

## Forensic odontology as an aid for victim identification in mass disasters

Madam,

Forensic odontology essentially deals with criminal identification by their dental records and aiding to get them to task. With a spike in the mass disasters occurring in the modern world, the focus of this subject has expanded to include the identification of the victims of these natural or man-made calamities. Although articles in the recent past suggest the importance of the forensic odontologist in the investigating team, only few have provided the difficulties faced by the team and the actual figures where forensic odontologists have helped.

The recent mayhem in Japan has redirected our focus on mass disasters. Various authors have emphasized on the importance of forensic dentistry, and the role a routine dental practitioner plays in maintenance of dental records. These records provide valuable information as they serve to be ante-mortem records.<sup>[1]</sup> Naiman *et al.* have elaborately described

the importance a dentist serves at a crime scene.<sup>[2]</sup> The importance of ante-mortem records for aiding in identification, and also being a social responsibility of the dentist cannot be overlooked, as is also very aptly explained by Chandra Shekhar and Reddy.<sup>[3]</sup> Although the present day scenario encourages and trains the mind of the young dentist to rigidly follow these rules, records that have not been maintained over the years provide a certain difficulty for identification. Highly skilled forensic dentists overcome these difficulties by evaluating the dental profile suggesting the characteristics of the individual, likely to narrow the search for possible identification.

An analysis of ten mass disasters conducted by Clark DH reflected the problems faced by the British forensic odontologists in the investigating team as well as the success rates in these projects. He also suggests the employment of a forensic odontologist from each country through the FDI, which will help in faster identification of individuals belonging to the particular country and race.<sup>[4]</sup> Sarode *et al.* have conducted a study providing insights into the actual forensic investigations using four mass disasters as their model. The results are suggestive of the odontology team aiding in identification of an average of 4% of the victims. These cases are usually the grossly destroyed cases wherein the facial features are not obvious and positive for identification.<sup>[5]</sup> Rai and Anand have also studied the use of forensic odontology in the identification cases of the earthquake of Sumatra in 2004, and have emphasized on the role of the Thai Tsunami Victim Identification Team (TTVI), as well as the protocols of international disaster victim identification which mainly involves four steps of body tagging and bagging, finger printing, forensic pathology, and forensic dentistry. Their study also comments on the fact that 61% of the victims were identified by dental analysis.<sup>[6]</sup>

The aforementioned details explain the immense use of a dentist in the forensic team, and also focus on the problems encountered by the investigating team. A thorough knowledge of maintenance of ante-mortem records will provide great help in identification of the deceased reducing the work load of the victim identification team.

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