Tobacco or oral health

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The remarkable British doctors' study showed that more than half of smokers die from their habit and half of these deaths occur in middle age (1). These figures also seem to apply to developing countries (W2), and globally nearly 5 million deaths every year can be ascribed to tobacco. The positive message from the British doctors' study is that cessation is effective. Cessation at 50 years of age halved the hazard; cessation at age 30 avoided almost all of it.

In developed countries a decrease in the proportion of smokers has been registered in recent decades, though WHO's goal for 80% of the European population to be non-smokers by 2000 was fulfilled by only one country, Sweden. In many eastern European, African and Asian countries, however, the proportion of smokers is about 50% — higher for men and lower for women — and is increasing. In addition to smoking, the use of smokeless tobacco (most types of which are highly carcinogenic to the oropharyngeal region) is widespread, in particular in many developing countries. A further problem in developing countries is the link between poverty and smoking, leading to less money for essentials, less energy to quit, and social disintegration in the families when tobacco-related illness develops (W3).

The adverse effects of tobacco on oral health are well documented (4). These include both common and rare conditions and diseases, some harmless and some life-threatening, such as staining and discolouration of teeth and dental restorations, halitosis, effect on taste and smell acuity, wound healing, periodontal disease, success of dental implants, oral mucosal disease including smoker's melanosis, smoker's palate, potentially malignant lesions and oral cancer, and, possibly, caries and candidosis. In the dissemination of these facts to other health professionals and the public it might be appropriate to focus on adverse effects that are substantially evidenced and have a significant global impact on the quality of life, in

particular oral cancer and periodontal disease.

Numerous studies have been published on the association between smoking and periodontitis. A recent review reports that the risk of destructive periodontal disease is 5-20-fold higher for a smoker compared with a neversmoker, depending on the definition of disease; there is a dose-dependent relation between periodontitis and exposure, and treatment outcome for smokers is inferior to that of non-smokers (5). "Tobacco smoking is the main risk factor associated with chronic destructive periodontal disease", concludes the review. The vast majority of studies on the effect of smoking on periodontal disease have been carried out in developed countries, though a recent study suggests an association in developing countries as well (W6).

In men, oral cancer is the eighth most common cancer type globally; in certain parts of Asia it ranks among the three most common types. Numerous studies in various populations have shown that smokers have a substantially higher risk of oral cancer than non-smokers (4). There is a clear dose-response relationship and a decreasing risk after smoking cessation. A large-scale intervention study in India clearly illustrates the effect of tobacco cessation on the incidence of potentially malignant lesions (W7). Smoking and an excessive alcohol intake synergistically increase the risk of developing oral cancer. The use of smokeless tobacco in most of its forms (mainly chewing tobacco, typically mixed with other chewing substances such as areca nut, and snuff) possesses a substantial cancer risk (W8), and special efforts are needed for intervention and management of these habits, especially in developing countries where they are closely linked to sociocultural conditions.

Dentists play a pivotal role in preventing harmful effects of tobacco, as part of evidence-based intervention systems (*W9*). In developed countries dentists have frequent contacts with a large proportion of the population, so

adverse oral effects are readily detected and even the harmless ones can be used as motivation. Given the evidence, tobacco cessation activities should be as natural as oral hygiene measures in dental offices. In the developing parts of the world in particular, where dentists are much fewer, an additional strong international and national political commitment is necessary to achieve substantial gains. In this respect the WHO Global Oral Health Programme (10) and the WHO Framework Convention on Tobacco Control (11) are significant advances in obtaining global control of tobacco use. The WHO programme contains several activities for controlling tobacco-related diseases; importantly, emphasis is given to tobacco prevention activities in schools and development of national and community-based tobacco programmes in low- and middle-income countries. Furthermore, the tobacco control advocacy guide written jointly by WHO and the FDI World Dental Federation (12) provides a constructive platform for the participation of oral health professionals in future tobacco control programmes.

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(References prefixed "W" appear in the web version only, available from www.who. int/bulletin)

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