

# Working for Oral Health in Europe

a discussion document



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## Executive summary

This discussion document highlights a range of oral health policy areas which should currently give cause for concern to all those involved with the provision and funding of oral health care in Europe. If they are to be addressed it will be necessary for all European states to act in harmony.

## Recommendations

- As there is a strong correlation between oral health and socio-economic status, there is a need to monitor inequalities in oral health in order to be able to show National Governments the effects of socio-economic status at an early stage and warn them in case undesirable developments occur.
- Concerted action needs to be undertaken to improve the health status of those who experience the most severe inequalities in oral health.
- The remaining dental caries 'black spots' in European countries are a public health challenge which needs to be tackled.
- Improved mutual educational interaction between dentists and doctors is needed in order to improve quality of care.
- Considerations regarding task delegation and teamwork in dental care should be the basis for education of all members of the dental team and for an integrated dental workforce policy throughout Europe.
- The existing system of monitoring the standards of training in the dental schools of the European Union (EU) is inadequate. A revised system which requires all dental schools to comply, is badly needed if the population of Europe is to be protected against inadequately trained dentists and which can build on the current work being carried out in this field.
- The database on dental care, oral health, dental manpower and education in dentistry in Europe, developed by the Council of European Chief Dental Officers (CECDO) should be kept up to date, the data analysed thoroughly and presented at regular intervals.

## 1 Introduction

The Council of European Chief Dental Officers aims to provide a forum for the exchange of views on oral health matters which affect European Union and European Economic Area, member countries and Europe in general. It exists to offer advice to National Governments, to the European Commission and others on matters affecting European dentistry. In order to achieve these targets, goals have to be formulated and priorities need to be set. Discussion documents such as this one, assist the process and serve as a framework for the future activities of the Council.

This document considers the current situation regarding oral health, oral health care and the dental workforce. Suggestions are made on areas where work is necessary if recent successes are to be consolidated and built upon.

## 2 Oral health, current situation

### *In general*

Despite significant improvements in the oral health of the citizens of most countries of Europe, tooth decay (dental caries) and gum disease (periodontal diseases) still affect millions of people.

Despite significant improvements in the oral health of the citizens of most countries of Europe, tooth decay (dental caries) and gum disease (periodontal diseases) still affect millions of people. Socially disadvantaged groups are at greatest risk of the diseases, especially those with low incomes and low educational attainment. Tooth decay rates are also high among some migrants and in the general population of countries bordering the European Union, including Hungary, Poland, Balkan countries and the Baltic States. By contrast, in several countries within the EU the degree of improvement between the 1970s and the 1990s was striking. The many success stories relating to the oral health status of children across the EU should not lull us into a false sense of security. Millions of teeth still have to be filled or extracted in European people every year. Most of the current generation of adults has personal experience of tooth decay. Most have fillings. Many have had teeth extracted.

The majority of studies indicate a prevalence of 1 to 10% for advanced levels (leading to a high risk of tooth loss) of periodontal diseases in industrialised populations. The prevalence may be higher in certain ethnic groups. Less severe periodontal conditions within the populations have tended to become less of a problem. Many patients seeking periodontal care have significant medical conditions. Furthermore, there is evidence that periodontal infection modifies the risk for a few major medical problems.

Many people aged 65 and over have lost all or most of their teeth. The wearing of dentures among older people is still commonplace in many countries.

### *Variations*

Whilst children across Europe are affected by tooth decay, there are marked differences in oral health status between member states. In addition, caries prevalence may be quite different within individual countries. Variations may be geographical, social or both. In those countries where there are significant variations, it is often the children from socially and materially deprived backgrounds who suffer more from tooth decay than those from affluent backgrounds. This accounts for significant differences between regions, with children from the more affluent ones tending to have lower rates of tooth decay than the poorer regions.



### Special needs

Children and adults at particular risk from the consequences of tooth decay and gum disease are those with special needs due to medical, physical, developmental or psychological conditions. These include:

- physically handicapped people who may have access difficulties, some people with learning difficulties, those affected by uncontrolled movements,
- phobic patients and multiple handicapped people,
- those who are medically compromised, and for whom dental infection is a particular threat (e.g. to their immune system) as a result of which, dental treatment poses a particular risk,
- those who are receiving medical care that puts them at risk of tooth decay (e.g. sugar-based medicines, radiotherapy).

