

Goals for oral health in Germany 2020

Sebastian Ziller

Berlin, Germany

Wolfgang Micheelis

Cologne, Germany

Dietmar Oesterreich

Stavenhagen, Germany

Elmar Reich

Biberach, Germany

Constant themes in the worldwide debate on public health policy are, on the one hand, the medical aspects, including those of social medicine, together with healthcare provision, and, on the other, considerations of health economics. Although it is essential for healthcare resources to be allocated appropriately, medical criteria should take precedence. One branch of research in the field of healthcare provision, the definition of health goals, is assuming increasing importance in this connection, in dentistry as in other spheres. In 1981, the FDI and the WHO jointly established the first 'Global Goals for Oral Health for the year 2000' and in 2004, drew up new goals for the year 2020. The FDI is thus allowing for the fact that not all recommendations are applicable equally to all countries and populations. Appropriate differentiation is important. This paper explores the transfer of the FDI goal initiative into a national context. On the basis of the FDI's 'Global Goals for Oral Health 2020', German academic dentistry and the dental profession have jointly drawn up new national 'Goals for Oral Health in Germany 2020'. Whereas the definition of goals used to be first and foremost tooth-related, it is now widened to include both disease-related aspects and the promotion of health and prophylaxis.

Key words: Global goals, oral health planning, Germany

Healthcare goals, targets and priorities are being pursued in Germany both by government, with the *Statutory Health Insurance Modernization Law* and the new *Prevention Law* now in preparation, and by academic policy advisers¹⁻⁴. The origins of the health policy instrument 'Gesundheitsziele' ('Health Goals') can be traced back at international level to the adoption by the World Health Organisation (WHO) of its first *global* strategic programme, 'Health for All by the Year 2000', at the 30th World Health Conference in 1977 and the subsequent adoption in 1980 of the 'Strategies for Health for All by the Year 2000' by the Member States of the *European* region of the WHO⁵. Finally, in 1998 the WHO adopted the 'Health 21' strategic programme for the 21st century⁶. However, the ensuing health goal programmes in several European states, while espousing similar objectives,

have proved to be very diverse both in scale and in their orientation towards measurable outcomes.

In Germany, considerable attention has been devoted to the setting of health goals on the basis of the international trend of the last decade⁷. Examples include the publication 'Dringliche Gesundheitsprobleme der Bevölkerung in der Bundesrepublik Deutschland' ['Urgent Health Problems of the Population of the Federal Republic of Germany'], issued in 1990 by the Project Group 'Priority Health Goals' with the collaboration of the Federal Ministry of Health, the medical and dental professions and the Robert Koch Institute⁸, as well as the now successfully established project *gesundheitsziele.de* of the Gesellschaft für Versicherungswissenschaft und-gestaltung (GVG)^{9,10}.

Specific background: Goals for oral health

In the dental field too, attention has been directed towards these issues. In 1981, the FDI and the WHO jointly established the first global goals for oral health for the year 2000¹¹. These original goals were reviewed in 1999 by a workshop of the FDI's 'Public Health' section. Working closely together with the WHO, the FDI and the International Association of Dental Research (IADR) as a result drew up new goals for 2020, the '*Global Goals for Oral Health 2020*'¹². Unlike their 1981 counterparts, the updated goals are not only quantitative in character but are also intended as a framework for the formulation of regional and national oral health goals (*Think globally act locally*). The FDI is thus allowing for the fact that not all recommendations are applicable equally to all countries and populations. In the industrialised nations for instance, the prevalence of caries is showing a gradual downward trend or at least a slower rate of increase, although there are still some patients with a concentration of high caries values. The corresponding tendency in the developing countries is in the opposite direction, with caries becoming more frequent, while at the same time conditions such as noma, which are insignificant in this form in the industrialised nations, also need to be combated. Appropriate differentiation is therefore important.

