Dental hospitals in Pakistan are significantly polluted with mercury

New tests confirm lax attitude towards amalgam use and management

Daniel Zimmermann

ISLAMABAD and RAWALPINDI, Pakistan: The results of nation-wide tests conducted throughout Pakistan have raised the alarm over the high levels of mercury pollution in dental hospitals. In some of the tested sites in the twin cities of Islamabad and Rawalpindi, the amount of the toxic metal detected in the air was found to be up to 20 times higher than acceptable levels.

According to the monitoring team from the Sustainable Development Policy Institute, an independent development and policy analysis organisation in Islamabad, dental personal working in the affected facilities were recently informed about the results and given recommendations about a number of safety measures. They were also advised on how to reduce the use of mercury in dental practice in general.

Despite the availability of alternative filling materials such as composite resins, amalgam remains the most widely used dental restorative in Pakistan. Waste management of the material, however, has traditionally been poor. According to the results of a study conducted in 2007 by researchers from the Riphah International University’s dentistry college, over 90 per cent of dentists in the country still dispose of used amalgam through regular waste or the waste-water system. Only 6 per cent showed awareness of proper waste management.

‘Dental restorative in Pakistan remains the most widely used dental restorative in Pakistan. (DTI/Photo Szasz-Fabian Jozsef, Romania)’

As composite resins have become available over the years, many dental practitioners have used this material as a substitute. Composite resins are said to require little or no mercury. It is arguable whether this is true as most composite resins are manufactured with the use of mercury.

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India hosts FDI congress in 2014

In anticipation of this year’s congress, which will be hosted by the Turkish Dental Association in Istanbul, the FDI World Dental Federation has disclosed the venue for the event next year.

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DTI expands to South Africa

With Modern Dentistry Media in Cape Town, another publisher has recently joined the Dental Tribune International Publishing Group. The first Dental Tribune South Africa edition is going to be released in June together with Modern Dentistry Media’s flagship publication International Dentistry South Africa.

Dentophobia passes generations

Parents can pass dental anxiety on to their children, which may prevent them from attending routine dental check-ups later in life, research from the US suggests. In a survey conducted on over 800 primary caregivers, the percentage of children with dentophobia was higher when parents already suffered from the condition.

Legal battle over dentist’s death continues

The death of an Indian dentist in Ireland, which caused diplomatic rows in both countries, could soon end up in European courts, as the family of Savita Halappanavar, who died after miscarriage of her baby in a hospital in Galway last October, is considering taking the case to the European Court of Justice in Brussels in June, the newspaper the Irish Independent has reported.

The medical incident has been the subject of ongoing debate in the ultra-Catholic country, as well as internationally, owing to the circumstances of Halappanavar’s death, which, according to reports, has largely been blamed on medical personnel denying her a termination of pregnancy over the course of several days owing to the country’s very strict abortion laws. Since then, the government in Dublin has drafted a bill to be put before Parliament that could make abortion by Irish doctors legal when the life of the mother is at risk.
Dental Tribune: Asia Pacific Edition

Japan begins standardisation of dental records with trial

TOKYO, Japan: The Japanese Ministry of Health, Labour and Welfare is reported to have released funding for a pilot project that aims to standardise the format of electronic records in dental practices nationwide. If successful, the measure is supposed to improve the identification of victims of crime or mass disasters such as the March 2011 earthquake.

According to reports by the Tokyo newspaper The Mainichi Shimbun, the ministry has allocated ¥21 million (approximately US$160,000) from its budget for the project over the next fiscal year. The new format will be introduced in several dental clinics by the beginning of 2014, it said.

A review panel will be also set up in June to discuss the further standardisation of record formats for body identification.

Dental records in Japan have been primarily stored on paper or film thus far. This made victim identification difficult for forensic experts when archives were swept away or made unusable by the tsunami following the March 11 earthquake. In the coastal town of Minamisanriku north of Fukushima, for example, all dental clinics, along with their patient files, were destroyed (as reported by Dental Tribune in September 2011). Electronic records existed before the disaster but they were often stored in different formats, which made accessing the data in the aftermath laborious because it first had to be converted.

Overall, dentists were still able to identify 14 per cent of the 8,719 bodies through forensic examination, which according to the President of the Japanese Dental Association, Dr Mitsuo Okubo, proved significantly more effective than DNA or fingerprint matching. In a recent interview, he told Dental Tribune Asia Pacific that a new system could expedite the identification process dramatically through automated dental matching tests. A full-fledged system is most likely to be implemented within three to five years, he predicted.

Owing to its close proximity to the boundary of two tectonic plates, Japan experiences between 1,500 and 2,000 earthquakes of different magnitudes per year.

With over 140,000 casualties, the most deadly occurred in the Kanto region in the early 1920s. The March 11 earthquake is currently estimated to have killed almost 16,000 people and destroyed or damaged one million homes. According to recent probability predictions by geological experts, another magnitude 7.0 earthquake could strike the southern part of the country as early as next year.

Japan begins standardisation of dental records with trial

Belief workers surveying destruction in Minamisanriku. All dental clinics including records were destroyed. (DTFPhoto courtesy of AmericaCares, USA)
Singapore to extend subsidised dental health care

Singapore’s health minister Gan Kim Yong has recently announced incentives to encourage more dental clinics and practices to sign up for the Community Health Assist Scheme (CHAS), which provides subsidies for the treatment of medical and dental conditions. In response to questions from members of parliament last month, Yong revealed that another 50 dental health care facilities are expected to join the scheme this year.

Since the introduction of the programme in January last year, the number of dental clinics participating in the scheme has risen to 295, according to Yong, an increase of over 20 per cent compared with last year. He added that the ministry aims to focus on underserved areas in the context of the expansion but will continue to maintain an equal geographical spread of clinics participating in the scheme nationwide to make sure that the maximum of people are able to claim benefits.

According to the ministry’s latest figures, over 200,000 people were eligible for subsidy under CHAS by the end of 2012. A replacement of the Primary Care Partnership Scheme, it allows Singaporeans over the age of 40 with low income and disabled people to seek medical and dental treatment in private clinics or practices.

A recent EU study indicated substantial loss of IQ in European dentists due to mercury exposure. The health of staff working under these conditions will be impaired in the same way as that of dental nurses in Norway and New Zealand, for example, who were using copper amalgam a few decades ago,” commented amalgam expert Lars Hylander from Sweden.

Final results from the project are expected to be published later this year after the testing in several cities has been completed. A first in Pakistan, the project seeks to provide reliable data on indoor and outdoor mercury pollution throughout the Western Asian country. The project is being conducted in collaboration with the European Environmental Bureau and the Zero Mercury Working Group, a coalition of non-governmental organisations aimed at the reduction of mercury worldwide. In addition to dental offices, the project has been targeting light manufacturing facilities, among others.