The World Health Organization's Oral Health Programme in Europe

Ingolf J. Møller, Kirsten Stæhr Johansen and Poul Erik Petersen

On 7 April, 1998, the World Health Organization (WHO) celebrated its 50-year anniversary. In 1957 the WHO Regional Office for Europe (EURO) was moved to its present permanent quarters at Scherfigsvej in Copenhagen. During the period 1948-1968 no coherent oral health programme existed in EURO. In the following years the oral health programme became more structured with emphasis on: 1) implementation of oral disease preventive programmes, 2) assistance in introducing appropriate technology and design of relevant infrastructures for dental care delivery systems, 3) improvement of oral health manpower development, 4) establishment of an oral health information service system, and 5) encouraging coordinated research aiming at improving the oral health status of the European population.

The present paper gives for the first time a comprehensive account of the oral health activities in WHO's European Region as well as a complete list of references of all the reports, documents and publications issued by WHO's Regional Office for Europe in the field of oral health.

The World Health Organization (WHO) was officially inaugurated on 7 April, 1948, (World Health Day). The headquarter's office (WHO, HQ) is situated in Geneva, and the six regional offices in Brazzaville (African Region, AFRO), Washington D.C. (American Region, AMRO), Alexandria (Eastern Mediterranean Region, EMRO), Copenhagen (European Region, EURO), New Delhi (Southeast Asian Region, SEARO) and Manila (Western Pacific Region, WPRO).

The World Health Organization's Regional Office for Europe (EURO) was established in 1949 with its office located in Geneva. In 1957 the office was moved to its present permanent quarters at Scherfigsvej in Copenhagen (Fig. 1). The first Regional Director was Dr. *N.D. Begg* from 1952 to 1956, followed by Dr. *P. van de Calseyde* from 1957 to 1967, Dr. *L. Kaprio* from 1967 to 1985, and the present Regional Director, Dr. *J. Asvall* from 1985.

The Early Days (1949-1977)

During the period 1949-1968 no coherent oral health programme existed in EURO. The first oral health activity took place in February, 1958, when a group convened by EURO in Brussels, Belgium (1), discussed the scope of dental health services for children, covering subjects of organization, administration, agegroup priorities, preventive measures, curative services and dental health education.

A Seminar on Dental Health Services for Children was held in 1960 by the European Regional Office in Gothenburg, Sweden (2). This seminar provided an excellent opportunity

Fig. 1. The World Health Organization Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen Ø.

Fig. 1. Verdenssundhedsorganisationens Regionalkontor for Europa, Scherfigsvej 8, 2100 København Ø.

for representatives of nearly all countries of Europe to exchange information and to discuss problems of common interest. It was practically the first occasion that dental professionals from countries with such different systems of health services had come together.

In 1968 it was decided to establish a post as dental officer in EURO. Dr. *J. Kostlan*, former chief of the Stomatological Research Institute in Prague, was appointed to this post from 1968 to 1973, and as a consultant from 1974 to 1977. During this period, four surveys (3-6) and three meetings took place, namely one on »Undergraduate Dental Education in Europe« (Copenhagen 1968) (7), one on »Postgraduate Dental Education« (London 1970) (8), and one on »Planning and Evaluating Dental Health Services« (Oslo 1971) (9). Following these events Dr. *Kostlan* made three studies in 1974, namely »Evaluation of Dental Health Services«, »Survey on Child Dental Health in Europe«, and »Child Dental Health Services in Europe«. These activities eventually led to the publication »Oral Health Services in Europe« (10). In the meantime, another publication on the »Training and Use of Dental Auxilliary Personnel« had been published in 1977 (11).

A New Era (1978-1991)

In 1978 the Oral Health Programme in EURO was re-established as a separate unit with Dr. *I.J. Møller* as the first Regional Officer for Oral Health (Fig. 2). At that time the oral health status in Europe was as follows:

There were great variations in the prevalence of dental caries within the European Region, being at the high to very high level in Northern Europe, moderate to high level in Central Europe and low to moderate level in Southern Europe. While there in certain countries in Northern Europe were indications of a decrease in dental caries amongst those countries which had introduced comprehensive oral disease preventive programmes, there were clear signs of an alarming increase in dental caries in those countries in the European Region which hitherto had had a low to moderate level of severity of dental caries.

