Dr Ashith B. Acharya is an internationally educated forensic dentist specialist from India. In 2005, he helped to set up the Department of Forensic Odontology at the S.D.M. College of Dental Sciences and Hospital in Dharwad which was recently recognised as the nation’s first referral centre for forensic dental casework. Dental Tribune Asia Pacific spoke with him about the consequences of this decision and how it can help to establish the specialty in India.

**Dental Tribune Asia Pacific:** Your department has recently been recognised as the nation’s first referral centre for forensic dental casework. What impact has this decision had on your department and forensic dentistry in India in general?

**Dr Ashith Acharya:** Law enforcement in India has traditionally sought the assistance of government-employed personnel and, therefore, forensic dental referrals are commonly made to forensic medical departments at government hospitals or dentists in government service. However, these professionals are often not necessarily required to have undergone formal training or experience in forensic dentistry.

The recognition of our department sets a precedent for formal involvement of qualified forensic odontologists employed in the private sector to contribute to forensic dental casework. It will hopefully encourage public-private partnership in forensic investigations nationwide as well.

**You have lobbied since 2008 to receive recognition by the Karnataka government. Why did it take so long?**

In order to recognise the private sector and permit its contribution to law enforcement, the government had to hear a number of opinions and undertake visits to ensure that a private organisation like ours is well equipped to deal with the queries of the police.

Our application was delivered to the State’s Home Department in December 2008. The Home Minister then sought the opinion of the Director-General of Police and the Ministry of Medical Education, whose Director and Deputy Director paint a visit to my college and department. Their recommendation to the Home Ministry finally paved the way to the recognition of our department as a referral center for forensic dental cases in October.

**India appears to lack forensic dentistry experts in general. Why is that?**

The greater focus on dental practitioners and dental clinical specialists in India is perhaps due to the necessity to serve the oral health care needs of the vast Indian population. Less emphasis therefore may have been placed on para-clinical dental specialties such as forensic dentistry. However, this is slowly changing and there has been a steep increase in interest in the field over the last decade.

Although no formal course in the specialty is offered by dental colleges in India yet, the Dental Council of India (DCI) recognises two overseas forensic odontology qualifications from the University of Adelaide in Australia and Cardiff University in the UK. This has opened the door for Indians to obtain formal training abroad and help to bring this knowledge to the country. Formal training may shortly commence in India, increasing the number of forensic dentistry experts further.

**What are the consequences of this lack of forensic experts?**

A major disadvantage is that law enforcement frequently seeks opinions from unqualified and inexperienced personnel, who may not have a thorough understanding of the nuances of forensic dental casework, including evidence collection methods, evaluation techniques and report writing. This lack of expertise has resulted in forensic dental evidence not being used in a reliable manner in which to serve the interest of the judiciary.

**How has this decision changed the process?**

The recognition of our department finally paved the way to the recognition of our department as a referral center for forensic dental cases in October. This has opened the door for Indians to obtain formal training abroad and help to bring this knowledge to the country.

**How many forensic dentists would be required to cope with the demand in India?**

It is difficult to predict the number of forensic dental experts actually required, but certainly much more than the handful available today. There are 29 states and a number of federally governed territories in India and many of them are larger in size and population than most countries in Asia. Hence, there is definitely a need for experienced and trained forensic dental experts throughout the country. I recommend that at least one forensic dental centre be established in each state.

**How is forensic dentistry taught in India?**

Our application was delivered to the State’s Home Department in December 2008. The Home Minister then sought the opinion of the Director-General of Police and the Department in December 2008. The Home Ministry finally paved the way for the recognition of our department as a referral center for forensic dental cases in October.
In 2007, the DCI revised the undergraduate Bachelor of Dental Surgery (BDS) curriculum, which included the provision for teaching forensic dentistry in the third year of the BDS under Oral Pathology and in the fourth year of the BDS under Oral Medicine and Radiology. This inclusion in two major dental subjects was intended to ensure forensic dentistry would be taught in dental colleges even in the absence of qualified forensic dental teaching personnel. Oral pathologists and biologists can cover areas of forensic odontology related to oral biology, for example, the use of dental histology in age estimation, application of tooth morphology in sex and race identification, and bite mark registration. Oral physicians and radiologists are also able to cover issues like radiographic age estimation or post-mortem radiography.

The curriculum mandates 10 hours of lectures and 20 hours of hands-on/practical training in the basics of forensic dentistry. As far as I know, the depth of the subject and time mandated for teaching it at undergraduate level are on par with those, for example, in Australia or Malaysia.

**New digital technologies and DNA identification have made it easier to identify the remains of victims of crimes or mass disasters. How do you keep up-to-date with latest advancements in the field?**

Access to all major peer-reviewed forensic sciences journals and leading dental periodicals ensures that knowledge in India is up to date with current trends and practices. However, we do not only believe in staying in touch with recent developments, but also in contributing towards progress in dentistry. An interdepartmental and multi-speciality approach to research in forensic dentistry and publication of research—such as a new method of age estimation and an innovative system of denture marking for post-mortem identification—ensures that my college and department are part of the evolution of the specialty.

**What are the general issues that you as a forensic expert are confronted with? Are dentists in India required to store dental records?**

Dentists in India are not legally mandated to store data; however, many dentists do make an effort to catalogue their patient records as a matter of good practice. These have already contributed to post-mortem dental identification on several occasions. What undermines routine forensic dental casework in India most is the lack of awareness amongst the general population, for example, the use of dental records in sex and race identification, radio graphic age estimation or DNA identification have tremendous potential in the advancement of forensic dentistry in India most is the lack of awareness amongst the general population, as well as law enforcers and the judiciary, of what dentistry can contribute to forensic investigations.

I believe that with joint effort we can educate all stakeholders and gain the recognition that the specialty deserves. However, this will only be possible through immense dedication of all individuals and organisations involved in the field, such as the Indian Association of Forensic Odontology. This organisation was formed by members of different dental specialties 10 years ago and organises national conferences annually with the goal of encouraging interest in the specialty amongst dentists and other professionals.

**What, in your opinion, also has to be done to establish forensic dentistry in India?**

A number of initiatives need to be undertaken in order to establish forensic dentistry in the country, including mandating dentists with casework experience in the specialty to be part of state forensic investigation and identification teams. Legislation on the compulsory use of dental methods in post-mortem identification and other routine forensic investigations is also required, as well as formal and structured graduate courses in the subject. State officials throughout the country should also push the development of stand-alone forensic dentistry centres incorporating full-time staff.

Thank you very much for the interview.