As long ago as in 1996, the German Dental Association (BZÄK) laid down oral health goals for Germany for the first time in a dental context¹³. These were to be achieved mainly by implementing the concept of 'lifelong prophylaxis'¹⁴. At the time, attention centred on tooth-related aspects. Preventive goals were established for 6- and 12-year-olds and for the age groups 35-44 and 65-74. The aims included reduction of caries or edentulousness. The Third Oral Health Study conducted by the Institute of German Dentists (IDZ) in 1999 yielded a result with gratifying implications for the debate on dental care provision, with an average DMFT (Decayed, Missing, Filled Teeth) value of 1.7 for 12-year-olds¹⁵. This meant that the target of less than two DMF teeth set by the FDI/WHO for this age group for Germany as a whole in 2000 had already been met.

The German Dental Association sees the current extension of the 1996 goals as presenting a worthwhile opportunity for securing acceptance of its position in the healthcare debate. Another consideration is the need for an overall framework of health policy conditions. On the basis of the FDI's '*Global Goals for Oral Health 2020*', the bodies representing academic dentistry and the dental profession have jointly drawn up new national 'Goals for Oral Health in Germany 2020' (German title '*Mundgesundheitsziele für Deutschland für das Jahr 2020*'), which were adopted in 2004. In addition to purely tooth-related factors, specific regional part-goals and care parameters are now allowed for.

Underlying the goals are the following considerations:

- Oral health goals provide a platform for the profession to play an active part not only in the improvement of dental health system but also in the political shaping of the healthcare system.
- Oral health goals define tasks for the dental profession. They provide an opportunity for evaluating both dental activity and the overall political framework of healthcare and treatment provision.
- Oral health goals are directed towards prevention.

The prevalences of oral and maxillofacial pathology, together with the level of care and need for treatment, within different age groups and social classes constitute the basis for the formulation of the current oral health goals. Whereas the definition of goals used to be first and foremost tooth-related, it is now widened to include both disease-related aspects and the promotion of health and prophylaxis: primary, secondary and tertiary prevention all form part of an integrated approach, because prevention-oriented dentistry extends far beyond the promotion of action at primary level to prevent caries or periodontitis. Oral health is inseparable from general health, and health goals are always bound up with the specifics of the healthcare system. The joint establishment of the oral health goals by academic dentistry and the dental profession has resulted in a consensus that has laid the foundations for the further improvement of oral health in Germany – subject, however, to improvement of the overall framework of conditions for a policy of prevention in the healthcare field.

Whether and how the quantitatively formulated oral health goals and part-goals can be achieved depends on the commitment of all players and institutions in the healthcare system to securing the implementation of the relevant measures and, in particular, on the dental profession's healthcare-related demands being met. An essential prerequisite for improvement of preventive outcomes is the allocation of appropriate resources in terms of funding, organisation and personnel.

Goals, objectives and targets for oral health in Germany 2020

Goals

1. Promotion of oral health and reduction of the impact of oral and maxillofacial diseases on general health and psychosocial development, especially in at-risk groups.
2. Reduction of the impact of oral and maxillofacial diseases on general health at both individual and population level by means of early detection, prevention and effective treatment of oral diseases.

Objectives

1. Reduction of mortality and morbidity due to oral and maxillofacial diseases, with consequent improvement of quality of life.
2. Promotion of necessary structures and programmes for oral health care, derived from systematic reviews of best practice (i.e. evidence-based policies).
3. Promotion of accessible and cost-effective (oral) health systems for the prevention and control of oral and maxillofacial diseases and for improving general health, account being taken of common risk factors. Development of oral health programmes to improve oral health in social and medical at-risk groups.
4. Integration of oral health promotion and care with other sectors that influence health.
5. Promotion of systems and measures for oral health evaluation (both processes and outcomes).
6. Promotion of social responsibility and ethical practices in the dental profession.

Targets

The following are to be achieved by 2020:

1. Tooth hard tissue defects
An increase in the proportion of 6-year-olds with caries-free primary dentition to not less than 80%.
Baseline: Proportion of 6-7-year-olds with naturally healthy dentition in 2000: 33.3% - 60.2%¹⁶.