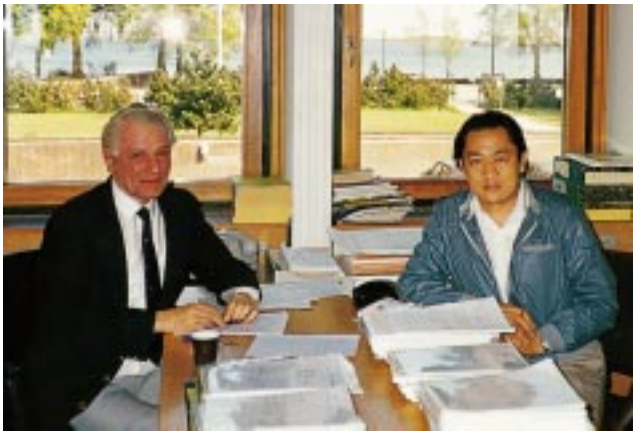

Fig. 2. From the WHO Regional Office for Europe in Copenhagen. Former Regional Officer for Oral Health Dr. Ingolf Møller (left) discussing future collaboration with a representative from the WHO Western Pacific Region.

Fig. 2. Fra Verdenssundhedsorganisationens Regionalkontor for Europa i København. Tidligere Regional Officer for Oral Health Ingolf Møller (tv.) drøfter fremtidigt samarbejde med en repræsentant for WHO's Region for Fjernøsten.

In certain parts of Europe the average number of decayed, missing and filled permanent teeth (DMFT) was in the order of eight to twelve at twelve years of age. This meant that already at this age 25-40% of the teeth which were to be kept for the rest of the life were diseased. Since dental caries is an irreversible condition, the signs of the disease will accumulate by age. At the age of 35-44 years the DMFT index in many highly developed countries was in the order of 15 to 25, with 5-35% of the population being completely edentulous.

Periodontal diseases affect virtually 100 percent of every population, commencing in mild to moderate forms even in schoolchildren and will untreated cause premature loss of otherwise sound teeth in the 35-44-year age groups. In the European Region there were great differences in the severity of periodontal diseases between different parts of the Region.

While many countries have shown great interest in making efforts to prevent and control the oral disease problem, only a few instances had shown any evidence of an actual reduction in the prevalence of oral diseases. It was probably true of many health sectors that priority for the preventive approach was difficult to implement in full measure at the delivery level, and dentistry was no exception.

While Europe as a whole had the largest number of qualified oral health staff and researchers in the world, the situation was far from satisfactory. There were clear indications of a future overproduction of dentists in some countries of the European Region, in contrast to a dramatic shortage of dentists in that part of Europe where oral diseases (particularly dental caries) were on the increase. Only a few countries had been able to delegate relevant responsibilities to dental auxiliary staff. A revision of the delivery of oral health care and training of oral health manpower was urgently required in most countries. In short, the oral health problem areas in Europe were:

1) insufficient emphasis on comprehensive programmes for the prevention of oral diseases,
2) lack of appropriate technology and infrastructure of dental care delivery systems to cope with the problems in an effective and economical way,

3) general lack of appropriate manpower to deal with the problems specific to country needs,
4) insufficient reference material and information service for administrators, and
5) lack of comprehensive and coordinated research designed to decrease the prevalence of oral diseases and to determine the most appropriate approach to provide oral health care.

During the period 1978-1988, the Oral Health Programme in EURO took a more systematic and action-oriented approach and strategy. In addition, the repercussion of the Alma-Ata Conference on Primary Health Care in 1978 (12) radically changed the World Health Organization's approach from being disease-oriented to becoming health-oriented. The outcome of the conference clearly showed that in order to obtain the highest possible level of health within existing and projected resources, it would be necessary to make priorities and to formulate targets and goals to be achieved within a given time frame (13). In the field of oral health it meant a reorientation of services from *oral disease and its treatment* to *oral health and disease prevention.*

