By DTI

DAEGU, South Korea: Although equivalent alternatives have become available over the past decade, dental amalgam remains in use as a restorative material for dental caries in children in many countries. The safety of dental amalgam, however, is still a controversial issue among experts, as it has been associated with developmental disorders and systemic conditions. A Korean study has recently provided evidence that dental amalgam exposure can affect systemic mercury concentration in children.

In order to assess chronic exposure to elemental mercury, researchers at Kyungpook National University in South Korea evaluated mercury concentrations in urine samples from more than 1,000 children aged 8–11, who also underwent oral examination. They found that children with more than one amalgam-filled tooth surface exhibited significantly higher urinary mercury concentrations than those with none. The researchers thus concluded that dental amalgam exposure could affect systemic mercury concentration in children.

A number of studies have indicated that mercury exposure could be involved in problems in early brain development. Mercury has also been associated with adverse health effects relating to the digestive and immune systems, as well as the lungs, kidneys, skin and eyes. Awareness and recognition of these health and environmental implications have led to a ban on the use of dental amalgam in some high-income countries. However, dental amalgam restorations are still taught in the dental curriculum in South-East Asia. In Myanmar, for example, about 50 per cent of fillings placed are of amalgam.

The study, titled “Dental amalgam exposure can elevate urinary mercury concentrations in children”, was published online on 1 February in the International Dental Journal.
Indian dental patients in favour of chairside medical screening

By DTI

MUMBAI, India: A number of international studies have already indicated that oral health professionals could play a greater role in detecting chronic disease. Given the high prevalence of cardiovascular disease, diabetes mellitus, tuberculosis, HIV/AIDS and hepatitis B in India, researchers have now assessed patient attitudes towards and willingness to participate in medical screenings in dental settings in the country.

In the study, adult patients visiting five university-based dental clinics and one private practice were asked about their attitude and about 95 per cent in the public and willingness to participate in chairside screening. Almost 90 per cent of the study participants in the clinical group and about 95 per cent in the private practice group said that they believe that it is important for dentists to conduct medical screenings in dental practices for the most common chronic diseases. The majority of patients were willing to have a dentist perform screenings for this purpose. Willingness was highest for screening for diabetes, with 85 per cent in the clinical group and 78 per cent in the private practice group. Over 70 per cent in both groups reported willingness to undergo HIV/AIDS screenings in a dental setting.

In addition, the researchers found that the majority of patients were willing to pay 150 Indian rupees (36 per cent in the clinical group and 52 per cent in the private practice group) US$ 2.25 for medical screenings. According to the WorldBank statistics, the gross national income per capita in the country is 1,370 Indian rupees (US$ 24.47).

According to a US study published in the American Journal of Public Health in 2014, chairside screenings in dental practices for the most common chronic diseases could save the health care system more than US$100 million annually.