It is indeed a great pleasure for me to pen down few thoughts about dentistry in general and forensic odontology in particular. As the human race trying hard to push the hard times of COVID-19 and looking ahead the future with ray of hope and the life routine falls back in order. All businesses, industries, institutions, politics and conflicts are back to its routine. Happiness in life is being able to keep smiling and dentistry is a gifted profession since it adds beauty to the smile. The last three decades of my travel in dentistry have witnessed the remarkable change in the awareness and attitude of general public towards dentistry and the dominance of digital technology in dentistry. There is a remarkable change in the way dentistry is practiced, very interesting to note that big technology giants and corporates are very successful in transferring the technology to practicing dentist directly through professional associations and bodies. Whereas the majority of institution based dental education run by rules and regulations is lagging behind to catch up with technology transfer. Dental institutions role in this technology transfer should be emphasized as it will help student community “catch them young” and also to ignite the young minds about innovation and new discoveries. National Assessment and Accreditation Council (NAAC) accreditation process for dental institutions not only encourages quality in systematic dental teaching learning process but also research and development, the impact of this would be seen in near future.

Dr. Oscar Amoedo was considered as the father of the forensic odontology. His thesis ‘L’ Art Dentaire en Medicine Leagale’ to the faculty of medicine is the first comprehensive reference text on forensic odontology.¹ According to Federation Dentaire Internationale, forensic odontology is that branch of dentistry which in the interest of justice deals with proper handling and examination of dental evidence and the proper evaluation presentation of dental findings.

Forensic dentistry is the branch of forensic medicine, which tries to get dental evidence for justice in medico-legal cases including the identification of the dead person. The advantage of dental tissues is that they are preserved even if the deceased victim is skeletonized, decomposed, burnt, or dismembered. Various techniques are employed to determine age, sex, and ethnicity of the person using dental data. Digital technology, data collection methods and supplementary techniques used in forensic dental identification have undergone significant transformation. The three major focus points of Forensic odontology are: diagnostic and therapeutic examination and evaluation of injuries to jaws, teeth, and oral soft tissues in assault and criminal cases. The identification of victims in criminal investigations and/or mass disasters. Identification of offender by examination, and evaluation of bite marks which occur with some frequency in sexual assaults, child abuse cases, and in personal defense situations.²

Recent advances in the field of genetics and molecular biology have contributed to the rapid growth of forensic odontology. Techniques like polymerase chain reaction using DNA in forensic dentistry offer a new tool when traditional identification methods fail due to effects of heat, traumatism, or autolytic process. There are many
biological materials such as blood, semen, bones, teeth, hair, and saliva that can be used for DNA typing. Both genomic and mitochondrial DNA can be used. Teeth are an excellent source of genomic DNA.  

There is an increase in the awareness about this branch and many MSc and certified courses are available in several institutions in India. There is a long demand to start post-graduation in this specialty in the form of M.D.S (Forensic Dentistry), which would open a new scope and avenue for the next generation dentists in terms of job opportunities.

References