The WHO Oral Health Programme (HQ and EURO) in collaboration with the International Dental Federation (FDI) were the first to formulate such goals under the »Health for All by the Year 2000 (HFA) Programme« (14). The goals for oral health were formulated as follows:

Goal 1: 50 percent of 5-6-year-olds will be caries free.
Goal 2: The global average will be no more than three DMF teeth at twelve years of age. In 1991 this goal was set at two DMFT for the European Region.
Goal 3: 85 percent of the population should retain all their teeth at the age of 18 years.
Goal 4: A 50 percent reduction in the 1982 levels of edentulousness at the age of 35-44 years will be achieved.
Goal 5: A 25 percent reduction in the 1982 levels of edentulousness at the age of 65 years and over will be achieved.
Goal 6: A data-based system for monitoring changes in oral health should be established.

With these global indicators as a guide, each country was expected to formulate its national goals according to their own situations and resources. However, the lack of reliable baseline data for several oral conditions would make it difficult to set measurable and attainable goals. Goal 6, therefore, was seen not only as a goal for the year 2000, but rather as an intermediary target which would have to be achieved as soon as possible.

From the very start of the re-established WHO Oral Health Programme in Europe in 1978, the activities focused on the following basic components:

1) Situation analyses and country health programmes,
2) oral disease prevention,
3) oral health manpower development,
4) oral health care services, and
5) oral health information systems.

Situation Analyses and Country Health programmes

The planning of oral health care services and projection of oral health manpower needs must be based on reliable epidemiological data which can identify and illustrate the magnitude of the oral health problem in the country or area in question. Without the establishment of such an oral health epidemiological database (WHO/European Oral health Epidemiological Data Bank), it is impossible to formulate realistic national goals for oral health or to select appropriate strategies for attaining the goals. Which strategy to select will depend upon expected disease trends, projection of oral health manpower in terms of numbers, type and distribution, and projection of expected budgetary resources. Additional information needed for the appropriate planning of oral health care services would include a surveillance of socio-demographic pattern, consumer attitudes and behaviour, demand for services (type, extent), an assessment of the effectiveness, efficiency, appropriateness and adequacy of the programme, as well as an account of the availability, accessibility and acceptability of the services. The collection and analyses of these data is what is understood by a *Situation Analysis.*

As a specific case, and in recognition of the fact that time and personnel for comprehensive oral health surveys are very limited, the concept of a »pathfinder« survey was introduced. This type of survey is intended as an economical and practical way of obtaining data for health service planning by limiting the number of age and other groups as far as possible.

The results of such a »National Oral Health Pathfinder Survey« will normally provide information and data for the following purposes:

1) estimating the prevalence and incidence of specific oral diseases and conditions, and identifying variations in local, regional or national groups,
2) supplying baseline data for subsequent evaluation of oral health care programmes,
3) supplying data to assist health administrators in determining priorities with respect to:
   - health education and preventive and treatment services,
   - the groups most in need of oral health care,
4) identifying the extent to which existing oral health services are coping with the current demand for treatment seen in relation to the actual need for service,
5) estimating the nature and extent of required preventive, curative, and restorative services,

6) estimating the costs of establishing, maintaining and expanding an oral health care programme, including an estimate of manpower requirements in terms of number, type and distribution.

The methodology just described was employed in the »Country Health Programme«, the purpose of which was to assist member states in an attempt to improve the oral health care services to the population based upon the primary health care principles, and with strong emphasis on the implementation of oral disease preventive measures.

Under the then existing »Country Medium Term Programmes« such country programmes would include:

1) situation analysis (including pathfinder survey),
2) problem identification,
3) formulation of goals,
4) selection of strategy,
5) programme formulation, and
6) evaluation (and reformulation of strategy if necessary).

During the period in question the following countries took part in this programme: Albania (15), Greece (16-18), Hungary (19-24), Iceland (25), Italy (26), Lithuania (27), Malta (28-30), Morocco (31, 32), Poland (33-36), Portugal (37-42), Romania (44), San Marino (45, 46), Spain (47-49), Turkey (50-52), USSR (53, 54), and Yugoslavia (55-58) (Fig. 3).

Under this programme several publications were produced in support of the principles described above (59-67).

