

Global facts

on **Tobacco or Oral Health**

WORLD HEALTH ORGANIZATION
Global Oral Health Programme



Tobacco use is a primary cause of many oral diseases and adverse oral conditions. Tobacco-induced diseases include particularly cancer of the oral cavity (mostly of the tongue, but also lips), periodontal disease, tooth loss and congenital defects (Reibel, 2003).

These oral diseases contribute significantly to the global disease burden. Oral cancer is the eleventh most common cancer worldwide (Fig. 1) and tobacco use is estimated to account for about 41% of oral/pharyngeal cancer cases in men, and 11% in women (Stewart and Kleihues, 2003). Severe periodontitis which may result in tooth loss is found in 10-15% of adult populations worldwide. Studies show that years of smoking is associated with high numbers of missing teeth (Fig. 2).

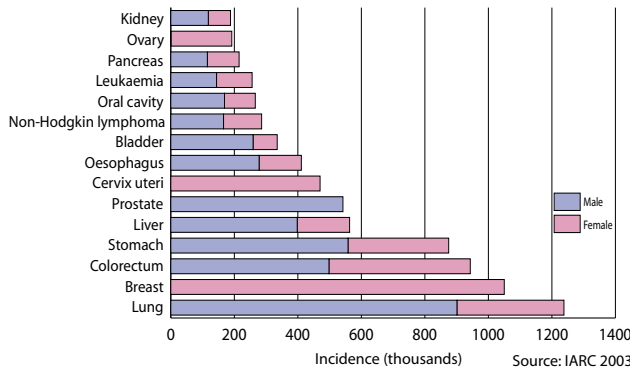


Fig. 1 Incidence of the most common cancers worldwide

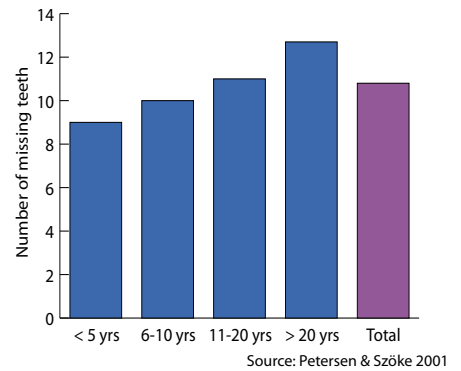


Fig. 2 Tooth loss by years of smoking among 35-44 year olds in Hungary

Smokeless Tobacco

Smokeless tobacco is an addiction for hundreds of millions of people worldwide and the use by young people is increasing in many countries. Many types of smokeless tobacco are marketed for oral or nasal use. All contain nicotine and nitrosamines. Epidemiological studies from the USA, India, Pakistan, and Sweden provide sound evidence that smokeless tobacco causes oral cancer in humans (Cogliano et al., 2004).

Global data on oral cancer

The incidence of oral cancer shows extensive variation (Fig. 3 & 4). Incidence and mortality rates are higher in men than woman. Differences across countries particularly relate to distinct risk profiles and availability and accessibility of health services.

Fig. 3 Incidence of oral cancer (Male – all ages)

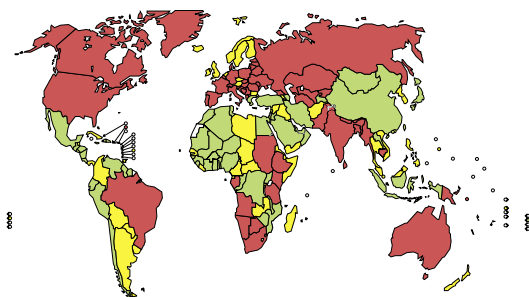
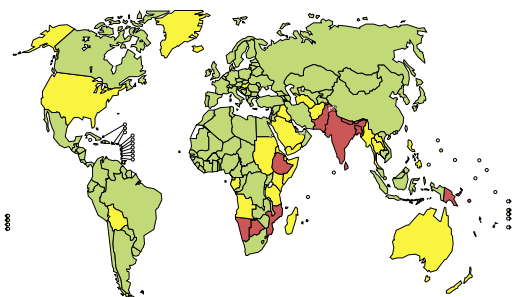


Fig. 4 Incidence of oral cancer (Female – all ages)



■ < 3.3
 ■ 3.3 – 6.8
 ■ 6.9 +

Source: IARC 2003

What can people do to prevent oral cancer and periodontitis?

1. Ask your dentist to screen for signs of oral cancer and periodontitis at least once a year.

2. Some warning signs are:

Periodontitis:

- bleeding from gums
- mobility of teeth

Oral cancer:

- any sores in the mouth or on the face, and neck that do not heal within two weeks (Fig. 5)
- swellings, lumps or bumps on the lips, gums or other areas inside the mouth
- white, red or dark patches in the mouth (oral precancer, Fig. 6)
- repeated bleeding in the mouth
- numbness, loss of feeling, or pain in any area of the mouth, face or neck

3. If oral cancer and periodontitis is detected at an early stage, the treatment is much easier and the long-term prognosis is much better.



Fig. 5 Malignant tumour (oral cancer) on tongue



Fig. 6 Leukoplakia (oral precancer) on floor of mouth and tongue

What can the oral health professional do to prevent oral cancer and periodontitis?

Oral health professionals have a special interest in tobacco control. Special advantages of involving dentists in tobacco prevention and cessation are (Petersen, 2003):

- They typically have access to children and young adults, which gives an opportunity for advice on the health effects of tobacco or prevention at an early stage.
- They often have more time with patients than many other clinicians, so they can integrate education and intervention methods into their routine.
- They often treat women of childbearing age and are able to inform about the potential harm (congenital defects such as cleft lip and palate) to children whose mothers use tobacco during pregnancy.
- They can build patient interest in tobacco cessation by showing actual tobacco effects in the mouth.

Key contacts

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Tobacco cessation and oral health professionals

- Dentists' knowledge and attitudes related to tobacco cessation are high.
- The majority of dentists feel that it is a responsibility of dentists to encourage patients to stop using tobacco.
- Dentists can play a role in early detection of cancer.
- Dentists form integral part of a national cancer prevention programme.

References

Cogliano V, Straif K, Baab R, Grosse Y, Secretan B, Ghissassi FEI. Smokeless tobacco and tobacco-related nitrosamines. *The Lancet Oncology* 2004; 5: 708.

Petersen PE. Tobacco and Oral Health – the Role of the World Health Organization. *Oral Health Prev Dent* 2003; 1: 309-315.

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Stewart BW, Kleihues P. *World Cancer Report*. Lyon: WHO International Agency for Research on Cancer 2003; 1-351.

Website: www.who.int/oral_health

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