govt. of West Bengal. He was the recipient of Padma Bhushan in 1964. To honour him Indian Dental association declared 24th December (his birthday) as National Dentist Day.⁴

V M Desai – He is main architect behind the formation of Nair Dental College at Bombay in 1933. It was the first dental college to offer MDS courses in independent India in 1959, starting with 6 dental specialties.⁵

Fatima Jinnah (1893-1967), younger sister of Mohd. Ali Jinnah, was first women dentist from undivided India, passed from Calcutta Dental College in 1923, moved to Pakistan afterwards.⁶

Dept. of Obstetrics & Gynecology, College of
Medicine & JNM Hospital, WBUHS, Kalyani,
Nadia, West Bengal

✉ email: editorujohs@gmail.com

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Tabitha Solomon (1900-1976) - can be considered as the first 'Indian' woman Dentist who qualified from Calcutta Dental College in 1928 and then worked at Chittaranjan seva Sadan and Dufferin Hospital, Kolkata. Solomon worked with Raffiuddin Ahmed also in Calcutta Dental Journal.⁷

S K Majmudar is ever remembered notable figure for his contributions and efforts to form Indian Dental Association and later enactment of Indian Dentist act in 1948.⁸

Hari Krishan D Merchant – he is considered as Father of Indian Orthodontics. The saga of orthodontics (treatment of irregularities in the teeth and jaws) started in 1935 when Dr Merchant gave first series of lectures in Orthodontics at the Nair Hospital Dental College, Bombay after graduating from Germany. He was the founder president of Indian Orthodontics Society (1965-67) and founder editor of Journal of IOS. He was honored by Pierre Fauchard Academy as 'Dentist of the year' in 1976 for his outstanding contribution to dental education in India, awarded for the first time in India.^{9,10}

Minoo Sorabjee Ginwala is the Father of Oral & Maxillofacial Surgery in India. Oral and maxillofacial surgery treats diseases, injuries, malformations and reconstruction of the mouth, jaws and surrounding structures. He is the first dental surgeon of this speciality in India, His birthday 13th February is been celebrated as Oral & Maxillofacial Surgery Day in India.¹¹

Tehmi Minoo Sorabji Ginwala (1918-1985) – is popularly known as "Madam" of Periodontology in India. Periodontology deals with the diseases of the supporting structures of teeth or periodontium (gingiva, alveolar bone, cementum, and the periodontal ligament). In 1947 she pioneered the first independent Department of Periodontology in Nair Hospital Dental

College, Mumbai. She was awarded a gold medal for the first Dr. Ahmed Memorial Oration by Indian Dental Association. TMS Ginwala was unanimously elected first President of Indian Society of Periodontology (1975-76).¹²

B R Vacher (1921-2012) – is known as Father of Pedodontics in India. Pedodontics provides preventive and therapeutic oral health care for infants and children up to adolescence, including special health care needs. This dental speciality was introduced in India by Dr Vacher in the year 1950 at Govt. Dental College, Amritsar, Punjab. Indian Society of Pedodontics & Preventive Dentistry was formed in 1979 and Dr B R Vacher was named as Father of Pedodontics in India because of his lifetime dedicated and marvelous work for the oral care of children.^{13,14}

Vimla Sood (1922-), was the first Indian women to do post-graduation in dentistry. She did her graduation from DeMontmorency College of Dentistry, Lahore in 1944. She did her post graduation in pediatric dentistry from University of Minnesota, USA in 1955. She worked in Wellington Hospital (present Ram Manohar Lohia Hospital, New Delhi), JIPMER, Puducherry.¹⁵

B K Venkataraman (1923-2018) – was the doyen of Oral medicine and radiology in India. He was instrumental in starting Oral Medicine as undergraduate subject at Govt. Dental College, Bangalore in 1967 and post-graduation in oral medicine & radiology in 1970, first of its kind in the country. He also served as President of Dental Council of India.¹⁶

Tansukhrai M. Udani (1924-2009) – is recognized as Teacher of the Teachers in Prosthodontics in India. Prosthodontics deals with design, manufacture, and fitting of artificial replacements ((from dentures to dental implant) for teeth and other parts of the mouth. He was the founder president

of Indian Prosthodontics Society. T M Udani was an academician par excellence, a researcher with open mind, always ready to share his thoughts.¹⁷

Harnath Manishankar Dholakia (1926 -) is considered as Father of Indian Oral Pathology.¹⁸ He is the first postgraduate teacher of Oral Pathology in India, since 1960. Nearly 7000 teaching slides are developed by him. Because of his contribution in various classifications he is also known as “Master of Classification”.¹⁹

Firoze Dara Mirza (1933-) – recognized as giant of Oral Implantology in India. Implantology deals with the permanent implantation of artificial teeth in the jaw. He was founder president of Indian Society of Oral Implantologists as well as founder secretary of Indian Prosthodontics Society.²⁰ He has done the first subperiosteal implant ever done in India in the mandible in Bombay in 1962.²¹

Mohandas Bhat (1935-2018) – he has started the Public health dentistry in India. First MDS course at Govt. Dental College Bangalore was started under his leadership in 1970. He was a “Karma-Yogi” par excellence.²²

B Suresh Chandra (1946-2014) – He could be called as one of the foundational father of Indian endodontics & operative dentistry. He received the Best Dental Teacher Award by Rajiv Gandhi University of Health Sciences, Karnataka in 2012. He served as President of the Indian Endodontic Society (2001-2003) and as President, Federation of Operative Dentistry of India (2003-2005).²³

