Billions to suffer from untreated decay

Dental neglect affects a third of the world’s population, according to report

LONDON, UK: Despite worldwide efforts to improve oral health, a new global study has revealed that 33 per cent of the world’s population currently suffers from untreated caries lesions in their permanent teeth. It also found that 621 million children worldwide have tooth decay that goes untreated.

To make things worse, hundreds of millions of new cases are expected to add to the burden of dental decay annually owing to neglected treatment, according to the paper published by researchers from the UK, the US and Australia in the latest Journal of Dental Research.

Even developed countries are affected, with one in three people in the UK suffering the consequences of neglected treatment, along with one in five in the USA, for example.

The findings which are part of latest Global Burden of Disease study involved a systematic review of all data on untreated dental decay, leading to a comprehensive report on rates of tooth decay for all countries, age groups and genders from 1990 and 2010. The team said to have analysed 192 studies of 1.5 million children aged 1 to 14 years old, across 74 countries, and 186 studies of 5.2 million people aged five years or older, across 67 countries.

Hundreds of millions of new cases are expected to add to the burden annually. (Photo Greta Gabaglio)

The World’s Dental Newspaper · Asia Pacific Edition

Thorough dental care helps retain youthful looks

SHARNBROOK, UK/LEIDEN, NETHERLANDS: A new study on lifestyle and appearance has linked personal effort in oral hygiene to perceptions of facial age.

The findings suggest that people with good dental routines and overall oral health can appear up to 10 years younger.

A team of scientists at Unilever and Leiden University in the Netherlands evaluated various lifestyle factors, such as smoking, sun-bathing and oral care, in relation to perceived facial age. The results showed that, along with other factors, thorough oral care, including flossing and regular brushing routines, can have long-term effects on the preservation of a youthful look.

In order to determine perceived facial age, the researchers photographed about 800 people with their mouths closed. The portraits were then shown to 60 assessors, who estimated the age of each individual within a range of 5 years. The average perceived age of each person was then compared with the lifestyle factors collected via questionnaires. The study group included smokers and non-smokers from the Netherlands and England aged 45 to 75.

The researchers found that Dutch women with few remaining teeth were associated with a total perceived facial age of 10.9 years higher than their actual age. In comparison, Dutch men with dentures who did not floss were significantly associated with a total perceived facial age of 9.5 years higher. Similar findings were made in the British group, as English women who cleaned their teeth only once a day and wore dentures had a total perceived facial age of 9.1 years higher than women with natural teeth and a comprehensive oral routine.

The number of teeth and the condition of the surrounding gums are known to directly influence the appearance of overlying tissues. For example, people look younger with their mouths closed after receiving new dentures, and the number of teeth or the use of dentures has been linked to lip size and the appearance of the labio-mental fold,” stated Dr David Gunn, a senior scientist at Unilever.

The authors stressed that dental aspects were significantly associated with perceived facial age in the groups studied.

Stricter regulations

The Australian Dental Industry Association (ADIA) has advised the government panel currently reviewing medical device regulation in Australia to strengthen the regulatory framework for dental laboratory products. In particular, ADIA pointed out that there is a need for an obligatory statement of manufacture to be provided to patients and retained by dentists.

ADIA’s recommendations arise from the increasing prevalence of dental laboratory products sourced from overseas and the inability to readily identify the source of the products, the association stated.

While the regulatory standards for design, performance and manufacture of these devices are appropriate and do not require revision, ADIA believes that there is a need to consider revision of regulations governing the information provided to patients. It has thus called for a new regulation that will require companies that offer custom-made medical devices to provide a statement of manufacture in the future.
“We have seen a clear shift in the burden of tooth decay from children to adults. The current perception that low levels of decay in childhood will continue throughout life seems incorrect,” said lead author Prof. Wagner Marcenes from the Queen Mary University in London. “It is alarming to see prevention and treatment of tooth decay has been neglected at this level because if left untreated it can cause severe pain, mouth infection and it can negatively impact children’s growth.”

Marcenes explained that the study underscores the vital need to develop effective oral health promotion strategies.

“The fact that a preventable oral disease like tooth decay is the most prevalent of all diseases and injuries examined in our report is quite disturbing and should serve as a wake-up call to policymakers to increase their focus on the importance of dental health,” he continued. “Extending oral health promotion activities to the work environment is necessary to maintain good oral health to reduce the major biological, social and financial burden on individuals and healthcare systems.”

Tooth decay is the fourth most expensive chronic disease to treat, and if left untreated, can lead to poor productivity at work and absenteeism in adults and poor school attendance and performance in children, studies have shown.

Prof. Wagner Marcenes

The Minamata Convention on Mercury was signed in October 2013. At a regional conference held last year, it recognised that the sound management of waste and chemicals is crucial for the protection of human health and the environment. However, there are limitations of adequate institutional and border controls for managing mercury and other hazardous wastes, as well as a significant lack of data regarding levels of mercury, particularly in Pacific fish, Malielegaoi said.

The Minamata Convention on Mercury was signed in October 2013. In adopting the treaty, governments agreed on the development and implementation of national strategies to reduce or eliminate the production and industrial use of the harmful substance. The treaty has implications for the dental industry, among others, as dental amalgam contains about 50 per cent mercury. It is considered a significant source of mercury released into the environment.

Since the signing of the treaty, workshops have been organised in different parts of the world in support of the ratification and early implementation of the Minamata Convention on Mercury. According to the United Nations Environment Programme, the aim of workshops is to improve understanding of the convention, as well as familiarise parties with the process of signing, ratification and implementation.

Informing participants about available sources of support and creating opportunities for exchange and action in the subregions are also part of the process.

### Oceania to implement the Minamata Convention

APIA, Samoa: The first subregional meeting on the Minamata Convention on Mercury in the Oceania region was held in Samoa’s capital, Apia, from 19 to 21 January. The workshop aimed to support Pacific islands in the early ratification of the convention and implementation of measures to protect human health and the environment from the adverse effects of mercury.

The meeting was attended by representatives of the Cook Islands, Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Over the course of three days, participants were introduced to the various articles of the convention and learned about the actions countries are required to take in implementing it at a national level. Samoa’s Prime Minister Tuilaepa Sailele Malielegaoi called upon United Nations Environment Programme, the Secretariat of the Pacific Regional Environment Programme and other UN agencies to assist Pacific island countries in this effort.

Malielegaoi’s country was among the 87 countries that first signed the treaty in October 2013. At a regional conference held last year, it recognised that the sound management of waste and chemicals is crucial for the protection of human health and the environment. However, there are limitations of adequate institutional and border controls for managing mercury and other hazardous wastes, as well as a significant lack of data regarding levels of mercury, particularly in Pacific fish, Malielegaoi said.

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