Oral Disease Prevention

The traditional way of handling oral diseases is by curative, restorative and rehabilitative dentistry. In the technologically advanced part of the world, these efforts have unquestionably resulted in the control of much suffering. This approach has also led to the preservation of more dentitions in a functional state for a longer time than would otherwise be the case. There are, however, serious shortcomings to this approach. Even in situations of favourable dentist-population ratio, where well-trained dentists are providing restorative dental care with little or no financial barriers, the tooth loss figures were alarmingly high.

Fig. 3. Oral epidemiological field survey in Northern Portugal, 1987.

Fig. 3. Odontologisk feltundersøgelse i den nordlige del af Portugal, 1987.

It appears that the increasing allocation of budget, from public and private sources and spent on traditional dental care, has only a marginal effect on the population's oral health status. Disease control by repairing the damage caused by the disease is a justified procedure as long as the causes cannot be identified or eliminated. Today, however, the aetiology of several oral diseases is reasonably well explained, and effective preventive measures are available. Therefore, new approaches in oral health care is both warranted and imperative.

The well-documented caries-reducing effect of fluorides in its various forms (drinking water fluoridation, fluoride tablets, fluoridated milk, fluoride dentifrice and topical application of fluorides) has provided the basis for WHO's official recommendation of its use from the very start of the WHO's Oral Health Programme (68-79).

Oral Health Manpower Development

The World Health Organization in Europe has two WHO Collaborating Centres for Dental Education, namely one in Moscow (established in 1976 in the Medical Stomatological Institute) and one in Dublin (established in 1984 in the Dental School at Trinity College). The first »WHO Workshop on Dental Education« in Europe was held in Dublin in connection with the inauguration of that centre. The main conclusions of the workshop were that:

1) there is an urgent need to modify existing educational programmes for oral health personnel,
2) the role and function of present and future oral health manpower must be defined, and national oral health manpower plans need to be developed; and the educational implications identified with respect to pre-professional, post-professional, continuing education and re-education,
3) educational goals for oral health personnel should be defined in relation to national oral health goals,
4) there is a need to stimulate change in educational programmes for oral health personnel and to support those institutions attempting change,
5) there is a need to stimulate research in dental education.

A second workshop was held in the centre in Moscow in June, 1988. The main purpose of that workshop was to review what progress in changing dental education had taken place since

the meeting in Dublin. Four main issues were discussed, namely:

1) strategies for educating oral health personnel to support health for all,
2) how to change curricula for such education,
3) formulating guidelines for the development of the curricula, and,
4) determining the role of the collaborating centres concerned with dental education, of other non-governmental organizations and of the network of dental schools involved in curriculum change in support of health for all.

Particular attention was given to ways of overcoming institutional barriers to curriculum change, the need to develop changes in dental education alongside those required in medical education, and the forum needed for continuous discussion of changes in the education of oral health personnel in the European Region. The existing problems were:

1) lack of policy in developing a concept for the oral health team in training and in service,
2) lack of integration of oral health services with general health services and primary health care,
3) lack of planning for the training of dental auxiliary personnel,
4) due to lack of clear definition of function for each type of oral health personnel, there is a lack of educational objective and structure of curricula,
5) curricula currently in use for training oral health personnel are often unsuited to national and local conditions, and
6) educational programmes are still mainly directed towards curative care, rather than to oral health promotion and prevention of oral diseases.

There is a need, therefore, for a change of the dental educational structure so that it will provide a dentist with the skills to serve the future needs of the community.

Oral Health Care Services

The need to change from treating the patients to maintaining health in the populations will, in most countries, require a tremendous change of the existing health care system.

The future oral health care delivery system (be it public or private) will be faced with other demands, the bulk of which on the one hand are simpler than before (oral hygiene instruction, topical fluoride application, fissure sealants, simple fillings, etc.) and on the other hand more complex (advanced oral surgery, complicated rehabilitation, gerodontology, orthodontic corrections, organization and administration of dental public health services, etc.) (80-91).