Some people may have more than one set of problems and/or they may come from socially deprived backgrounds which increase their overall risk.

Dentists and other members of the dental team need to be better informed of the social characteristics of special need groups and the barriers they face in gaining access to appropriate oral health care

Oral cancer is a very serious condition. The incidence of oral cancer is closely related to the use of alcohol and tobacco.

Improved mutual educational interaction between dentists and doctors is needed in order to provide dental and/or medical treatment of high quality.

### 3 Prevention

As mentioned earlier, the incidence of dental caries has undergone striking reductions in most industrialised countries over a relatively short period, and major periodontal problems are becoming rare.

These changes demonstrate that the two commonest types of oral disease are preventable and can be dramatically reduced within two decades. What is more, improvements were due to a general improvement of the standard of living and simple measures: the use of fluorides (mainly fluoridated toothpastes) and shifts in diet for dental caries, and in the case of periodontal diseases improvements in oral cleanliness and in part a reduction in smoking. The recent sharp fall in the prevalence of the two major oral diseases in industrialised countries calls for a radical revision of the educational curriculum of oral health personnel. Additional reasons for change are: public expectations and demands, changing concepts of health and disease, health promotion, politics of professionalism, competition (from other dental and health workers) new techniques and materials, demography ('greying' of the population) and changes in welfare/health services organisation.

In countries with high dental caries levels or with high levels of inequality and oral health, systemic fluoridation including water fluoridation, salt fluoridation and fluoride tablets, remain the most cost effective public health measures for reducing dental caries. However, in some countries or areas school based prevention programmes could be the prevention programme of first choice for various reasons. Gaining broad public acceptance for these measures is a matter for each member country.

Priorities for concerted action should be the targeting of vulnerable groups with oral health promotion and oral disease prevention programmes and the change of the public dental services so as to meet this task, and the required changes of the financing of oral health care.

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Tackling the remaining dental caries 'black spots' in Europe therefore is a public health challenge which cannot be ignored.

Concerted action needs to be undertaken to improving the health status of those who experience the most severe inequalities in oral health whilst preserving the health gains already made.

These considerations should be the basis for education of members of the dental team and for an integrated dental workforce policy throughout Europe.

#### 4 Consequences

Because the health of the teeth and supporting tissues has generally been improving, more adults are keeping more of their teeth longer. This is clearly a significant health gain. But it also means that looking after teeth in middle and later life becomes increasingly important. There are more teeth, in more mouths, to protect.

Not only do dental caries and periodontal diseases result in scarce resources having to be spent on filling and extracting teeth and periodontal treatment, it is also extremely wasteful in terms of people having to take time off work to attend the dentist. Millions of working days are lost annually because of sickness absence due to tooth decay and gum disease. This is unfortunate for the individuals concerned, for their employers, and for national social security or insurance systems which may be picking up all or part of the bill.

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#### 5 Socio-economic considerations

A trend is noticeable all over Europe which can bring problems. In the first decade of this century a movement started to harness the powers of the state to moderate the effects of market forces, to relieve poverty and promote social welfare. Deregulation made a return to political life during the 1980s and 1990s. It will be harder now than it was in the beginning of this century, to moderate the social costs of free markets. The leverage of National Governments over their economies is much weaker nowadays. If social markets are to survive or be rebuilt they will need to be embodied in new and more flexible institutions.

As there is such a strong correlation between oral health and socio-economic status there is a need to monitor the inequalities in oral health to be able to show the National Governments the effects of socio-economic policy at an early stage and warn them in case unintended developments occur.

Concerted action needs to be undertaken to improving the health status of those who experience the most severe inequalities in oral health whilst preserving the health gains already made.

#### 6 Oral health workforce and the quality of care

Both aspects of the care system, workforce and quality of care, seem too often to be forgotten in discussions about costs of care. It really is not too difficult to calculate the costs, generated per dentist per year. In dentistry it is possible to come to different diagnostic conclusions on the same set of symptoms, it is also possible to devise very different treatment plans, ranging from very simple (cheap) to very complex (expensive). In economic terms, this means that there is much elasticity in the market. As a consequence, workforce planning can be an effective instrument for the Government to control costs. However, it is not only important in terms of costs but also in terms of quality of care.