M. R. Shankar Aradhya – is known as Father of Public Health Dentistry in India.²⁴ He has immense contribution in developing this speciality in India and taken the initiative to form Indian Association of Public Health Dentistry.²⁵

Sandesh Mayekar – notable figure of aesthetic dentistry in India. Aesthetic

dentistry uses techniques to give you a more natural, healthy look. Mayekar has done lots of work on creating good smile, hence a popular name in Bollywood film industry also. He is often called as Father of Aesthetic Dentistry in India.²⁶

Ashith Acharya - having significant contribution in forensic odontology in India. He may be the most sought after person in this branch of dentistry in India. Police asked Acharya’s help during Nirbhaya gangrape and murder investigation, Delhi (2012-13), when the investigators sought to understand the nature of the marks left on the young physiotherapy student’s body. Acharya made his report using police photographs of the suspects’ features and matching their dental patterns against the injuries.²⁷

Many new branches of dentistry have come up e.g. sports dentistry, dental genetics, microdentistry etc. Dental surgeons are gaining their proficiency in these fields to make India proud in future. A humble attempt has been made to mention the significant Indian Dentist’s contribution but due to the paucity of evidenced based literature many contributors’ names remain unsung.

References

1. India has first laugh in dentistry. The Telegraph online 13.04.2001 <https://www.telegraphindia.com/india/india-has-first-laugh-in-dentistry/cid/932824> accessed on 10.02.2021
2. The history of Indian dentistry. <https://dentsweb.com/history/history-of-indian-dentistry> accessed on 13.02.2021
3. <https://kreately.in/ancient-indian-discoveries-ancient-dentistry-2/> accessed on 13.02.2021
4. <https://dentsweb.com/history/history-of-indian-dentistry> accessed on 20.02.2021

5. Municipal Corporation of Greater Mumbai. Nair Dental College. https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Nair%20Hospital%20Dental%20College/RTI%20Manuals/NHDC_RTI_E01.pdf accessed on 10.04.2021
6. <http://pu.edu.pk/images/journal/history/PDF-FILES/Naureen-Talha.pdf> accessed on 02.03.2021
7. Recalling Jewish Calcutta http://www.jewishcalcutta.in/exhibits/show/wom_p/tabitha_s accessed on 11.03.2021
8. <https://dentsweb.com/history/history-of-indian-dentistry/> accessed on 01.03.2021
9. Teja MV, Teja TS, Shetty S, Kashyap R. The rise of Indian Orthodontics: A historical perspective. *J Indian Orthod Soc* 2013;47(3):113-20.
10. Mistry KM. 50 years of Indian Orthodontics Society. *J Indian Orthod Soc*. 2015 December;49:S14-S18.
11. <http://lhmc-hosp.gov.in/WriteReadData/1892s/MAXILLOFACIAL%20SURGERY%20DAY.pdf> accessed on 10.03.2021
12. D'Silva I. Days of giants: remembering Dr. (Mrs.) Tehmi Minoosorabji Ginwala. *J Indian Soc Periodontol*. 2012 Jul-Sep;16(3):298.
13. <http://www.isppd.org.in/about.aspx> accessed on 24.03.2021
14. <http://ajids.edu.in/pediatric/index.html> accessed on 24.03.2021
15. https://en.wikipedia.org/wiki/Vimla_Sood accessed on 05.03.2021
16. Nagesh KS. Tribute to a legend: Dr B K Venkataraman. *J Indian Acad Oral Med Oral Radiol*. 2018;30(4):336.
17. Tribute: A tribute to the teacher of teachers. *J Indian Prosthodont Soc*. 2009;9(4):241-2.
18. <http://indiaeducationdiary.in/oral-pathologist-day-celebrated-in-dental-college-jammu> accessed on 24.03.2021
19. Desai RS. Dr. H. M. Dholakia. *J Oral Maxillofac Pathol*. 2017 Sep-Dec;21(3):328-9. Doi: 10.4103/jomfp.JOMFP_213_17
20. [https://www.thejpd.org/article/S0022-3913\(00\)70166-1/fulltext](https://www.thejpd.org/article/S0022-3913(00)70166-1/fulltext) accessed on 30.03.2021
21. Mirza FD. In the words of the pioneering Indian implant dentist. *J Dent Implant*. 2019;9(2):51-2.
22. Shankar Aradhya MR. A Tribute to Dr Mohandas Bhat. *J Indian Assoc Public Health Dent*. 2013;11(2):1-4.
23. Gopikrishna V. Tribute to one of the foundational fathers of Indian endodontics and operative dentistry. *J Conserv Dent*. 2014 Nov;17(6):503. doi: 10.4103/0972-0707.144565.
24. Narayanan AMB. President's Message. *J Indian Assoc Public Health Dent* 2017;15:291-2.
25. Narayanan AM. Hon. General Secretary's Message. *J Indian Assoc Public Health Dent*. 2015;13(4):368.
26. Priya Pathiyan, Hindustan Times 12.07.2020 <https://www.hindustantimes.com/brunch/the-voice-of-reassurance-during-coronavirus-all-at-the-cost-of-a-smile/story-KAW3TW5A6TSr4tTawLixcO.html> accessed on 03.04.2021.
27. <https://scroll.in/magazine/890365/meet-indias-dental-detectives-who-are-helping-solve-crime-one-set-of-teeth-at-a-time> accessed on 07.04.2021.