Oral Health Information System

Probably the most important responsibility of ORH/Europe is to collect and disseminate information on the status and projected trends in oral disease patterns, oral health manpower needs and service structure. Therefore, one of the first activities undertaken at the time of the re-establishment of the Oral Health Programme in EURO in 1978 was to establish the »WHO/European Oral Health Epidemiological Data Bank« for monitoring and evaluation of the above mentioned areas in oral health. An example of the type of data contained in the data bank can be seen in Table 1.

Table 1. The average number of decayed, missing and filled permanent teeth (DMFT) in 12-year-old children.

Country	First available year	Latest available year
Albania	*5.9*	*2.2*
Austria	*4.0*	*3.2*
Belarus	*. .*	*3.8*
Belgium	*3.1*	*2.7*
Bulgaria	*4.5*	*3.1*
Croatia	*. .*	*2.6*
Czech Republic	*5.0*	*3.1*
Denmark	*3.4*	*1.2*
Estonia	*. .*	*4.1*
Finland	*3.0*	*1.2*
France	*3.4*	*2.1*
Georgia	*. .*	*2.4*
Germany	*6.2*	*3.9*
Greece	*4.7*	*4.4*
Hungary	*7.0*	*4.3*
Iceland	*7.7*	*4.3*
Ireland	*2.7*	*1.6*
Israel	*5.0*	*3.0*
Italy	*4.0*	*2.1*
Latvia	*. .*	*5.7*
Lithuania	*3.6*	*3.8*
Luxembourg	*. .*	*2.3*
Malta	*2.0*	*2.0*
Moldova	*. .*	*2.3*
Netherlands	*2.4*	*0.9*
Norway	*4.4*	*2.1*
Poland	*5.1*	*5.1*
Portugal	*3.8*	*3.2*
Romania	*1.7*	*3.4*
San Marino	*. .*	*3.7*
Slovenia	*. .*	*2.6*
Spain	*4.2*	*2.3*
Sweden	*3.4*	*1.4*
Switzerland	*3.0*	*1.1*
Turkey	*. .*	*2.7*
Former USSR	*1.6*	*3.3*
Ukraine	*3.7*	*4.4*
United Kingdom	*3.0*	*1.4*

The most popular ORH/EURO publications have been the documents in the »yellow series« which include subjects on: dental education (92, 93), drinking water fluoridation (94), financing of dental care (95, 96), community health programmes (97), self-care in oral health (98), directory of dental schools (99), formulation of goals (100), and country profiles (101, 102).

The Restructuring (1991)

During the Regional Committee Meeting in 1986 it was decided to terminate the EURO/ORH Programme with effect from October, 1988 following Dr. I. J. Møller's retirement. However, with the political and economic changes that took place in Central and Eastern Europe from 1989 on, it became obvious that the WHO Regional Office for Europe could foresee a renewed and even stronger request from the Central and Eastern European countries (CEE) and the Newly Independent States (NIS), each of which had to establish an individual, separate infrastructure in their health services.

With the termination of Oral Health as a separate unit, it became clear that Dr *K. Staehr Johansen*, Chief of the Unit of Quality of Care and Appropriate Technology (QCT), was the most appropriate person to supervise the oral health problems.

Recent Years (1991-1997)

During the period from 1988 up to the present, the main emphasis of the ORH activities has focused on collaboration with countries in Central and Eastern Europe and on the further development of quality assurance in oral health care. Most of the activities during this period have been performed in collaboration with Professor *P.E. Petersen*, Director of the WHO Collaborating Centre for Community Oral Health Programmes and Research, School of Dentistry, University of Copenhagen. In addition to this WHO Collaborating Centre there are 25 other such centres in Europe assisting the WHO European Regional Office in different fields of expertise within oral health.

The concept of quality assurance in health care is as ancient as the medical profession itself. However, it is only within the last two decades that the development of standardized criteria for defining and assuring an acceptable level of quality in health care has received serious attention. The reasons for this interest in quality assurance are: (a) the need for greater cost effectiveness in public health care; (b) increased patient awareness of the various options available in the quality of treatment; and (c) health professionals' ethical concerns and their wish to ensure the quality of their overall performance.

