Society’s poorest have eight fewer teeth

Daniel Zimmermann
DTI

NEWCASTLE, UK: The poorest people in society have eight fewer teeth than the richest, one of the largest studies of its type ever undertaken has found. The research, a collaboration between Newcastle University, the Newcastle upon Tyne Hospitals NHS Foundation Trust, University College London (UCL) and the UK National Centre for Social Research, showed that oral health is substantially worse among the poorest 20 per cent of society compared with the most wealthy.

For those over 65 years old, the least well off averaged eight fewer teeth than the richest— a quarter of a full set of teeth.

More than 8,000 people aged 21 and over from all income groups and regions of the UK, excluding Scotland, were involved in the study, which was funded by the Economic and Social Research Council and used data from the recent UK Adult Dental Health Survey. Those with lower income, higher deprivation and lower educational attainment, and in a lower occupational class generally had the worst clinical outcomes, including increased tooth decay, periodontal disease, and diastemata, as well as fewer teeth overall.

Despite these social differences, oral health is improving and the oral health of young British adults overall is much better than it used to be. However, previously published research by the same team showed that, while the youth had much healthier mouths than did their predecessors, when asked how good or bad their own oral health was and how it affected them, the social divisions between rich and poor were evident, and even more pronounced than in older people. The poorest young people were very aware of their poor health and much more likely than the wealthiest to rate their oral health as poor or say that it affected their day-to-day life.

Mix of reasons for poor oral health
Prof. Jimmy Steele, CBE, Head of the School of Dental Sciences

Elderly people suffering financial struggles have significantly less teeth than their affluent peers.

Saliva test for Ebola under development

In collaboration with two US scientific institutions, Ceres Nanosciences, a biotechnology company specializing in diagnostic products, is planning to develop a new method to detect the presence of the Ebola virus in saliva. Since current methods for diagnosing Ebola rely on blood samples, the four-month project aims to find a more effective and non-invasive alternative.

Ceres has developed and commercialized a novel nanoparticle technology, called Nano- Trap, which is suitable for a wide range of diagnostic applications and sample-handling needs. The technology could also be used to address the need for better testing methods for Ebola, scientists believe.

Hygiene market thrives

According to a report, rising demand for treatment and awareness about hygiene will prompt dental clinics and practices to adopt more stringent cross-contamination control procedures. This will drive growth in the dental infection control products market, which is projected to reach US$1 billion by 2020.

No trouble with tooth loss

A study from Australia has indicated that tooth loss does not necessarily interfere with a patient’s quality of life provided he or she still has a certain number and type of teeth. The findings can have important implications for public dental health system planning around the world in allocating dental prostheses.

Milk consumption traced to teeth

An international team of researchers has discovered the first evidence of milk consumption in the ancient dental calculus of humans in Europe and western Asia. The team found direct evidence of milk consumption preserved in human dental plaque from the Bronze Age to the present day.

According to the scientists from the universities in Oklahoma, USA, York, London and Copenhagen, the study will have far-reaching implications for understanding the relationship between human diet and evolution as it provides direct evidence that the milk of all three major dairy livestock—cattle, sheep and goats—has been consumed by human populations for at least 5,000 years. It also corroborates previous evidence for milk fat identification on pottery and cooking utensils in early farming communities.

The discovery of milk proteins in human dental calculus will allow scientists to unite these lines of evidence and compare the genetic traits and cultural behaviours of specific individuals who lived thousands of years ago.
Plans for multimillion-dollar dental clinic in Adelaide receive green light

DT Asia Pacific

ADELAIDE, Australia: Access to public dental care in South Australia still ranks among the lowest in the country. A new dental clinic to be established as part of the University of Adelaide’s overall reconstruction plans for the clinic building could help to improve the situation. They were recently approved by the Government of South Australia.

The University of South Australia had also submitted a proposal for the partnership, which was put out to tender by the state government in June. The University of Adelaide’s new dental clinic will have 80 dental chairs and help to deliver improved dental care services to public, a spokesperson said. She added that the reconstruction will cost the university over $58 million (US$88.1 million). The expansion fits into the government’s oral health plan to improve access to health care services in the state until 2017.

Once established, the clinic will replace all current dental care services currently offered at the school.

According to Vice-Chancellor and President Prof. Warren Bickel, the university is changing its current clinical care model to provide an enhanced year-round service with students placed in the clinic for 48 weeks a year. Moreover, two scholarships will be set up under the partnership to encourage students to take up work in rural areas. Better employment opportunities in outlying locations will also be provided.

South Australia Minister for Health Jack Snelling said that the plans will further facilitate the university’s position as a national leader in dental education and research.

“Clinic will provide state-of-the-art dental facilities where students can complete their training alongside skilled dental experts, and the public can access high-quality dental care,” he said. “The new deal also ensures we’re using public dental health care resources in the most effective way and providing a sustainable dental workforce for South Australia in the future.”

The University of Adelaide has South Australia’s only dental school. Founded in 1920, it offers a Bachelor of Dental Surgery and a Bachelor of Oral Health. Currently, 500 undergraduate students are enrolled in these programmes, according to the university.
New study finds link between tooth loss and atherosclerosis

KYOTO, Japan: Japanese researchers have investigated the association between tooth loss, as an indicator of oral disease, and arterial stiffness, as a marker of atherosclerosis, in Japanese adults. They found that a relationship indeed exists between the two diseases. However, the severity of atherosclerosis varied between male and female patients with oral conditions.

Although a number of studies have suggested that oral disease is a risk factor for cardiovascular disease, the mechanism underlying the association between the two remains controversial.

Therefore, researchers at Kyoto University collected data from 8,124 individuals aged 50-75 with a history of inflammation-induced tooth loss.

According to the World Health Organization, severe periodontal disease, which may result in tooth loss, is found in 15-20 per cent of middle-aged adults worldwide. Cardiovascular disease is the number one cause of death globally.

The organisation estimates that by 2050 more than 25 million people will die annually from cardiovascular disease.

The study, titled “Tooth loss and atherosclerosis: The Nagahama Study”, was published online in the Journal of Dental Research, published by the International Association for Dental Research, on 18 November ahead of print.