An interview with Barts and The London School of Medicine and Dentistry Professor Wagner Marcenes, London.

In a report, researchers of the Global Burden of Diseases, Injuries, and Risk Factors Study have recently shed light on the global dimensions of severe periodontitis, which now affects over 700 million people worldwide. This study is a major effort involving more than 1,000 scientists to systematically produce comparable estimates of the burden of 291 diseases and injuries and their associated 1,160 sequelae in 1990, 1995, 2005 and 2010. Dental Tribune UK had the opportunity to speak with lead author Prof. Wagner Marcenes from Barts and The London School of Medicine and Dentistry in London about the findings and why they are a cause for concern.

**Prof. Wagner Marcenes:** Having more than 700 million people suffering from severe periodontitis is really worrying. Although the proportion remained the same in 1990 and 2010, the number of people needing periodontal treatment has increased dramatically. This is because worldwide more than one in ten people suffer from severe periodontitis and the world population grew from 5.3 billion in 1990 to 6.9 billion in 2003. Moreover, severe periodontitis tends to develop during adulthood, showing a steep increase between the third and fourth decades of life. With more people living longer and retaining their teeth for life, the risk of developing severe oral health-related problems, particularly periodontitis, may at least double.

**How do the results compare to the situation prior to the surveyed period?**

We have updated the data from the first Global Burden of Disease (GBD) study and generated comparable figures in 1990 and 2010. Therefore, we were able to compare the current and the previous situation to our survey in 2010. Since the study is unique, we do not have global data before the first GBD study. However, we know that oral diseases have decreased significantly in most industrialized countries, such as the UK and the US, in the last five decades.

Severe periodontitis appears to be most prevalent in South America and east sub-Saharan Africa. What could be the reasons for that?

There is a growing number of people smoking in developing regions contrary to the trend in most developed countries. Nearly 80 per cent of the more than one billion smokers worldwide live in low- and middle-income countries. With 1,500 new smokers every minute, the risk of developing severe oral health-related problems, particularly periodontitis, which is almost double the global average, and high smoking consumption. We cannot establish a cause and effect relationship, but I believe that the high incidence of periodontitis in these areas is most likely related to the habit of smoking.

In your report, you mention how difficult it is to determine disease prevalence owing to different classification systems. Is your representation of the situation therefore a realistic one?

I am confident our report provides a realistic, comprehensive assessment of the global burden of severe periodontitis. After much consideration, we used a Community Periodontal Index of Treatment Needs score of 4, a clinical attachment loss of greater than 6 millimetres or a pocket depth of more than 5 millimetres as indicators of periodontitis. We used the measurements adopted by the World Health Organization, which are considered by most as the most reliable indicators of severe periodontitis. We endeavoured to reflect the measures adopted by the larger community of public health dentistry.

The choice of including only severe periodontitis and not less severe forms of periodontal disease, such as mild or moderate periodontitis and gingivitis, was because of their low impact in quality of life. Since periodontitis tends to progress from mild to severe if untreated, our numbers reflect only the tip of the iceberg, highlighting the seriousness of the challenge to health professionals.

Why is the situation so little addressed by the dental community?

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**Prof. Marcenes:** It is unacceptable to neglect severe oral diseases.