Two types of computerized information systems are available in oral health care today: those which focus on health status and normative treatment needs, and those which focus on billing and practice management. No quality assurance tool exists for monitoring of treatment outcomes, for decision support, self-education and self-evaluation. There is a wide variability among different computerized record systems used by insurance companies, third party payment agencies and clinical practices.

The ORATEL Project

The continued concern and demand for improving the quality of care in oral health was the main reason why the WHO/Europe Unit for Quality of Care and Appropriate Technology (QCT) applied for and was granted funds for the implementation of ORATEL (AIM, A 2029 (103-105)), a three-year project (1992-1994) with the ultimate objective of improving oral health through the use of appropriate telematic information tools for quality assurance and development in oral health care, using quality indicators chosen by European consensus (106). The system comprised four elements, namely:

1) ORATEL-EPRS, an electronic patient record system,
2) ORATEL-TEACH, an interactive multimedia teachware on quality assurance in oral health care (107),
3) ORATEL-PROACT, a proactive quality assurance support tool for real-time use at the dental unit (108), and
4) ORATEL-REVAL, a harmonized set of software modules for monitoring and self-assessment by the individual oral health care provider and for telematic reporting of aggregated data for evaluation at higher levels of the health care system (109, 110).

The prime contractor of this project was the WHO Regional Office for Europe, Copenhagen, with the following as full partners: Sogess, Milan; Centre for Human Computer Studies, Uppsala; University Complutense, Madrid; University of Gothenburg, and; Quintessens, Berlin.

The main objective of the ORATEL Project has been to develop a telematic system which would facilitate daily monitoring and evaluation of a dental practice; support the transfer of knowledge and goal setting; and stimulate and orient oral health care providers towards a quality assurance approach through a proactive clinical/quality assurance reminder system and self-education (111-113). Further description of the project has appeared in other publications (114-121).

ORQUEST

As the frontiers of oral health care-related knowledge continue to expand, providers are placed under increasing pressure

to keep up to date with accepted and effective clinical practice, which provides for quality treatment and improved communication between the patients and the health care team. In addition, there is an ever increasing pressure to make health care more cost effective. The ORQUEST project* (122) adresses these problems by providing oral health care professionals with a comprehensive multimedia-based telematic system, comprising a number of advanced IT&T-tools for quality assurance and development and for increased cost-effectiveness. The ORQUEST system covers three main areas:

Chairside support to the dental team – This includes a proactive multimedia-based, interactive electronic dental patient record system, helping the dentist to avoid actions which reduce quality (e.g. diagnosis from radiographs of poor quality), assuring that all data required for evaluation are registered, and saving staff time, because the dentist can dictate input data directly to the system.

Patient information – Cost-effectiveness of oral health care delivery is highly dependent on the patients' willingness to cooperate. This requires that patients understand their oral health situation, are motivated to achieve the goals of a treatment plan, and fully participate in the maintenance of their oral health.

Retrospective evaluation of the care delivered – The ORQUEST system enables both clinical evaluation and aggregated quality assurance surveys at local, regional and national levels. Most importantly, it enables EU a wide exchange of information, especially evaluative information, on quality assurance and development in oral health care.

The World Health Organization Regional Office for Europe is not a direct partner in this project, but provides technical assistance on a so-called »third party« basis.

EURO-QUAL (Biomed 2) Project

The overall aim of EURO-QUAL is to support the orthodontic professionals in Europe to improve the quality of orthodontic care. In order to achieve this goal the objective of EURO-QUAL is to create a framework of guidelines for continuous quality improvement that has the consent of European stakeholders and can be utilized by the orthodontic professionals to develop a system of quality for orthodontic treatment (123).

A work plan has been established for a period of three years. The plan builds on:

1) the development and communication of a common philosophy and a definition of »quality in orthodontic care«, useful in a European context,
2) the establishment of a framework of guidelines that can be utilized by the European orthodontic professionals to establish a system of quality, and
3) the establishment of an environment in which the quality framework can be implemented by the individual professional.

The workplan has been followed and carried out by means of (trans)national research studies, workshops, validation studies, field trials, discussion forums and consensus meetings.

