

# Consensus Report: 2<sup>nd</sup> European Workshop on Tobacco Use Prevention and Cessation for Oral Health Professionals

Christoph A. Ramseier<sup>1</sup>, Saman Warnakulasuriya<sup>2</sup>, Ian G. Needleman<sup>3</sup>, Jennifer E Gallagher<sup>4</sup>, Aira Lahtinen<sup>5</sup> and co-authors of the 2<sup>nd</sup> European workshop's position papers†

<sup>1</sup>Department of Periodontology, School of Dental Medicine, University of Berne, Berne, Switzerland; <sup>2</sup>King's College London and WHO Collaborating Centre for Oral Cancer and Precancer, UK; <sup>3</sup>Unit of Periodontology, UCL Eastman Dental Institute, London, UK; <sup>4</sup>King's College London Dental Institute, London, UK; <sup>5</sup>Isoistenkuja 8 I, Espoo, 02200, Finland.

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Tobacco use has been identified as a major risk factor for oral disorders such as cancer and periodontal disease. Tobacco use cessation (TUC) is associated with the potential for reversal of precancer, enhanced outcomes following periodontal treatment, and better periodontal status compared to patients who continue to smoke. Consequently, helping tobacco users to quit has become a part of both the responsibility of oral health professionals and the general practice of dentistry. TUC should consist of behavioural support, and if accompanied by pharmacotherapy, is more likely to be successful. It is widely accepted that appropriate compensation of TUC counselling would give oral health professionals greater incentives to provide these measures. Therefore, TUC-related compensation should be made accessible to all dental professionals and be in appropriate relation to other therapeutic interventions. International and national associations for oral health professionals are urged to act as advocates to promote population, community and individual initiatives in support of tobacco use prevention and cessation (TUPAC) counselling, including integration in undergraduate and graduate dental curricula. In order to facilitate the adoption of TUPAC strategies by oral health professionals, we propose a level of care model which includes 1) basic care: brief interventions for all patients in the dental practice to identify tobacco users, assess readiness to quit, and request permission to re-address at a subsequent visit, 2) intermediate care: interventions consisting of (brief) motivational interviewing sessions to build on readiness to quit, enlist resources to support change, and to include cessation medications, and 3) advanced care: intensive interventions to develop a detailed quit plan including the use of suitable pharmacotherapy. To ensure that the delivery of effective TUC becomes part of standard care, continuing education courses and updates should be implemented and offered to all oral health professionals on a regular basis.

*Key words:* Tobacco use cessation, oral health care

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## Oral health risks of tobacco use and effects of cessation

Tobacco use is a major risk factor for cancer of the oral cavity, periodontal disease and tooth loss. Based on 12 studies that have estimated oral cancer risk in smokers compared with non tobacco users, the pooled risk estimate is 3.43 times higher in smokers. The differential risk between non-smokers and heavy smokers reflects a steady progression of risk with increasing amount smoked (dose response), and therefore, clearly indicates tobacco as a major risk factor for oral cancer. A review of recently published studies on the effects of smoking and periodontal disease confirms earlier evidence and expands the understanding that smoking exerts a detrimental effect on periodontal health. It is apparent that almost all cross-sectional or case-control studies and over 90% of the cohort studies show significantly impaired periodontal health in smokers when compared to non-smokers. The relative risk varies from 1.4 to 5.0 in the different studies, the median being 2.0. There is robust evidence for an association between cigarette smoking and the prevalence of tooth loss while the rates of tooth loss among current smokers are about two to three times higher than among never smokers.

Furthermore, there is sufficient evidence of the carcinogenicity of smokeless tobacco. Smokeless tobacco causes cancers of the oral cavity and potentially malignant disorders (precancers) arise at the site where smokeless tobacco is regularly placed. Smoking cessation, on the other hand, is associated with the potential for reversal of precancer, enhanced outcomes following periodontal treatment, and better periodontal status compared to patients who continue to smoke. The risk for oral cancer and periodontal disease progression of former smokers approximates that of never smokers after some 10 years of quitting smoking.

## Public health aspects of tobacco control revisited

The tobacco epidemic presents a global public health challenge. Thus initiatives which address the wider determinants of health and behaviour change are required to address this issue at population and community levels. An increasing body of evidence suggests that strong health-related policy together with multiple tobacco control initiatives can help to reduce the prevalence of tobacco use.