Reduction of the DMF-T index in 12-year-olds to less than 1.0. Halving of the proportion of 12-year-olds with high levels of caries (1997 reference value: DMF-T index > 2).
Baseline: Average DMF-T in 12-year-olds in 2000: 1.21¹⁶. Proportion of 12-year-olds with high levels of caries (DMF-T index > 2) in 1997: 29.6%¹⁵.

Reduction of average M-T value in age group 35-44 to 3.0.
Baseline: Average M-T value in age group 35-44 in 1997: 3.9¹⁵.
2. Periodontal diseases
Reduction of the prevalence of severe periodontal diseases, allowing for the risk factors of smoking, poor oral hygiene, stress and systemic disease, to 10% in the 35-44 age group and to 20% in the 65-74 age group.
Baseline:
Severe periodontal diseases (CPI = 4) in age group 35-44 in 1997: 14.1%¹⁵.
Severe periodontal diseases (CPI = 4) in age group 65-74 in 1997: 24.4%¹⁵.
3. Tooth loss and edentulousness
Reduction of the prevalence of total edentulousness

in age group 65-74 to less than 15%.

Baseline: Prevalence of total edentulousness in age group 65-74 in 1997: 24.8%¹⁵.

4. Oral mucosal diseases
Improvement of the detection and targeted early diagnosis of oral mucosal diseases – especially pre-cancerous and prosthetic stomatitis.
Baseline: Prevalence of oral mucosal diseases (pre-cancerous and prosthetic stomatitis) in age group 65-74 in 1997: 1.8% precancerous and 18.3% prosthetic stomatitis¹⁵.

Measures to reduce tobacco consumption and chronic alcohol abuse in the population, with a view to the avoidance of oral and systemic diseases by a cause-based approach, should be promoted by dentists. The provision of information on the oral-health consequences of tobacco consumption (in combination also with chronic alcohol abuse), as well as anti-smoking counselling, should be made a routine element of the dentist's day-to-day activity.

5. Craniomandibular dysfunction (CMD)
Faster and better early detection, as well as prompt and appropriate counselling and therapy for CMD patients in the 35-44 age group having pain as their principal sign.
Baseline: Proportion of CMD sufferers in age group 35-44 exhibiting the symptom of pain in 1997: 4.6%¹⁵.
6. Diet
Increased provision of dietary advice by dentists with a view to significant reduction of (concealed) sugar consumption by babies and children and hence also of the prevalence of early-onset caries and subsequent tooth hard tissue erosion, involving increased interdisciplinary collaboration with paediatricians, gynaecologists and midwives (pregnancy counselling).
Baseline: Prevalence of nursing bottle syndrome in age group 1-6 in 2001: 5% - 10%¹⁷.
7. Measures in the field of collective prophylaxis
Increasing usage of fluoridated table salt to 70% as a semi-collective measure to combat caries, targeted at a wide range of social and medical at-risk groups. There should always be no more than one form of systemic fluoride supplementation (a fluoride anamnesis should be taken).
Baseline: Market share of fluoridated table salt sold as iodized salt with fluoride as a proportion of total table salt sales in 2003: 60%¹⁸.

Increasing the percentage of children and adolescents between age 3 and age 16 targeted by group

prophylactic measures to 80%.

Baseline: Percentage of group prophylactic measures in nursery schools in reference year 2002/2003: 68.0%¹⁹.

Percentage of group prophylactic measures in primary schools in reference year 2002/2003: 67.1%¹⁹.

Percentage of group prophylactic measures in school classes 5 and 6 (ages 10-11 and 11-12) in reference year 2002/2003: 33.3%¹⁹.

Percentage of group prophylactic measures in special schools in reference year 2002/2003: 41.9%¹⁹.

8. Health education and information

Working together with the relevant academic bodies, the German dental profession favours the provision of ongoing oral health information to the population with a view to achieving an all-round improvement in oral health.