Action Programme

The objective of the Action Programme (124, 125) for improving oral health in Europe is to support member states in the process of planning, implementation and evaluation of health promotion and preventive programmes for oral health. This would encompass pilot as well as long-term intervention programmes for the population, based on application of scientifically sound principles, methods and strategies.

Each member state would be able to adapt this framework to design an action programme which meets national or local conditions and needs. In addition, such programmes would be based on national or local goals considered attainable in relation to the resources available.

The Action Programme encourages the use of health systems research methods. The longitudinal outcome may be assessed from changes in oral health status and oral health knowledge, attitudes and behaviour. From a primary health care point of view, information on self-care, as well as family and social support in oral health would be very important. Evaluation of the process related to the Action Programme is particularly interesting as to the general relevance of applied methods and strategies. Thus, information on organizational processes, analysis of barriers encountered in implementation of planned activities, and acceptability and community participation should be collected.

Oral Status Euro

In order to maintain and to further strengthen the Action Programme for improving the oral health status in Europe, a simplified tool for collection of data for evaluation and monitoring of the oral health status on a population basis was proposed (126).

The Oral Status Euro has as its objective the application of common European quality development indicators in oral health care validated and accepted throughout countries of the European region. These indicators will become the basis of regional, national and ultimately trans-national tools for telematic information systems, making it possible to monitor, compare and evaluate outcomes of oral health care at the

*Not to be confused with ORQUEST Inc., California

European level. This procedure will enable the identification of »centres of excellence« and their experience to be shared in order to improve outcomes.

Oral health surveys using the Oral Status EURO methodology have been performed in Armenia, Belarus, Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia. In addition, the staff has either organized or participated in workshops or congresses on preventive dentistry and quality of care (Warzaw 1997, Oulomuc 1997, Budapest 1997, Dubrovnik 1998, Prague 1998).

Several publications and reports related to this programme have already been published (127-133). The effect of a comprehensive systematic oral disease preventive programme was further demonstrated by a survey in which the prevalence of dental caries in the occlusal surfaces of first permanent molars between Thai and Danish children was compared (134, 135).

Health Promoting Schools Project

In the field of oral health education and promotion, a manual for schoolteachers was developed in collaboration with the Health Promoting Schools Project (136, 137). The manual has been translated into Bulgarian, Chinese, Estonian, Malagasy, Romanian, Slovakian, Spanish and Swahili. The philosophy behind this project is that primary schoolteachers can play an important role in the development of good oral health habits. Through the inclusion of oral health themes in sound education programmes, children can learn how to improve their own oral health status. The present educational material has been designed with the purpose of integrating oral health into general activities and health promotion in primary schools. Training of trainers' programmes have taken place in Bulgaria, Romania and Slovakia.

The Future (1998-)

Changes in oral health trends, ageing of populations, high technology developments, improved computer technology and demands for increase in quality of care will call for fundamental changes in the way the profession is structured. The most important messages and statements for the immediate future are related to health promotion, prevention, treatment, training, oral health care services, and information services:

Health Promotion

1. Health promotion activities should be based on community participation.
2. Health promotion activities should assist in eliminating risk factors, encouraging healthy lifestyles and improving the environment.

Prevention

1. Prevention must be pervasive and have first priority in any national oral health structure.
2. Prevention should be supplemented by promotion of self-care and community responsibility.

Treatment

1. Treatment should be complementary to prevention and be based on a non-evasiveness philosophy.
2. Treatment should be based on quality and utilization of appropriate high technology.

Training

1. Training of oral health personnel should be changed to meet the challenges of the future in terms of numbers, type and distribution.
2. Training should be integrated with all health personnel production taking advantage of computer technology.

Oral Health Care Services

1. Oral Health Care Services should be based on a multidisciplinary approach.
2. Oral Health Care Services should become more cost-effective by introducing quality development procedures.

Information Services

1. Information on oral health status situations should be readily available at all administrative levels.
2. Monitoring and evaluation of oral disease trends should be performed with reference to the formulation of a new set of Oral Health Goals for the Year 2020.

