



## G44 Active Participation of the United Arab Emirates' Disaster Victim Identification Team Using Dental Identification

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After attending this presentation, attendees will be informed regarding the active participation of United Arab Emirates' (UAE) Disaster Victim Identification (DVI) Team in dental identification of the Air Asia QZ8501 airplane crash victims in Indonesia.

This presentation will impact the forensic science community by demonstrating the international contribution of the UAE DVI Team in general, and forensic dentists in particular, under the International Criminal Police Organization (INTERPOL) umbrella.

Human dental identification plays a key role in DVI because it is considered a prime identifier. It is used as a single identification procedure (using WinID $^{\text{TM}}$  version 3) or integrated in multidisciplinary procedures (DVI System International version 5); however, Deoxyribonucleic Acid (DNA) and fingerprint analyses are also identifying techniques well practiced in the UAE.

Although a global increase of unexpected large-scale accidents such as transport crashes, war explosions, and terrorist attacks cause an increasing number of unidentified or/and missing persons, only a few situations mandated a forensic odontologist involvement in the UAE.

A major disaster occurred in 1983 in the desert of Abu Dhabi. A Boeing® 737-2P6 from Gulf Air crashed and 112 victims were found. The 26 children among the victims were investigated by dental experts from the United Kingdom. One of the main obstacles that prevented confirmation of the identity of all victims was the lack of antemortem dental data from passengers with an Indian and Pakistani nationality.

In 2004, a Kish Fokker 50 airplane crashed in Sharjah, resulting in 45 victims. Dentists from the Dubai Health Authority were assigned to conduct the dental identification without previous related knowledge, training, or preparedness. It resulted in confusion and delayed identification.

Both of these aforementioned disaster identification interventions highlighted the need to establish a well-prepared UAE human identification team. In 2010, the UAE DVI team was established. The official certificate accession of the UAE as a member of the Steering Group of INTERPOL for DVI was obtained in 2011. The UAE became the first Arabic country member of the International Organization for Forensic Odonto-Stomatology (IOFOS) in 2011. Since 2014, the UAE has had a forensic odontological participant in the Scientific Working Group on Quality Assurance in the INTERPOL Forensic Odontology Section, contributing to updating the INTERPOL dental forms.

In 2015, the first active participation of the UAE DVI with the specific involvement of forensic odontologists was required for the Air Asia QZ8501 airplane crash in Indonesia. Eight forensic odontologists from six countries participated in the identification of 162 victims. Forty-two percent of the victims were identified based on dental methods and 37% with combined techniques. UAE had no countrymen victims in the air crash, but UAE forensic dentists had the ethical obligation to share their scientific approach for identification after the request of the Indonesian DVI team.

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