References

1. Bundesministerium für Gesundheit und Soziale Sicherung (Federal Ministry of Health and Social Security). *Entwurf eines Gesetzes zur Stärkung der gesundheitlichen Prävention*. Dezember 2004
2. *Gesetz zur Modernisierung der Gesetzlichen Krankenversicherung* (Statutory Health Insurance Modernization Law). *BGBI. I* 2003 **55**: 2190, § 142 Absatz 2.
3. *Bedarfsgerechtigkeit und Wirtschaftlichkeit, Band I: Zielbildung, Prävention, Nutzerorientierung und Partizipation, Gutachten 2000/2001 (Kurzfassung)*. Bonn: Sachverständigenrat für die Konzertierte Aktion im Gesundheitswesen (ed), 2001.
4. Wismar M, Busse R. Targets for health in Germany. *Eur J Public Health* 2000 **10**: 38-42.
5. WHO. *Formulating Strategies for health for all by the year 2000*. Geneva: World Health Organisation, 1979.
6. WHO. *Health for All: Origins and Mandate*. Geneva: World Health Organisation, 1998.
7. Schwartz FW, Kickbusch I, Wismar M. Ziele und Strategien der Gesundheitspolitik. In Schwartz FW, Badura B, Leidl R, Raspe H, Siegrist J (eds) *Das Public Health Buch*. 1st ed. pp 172-188. Munich-Vienna-Baltimore: Urban & Schwarzenberg, 1997.
8. Weber I, Abel M, Altenhofen L, Bächer K, Bergmann KE, Flatten G, Klein D, Micheelis W. *Dringliche Gesundheitsprobleme der Bevölkerung in der Bundesrepublik Deutschland: Zahlen-Fakten-Perspektiven*. 1st ed. pp 25-31. Baden-Baden: Nomos, 1990.
9. Angele S, Philippi. Die Entwicklung von Gesundheitszielen auf nationaler Ebene in Deutschland – Forum gesundheitsziele.de. *Z ärztl Fortbild Qualifich* 2003 **97**: 59-65.
10. *gesundheitsziele.de Forum zur Entwicklung und Umsetzung von Gesundheitszielen in Deutschland – Report*. Bonn-Berlin: Bundesministerium für Gesundheit und Soziale Sicherung (ed), 2003.
11. WHO, FDI. Global Goals for Oral Health 2000. *Int Dent J* 1982 **32**: 74-77.
12. Hobdell M, Petersen PE, Clarkson J *et al*. Global Goals for Oral Health 2020. *Int Dent J* 2003 **53**: 285-288.
13. BZÄK (German Dental Association). Mundgesundheitsziele der deutschen Zahnärzteschaft. *Zahnärztl Mitt* 1996 **19**: 2188.
14. IDZ (Institute of German Dentists, ed). *Prophylaxe ein Leben lang*. 2nd ed, pp 7-8. Köln: Deutscher Ärzte-Verlag, 1998.
15. IDZ (Institute of German Dentists, ed). *Dritte Deutsche Mundgesundheitsstudie (DMS III): Ergebnisse, Trends und Problemanalysen auf der Grundlage bevölkerungsrepräsentativer Stichproben in Deutschland 1997*. 1st ed, pp 206-428. Köln: Deutscher Ärzte-Verlag, 1999.
16. *Epidemiologische Begleituntersuchungen zur Gruppenprophylaxe 2000 - Gutachten*. Bonn: DAJ (German Working Group of Youth Dental Care, ed), 2001.
17. Wetzel WE. Zuckerteekaries bei Kleinkindern. *Rhein Zahnärztebl* 2002 **7-8**: 399-400.
18. Informationsstelle für Kariesprophylaxe (Caries Prevention Information Centre ed): Kariesvorbeugung mit fluoridiertem Speisesalz: Verbraucher honorieren Doppelnutzen von Jodsalz mit Fluorid. *Presseinformation*, Groß-Gerau: August 2004.
19. DAJ (German Working Group of Youth Dental Care, ed). Dokumentation der Maßnahmen der Gruppenprophylaxe Jahresauswertung Schuljahr 2002/2003. *DAJ Aktuell Spezial* 2004, **2**: 6-10.

Correspondence to: Dr. Sebastian Ziller MPH, Head of Dept. of Prevention and Health Promotion, German Dental Association (Bundeszahnärztekammer), Chausseestraße 13, 10115 Berlin, Germany. Email: s.ziller@bzaek.de