Dansk resumé

Verdenssundhedsorganisationens (WHO's) tandplejeprogram i Europa

Den 7. april 1998 kunne Verdenssundhedsorganisationen (WHO) fejre sin 50-års dag. Foruden WHO's hovedkontor i Geneve findes der seks regionalkontorer: i Brazzaville for Afrika (AFRO), i Washington for Amerika (AMRO), i Alexandria for Mellemøsten (EMRO), i New Delhi for Sydøstasien (SEARO), i Manila for Stillehavsområdet (WPRO) og et i København for Europa (EURO).

Op til 1968 fandtes der ikke noget struktureret tandplejeprogram i det europæiske regionalkontor. Med udnævnelsen af professor *J. Kostlan* fra Tjekkoslovakiet som den første *dental officer* (1968-1977) og professor *Ingolf Møller* fra Danmark som *regional officer* (1978-1988) blev et mere systematisk tandplejeprogram etableret.

I 1978 skete der en radikal ændring af WHO's strategi fra at være sygdomsorienteret til at være sundhedsorienteret. Dette skyldes især resultaterne fra den berømte Alma-Ata konference, hvor betydningen af den primære sundhedstjeneste (*primary health care*) kom i fokus med de deraf følgende formu-

leringer af mål for »Sundhed for alle ved år 2000« (HFA). WHO's tandplejeprogram i samarbejde med den Internationale Tandlægeforening (International Dental Federation, FDI) var de første til at formulere sådanne mål.

Siden 1978 har WHO's europæiske tandplejeprogram fokuseret på:

1) implementering af tandsygdomsforebyggende foranstaltninger,
2) indførelse af hensigtsmæssig teknologi og relevant infrastruktur i planlægningen af tandplejesystemer,
3) forbedring af tandplejepersonalets uddannelser,
4) oprettelse af et centralt informationssystem, og
5) forsøg på at koordinere odontologisk forskning inden for det tandsygdomsforebyggende område.

Disse initiativer blev i første række rettet mod lande i Central-, Øst- og Sydeuropa, hvor effektive og systematiske tandplejeprogrammer endnu ikke eksisterede. De fleste lande i Vest- og Nordeuropa havde ikke behov for WHO's assistance, men støttede derimod WHO's aktiviteter ved at stille eksperter og anden bistand til rådighed.

I 1988 blev WHO's europæiske tandplejeprogram nedlagt som selvstændig enhed. Imidlertid førte de politiske begivenheder i Central- og Østeuropa til at man kunne forvente at få fornyet behov for WHO's samarbejde, idet de nye uafhængige lande (NIS) skulle i gang med at etablere deres egne individuelle infrastrukturer i sundhedssektoren. Endvidere var kravet fra offentlige myndigheder, professionen og patientgrupper om forøget kvalitetssikring i sundhedssektoren blevet forstærket. Dette medførte at WHO's europæiske tandplejeprogram fortsatte som en del af WHO's program for kvalitetssikring og relevant teknologi (Quality of Care and Technologies).

I de seneste år er samarbejdet med Central- og Østeuropa således fortsat med det såkaldte »Oral Status Euro«-program, som er rettet mod indsamling af data som basis for planlægning af den fremtidige tandplejestruktur, og det såkaldte »Action Programme« og »Health Promoting Schools Project«, som er rettet mod at evaluere effekten af de tandsygdomsforebyggende foranstaltninger i sådanne programmer.

Inden for kvalitetssikringsområdet har WHO's europæiske tandplejeprogram været enten direkte eller indirekte involveret i udviklingen af elektroniske software systemer til hjælp for tandlægen i daglig praksis (ORATEL, ORQUEST, EUROQUAL).

Denne artikel er den første der giver en samlet beskrivelse af WHO's europæiske tandplejeprogram, og den første i hvilken en samlet oversigt over de rapporter, dokumenter og publikationer der er udgivet, præsenteres.

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Authors

Ingolf J. Møller, Professor, Dr.Odont., Former Regional Officer for Oral Health
Kirsten Stæhr Johansen, cand.odont. et med., Quality of Care and Technologies Programme
Poul Erik Petersen, Professor, Dr.Odont., Consultant for Quality of Care and Technologies Programme

World Health Organization, Regional Office for Europe, Scherfigsvej 8, 2100 Copenhagen Ø