Public health policy measures such as comprehensive bans on the advertising of all tobacco products, bans on smoking in public places, or price increases through taxation complement the clinical applications of tobacco use prevention and cessation (TUPAC) by oral health professionals. We recommend that professional leaders and associations act as advocates for promoting TUPAC through public policy. It is generally acknowledged that every member of the dental team plays a role as a pub-

lic health advocate in promoting health and preventing disease. Therefore, helping tobacco users to quit is a part of both the responsibility of oral health professionals and the general practice of dentistry.

The dental setting is favourable to the support of other social, cultural and health oriented factors that promote TUPAC. However, current evidence suggests that the engagement of oral health professionals in addressing the tobacco epidemic remains a challenge. Therefore, a paradigm shift may be needed to train and recruit oral health professionals to TUPAC for the support of public health policy measures in dentistry.

## Improving the effectiveness of tobacco use cessation in the dental setting

Available evidence for tobacco use cessation (TUC) within the dental setting reveals that oral health professionals who provide cessation counselling to tobacco-using patients can improve their odds of quitting. Next to behavioural support, pharmacotherapy options, such as nicotine replacements, bupropion and varenicline, demonstrate good outcomes. We recommend that all oral health professionals should regularly ask their patients about tobacco use, inform users of its harmful effects and assess their readiness to quit as an effective brief intervention.

Since tobacco dependence resembles a chronic disorder, its treatment ought to be viewed as a series of repeated cessation interventions, including assistance in quitting, maintenance of abstinence, and management of relapse. Therefore, successful quitting should not be viewed as the only important outcome. Other meaningful outcomes of TUC interventions include the frequency of attempts to quit, reduction of smoking and changes in patient attitudes. For those users not ready to quit, oral health professionals may re-assess readiness at subsequent visits.

There is evidence for the efficacy of both providing TUC counselling in the dental setting and referring to a TUC specialist service. If referral is used, we recommend closer integration of specialist services to support oral health professionals and their patients who want to quit. In addition, close collaboration may allow the oral health professionals to support and augment TUC counselling throughout the process of quitting via valuable follow-up information exchange.

## Content and methods of education

Dental and dental hygiene education have made great advances towards the incorporation of tobacco education into their curriculum in recent years. Unfortunately, however, research has consistently reported schools providing a limited knowledge-based curriculum that rarely incorporates the more effective, behaviourally-based components which could lead to predictable,

long-term change. Thus, the current training of oral healthcare students, at least in part, is reflected in the limited tobacco interventions provided by practicing dental professionals.

In order to prepare the next generation of oral healthcare providers, a paradigm shift is proposed so that TUPAC may be incorporated into existing curricula. Schools should carefully design their curricula to achieve the level of TUPAC competency that they deem appropriate for their graduates. The curricula designs should consider the:

- Importance of establishing rapport through good communication skills
- Core knowledge level needed for TUPAC
- Appropriate instructional and assessment strategies
- Importance of continuing professional education for the enhancement of TUPAC.

Given that TUPAC in the dental treatment setting occurs in brief interventions over repeated visits, dental educators and practitioners should consider adopting a level of care model. Because of its adaptation to the dental setting, this model could facilitate implementation of TUPAC by graduating oral health professionals.

**Basic care:** brief interventions of a few minutes in order to identify tobacco users, assess readiness to quit, request permission to re-address tobacco use at a subsequent visit, and if preferred, refer for further TUPAC counselling.

**Intermediate care:** interventions of 5 to 10 or more minutes consisting of (brief) motivational interviewing sessions to build on readiness to quit, enlist resources to support change, and to include cessation medications.

**Advanced care:** multiple intensive interventions of 20 or more minutes for complex care patients to develop a detailed quit plan including the use of suitable pharmacotherapy, past failure exploration, and recommendation adjustments as needed.

### Role and models for compensation

Oral health professionals would have greater incentives to provide TUC if they received appropriate compensation. However, since tobacco dependence is not widely recognised as a chronic disease but as a behavioural disorder or merely a risk factor for other diseases, compensation of TUC counselling is not available in many countries. TUC-related compensation should be accessible to all dental professionals, be in appropriate relation to other (dental) therapeutic interventions and should not be funded only from existing oral health care budgets. Furthermore, adapting to the proposed level of care model, we suggest a four-stage model for TUC compensation as follows: Stages 1 and 2 correspond to basic care, stage 3 corresponds to intermediate care and stage 4 corresponds to advanced care. Proceeding from

stage 1 to other stages may happen immediately or over the long term. We recommend that existing treatment and billing codes be modified or created anew to reflect this model.

**Stage 1, basic care:** This consists of the identification and documentation of tobacco use as a part of each patient's medical history and is included in the oral examination with no extra compensation.

**Stage 2, further basic care:** This consists of a brief intervention and provision of information about support. This stage should be coded as a short preventive intervention similar to other advice for oral care.

**Stage 3, intermediate care:** This stage should also be coded as a brief intervention consisting of the assessment of tobacco dependency, provision of behavioural support and provision of pharmacotherapy, if required.

**Stage 4, advanced care:** This stage consists of advanced interventions by oral health professionals with adequate qualification. A separate treatment code should be created for this stage.

All interventions should follow established guidelines and use the most cost-effective approaches.

### Oral Health Network of Tobacco Use Prevention and Cessation (OHNTPC)

The Oral Health Network of Tobacco Use Prevention and Cessation (OHNTPC), established with the first European Workshop in 2005, facilitates ongoing support and future collaborations among all oral health professionals. Future workshops will continue to augment the necessary network with dental clinicians, educators, and professional organisations, to provide effective strategies for TUPAC in all dental practices worldwide.

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### Participants and corresponding participants

† The 53 participants and corresponding participants of the 2nd European Workshop on Tobacco Prevention and Cessation for Oral Health Professionals are (in alphabetical order): Anja Ainamo, (Finland), Ivan Alajbeg, (Croatia), David Albert, (USA, Correspondent), Nadia Al-Hazmi, (Saudi Arabia), Magda Ecaterina Antohé, (Romania), Johann

Beck-Mannagetta, (Austria), Habib Benizian, (France, Correspond.), Jan Bergström, (Sweden), Viv Binnie, (Scotland), Michael Bornstein, (Switzerland), Silvia Büchler, (Switzerland), Alan Carr, (USA), Antonio Carrassi, (Italy), Elias Casals Peidró, (Spain), Iain Chapple, (UK, Correspond.), Sharon Compton, (Canada - English), Jon Crail, (France), Karen Crews, (USA, Correspond.), Joan Mary Davis, (USA), Thomas Dietrich, (UK), Birgitta Enmark, (Sweden), Jared Fine, (USA, Correspond.), Jennifer Gallagher, (UK), Tony Jenner, (UK), Doriana Forna, (Romania), Angela Fundak, (Australia), Monika Gyenes, (Hungary, Correspond.), Marjolijn Hovius, (Netherlands), Annelies Jacobs, (Netherlands), Taru Kinnunen, (USA), Ron Knevel, (Netherlands), Anne Koerber, (USA), Roberto Labella, (UK), Aira Lahtinen, (Finland), Martina Lulic, (Switzerland),

Nikos Mattheos, (Sweden), Andy McEwen, (UK, Correspond.), Ian Needleman, (UK), Kerstin Öhrn, (Sweden), Argy Polychronopoulou, (Greece), Philip Preshaw, (UK), Nicki Radley, (UK), Christoph Ramseier, (Switzerland), Josine Rosseel, (Netherlands), Meta Schoonheim-Klein, (Netherlands), Jean Suvan, (UK, Correspond.), Sabina Ulbricht, (Germany), Petra Verstappen, (Netherlands), Clemens Walter, (Switzerland), Saman Warnakulasuriya, (UK), Jan Wennström, (Sweden, Correspond.), Seppo Wickholm, (Sweden), Liana Zoitopoulos, (UK).

Correspondence to: Dr Christoph A. Ramseier, Department of Periodontology, School of Dental Medicine, University of Berne, Berne, Switzerland. Email: [christoph.ramseier@zmk.unibe.ch](mailto:christoph.ramseier@zmk.unibe.ch)