Dental education should change to reflect the new role of dentists. The main roles of dentists should be diagnosing oral and dental diseases, treatment planning, providing high quality complex dental care and leading a dental team who will carry out the majority of investigations, simple procedures and oral health education. The dentist will influence the behaviour of patients and advise patients about risks to oral health and investigate and control the risks. In this expanded role dentists will use their intellectual and therapeutic skills and not become burnt-out doing repetitive



simple procedures. The changes to the dental curriculum that are needed are a marked reduction in training to perform simple techniques and much more emphasis on evidence-based dentistry, clinical decision making and treatment planning. Dental undergraduate training must be closely co-ordinated with continuing education. Students should gain more skills in the advanced techniques which they will perform in practice as well as skills in communication.

These considerations should be the basis for education of members of the dental team and for an integrated dental workforce policy throughout Europe.

## 7 Education in dentistry

The variability of training and standards achieved by new graduates from dental schools in the EEA currently causes serious concerns.

The Dental Training Directives, enacted some 20 years ago and amended as new members have joined the EU, require member states to recognise primary dental qualifications obtained in other member states and to permit EEA nationals, who hold such qualifications to work in any other member state as an automatic right. The Directives specify which qualifications are to be recognised, that primary dental training should last for a minimum of 5 years and that all subjects on a specific list should be taught during the 5 years.

If there is to be free movement of dentists throughout the EEA, the public need to be assured that all dentists are trained to a safe, minimum standard before they leave dental school. To date few efforts have been made to ensure that such safe, minimum standards are being achieved by the 130 or more university dental schools within the EEA. When visits and surveys have been carried out, they have suggested that there is alarming variation in standards and that standards are inadequate in some dental schools.

In the past the Advisory Committee for the Training of Dental Practitioners (ACTDP), which advises the European Commission, has sought to review training standards in EU dental schools and to try to ensure that all new graduates reach a satisfactory minimum standard of competence. However, due to a lack of funding its members have only been able to visit 2 or 3 schools and to perform a postal survey of the different curricula taught in each school. Unfortunately, many schools did not reply to the postal survey. The Council of European Chief Dental Officers (CECDO) has also carried out a survey which included questions on the length of training and the numbers of new dentists graduating in each of the member states.

The ACTDP survey indicated a very wide variation in the hours that each of the topics listed in the Training Directives were taught in different schools. The CECDO survey showed that although all EEA dental schools ran courses which lasted for a minimum of 5 years, the total length of time spent on training varied from 140 weeks to 216 weeks. In some dental schools, undergraduates gain considerable clinical experience treating patients in all aspects of dentistry, in others it is possible to qualify without treating a patient, merely by observing treatment and by carrying out procedures on plastic teeth in an artificial mouth. An external audit of the 16 dental schools in one of the larger member states which considered the quality of cross infection control, basic science teaching, research, clinical teaching and facilities was carried out in 1993/4. Amongst other alarming findings, it revealed that the quality of cross infection control was bad or poor in many of the dental schools.

It is suggested that the existing system of monitoring the standards of training in the dental schools of the EU is inadequate and that a revised system which requires all dental schools to comply, to build on the work of DENTED and other projects, is badly needed if the population of Europe is to be protected against inadequately trained dentists.

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## 8 Information on oral health care and education

Validated, quantitative and qualitative information on European oral health, dental care, dental manpower and education will be of the utmost value in helping all the countries to improve services provided to their population, to improve the quality of care, to reduce costs and to secure cost-effective services.

The Council of European Chief Dental Officers (CECDO) has initiated the development of a validated database on the above mentioned items. It is obvious that not merely the participating countries, but the whole of Europe will benefit from this database. There are many areas of mutual interest in dentistry which cross national boundaries such as public health provisions (systematic and local applications of fluorides), the "amalgam debate", cross-infection control, undergraduate and post graduate education, and the mobility of oral health personnel. Reliable data are a prerequisite for the development of policy in these areas. The data collected and validated by the Council of European Chief Dental Officers are available to Governments, The European Union and other relevant institutions. Subsequently it will be necessary to update the database and analyze and present the data at regular intervals.

Validated, comparable quantitative and qualitative information will be of the utmost value in helping all the European countries to improve services provided to their population, to improve the quality of care, to reduce costs and to secure cost-effective services.

## 9 Conclusions

This discussion document has highlighted a range of oral health policy areas which should currently give cause for concern to all those involved with the provision and funding of oral health care in Europe. If they are to be addressed it will be necessary for all European states to act in harmony.

## 10 Recommendations

- As there is a strong correlation between oral health and socio-economic status, there is a need to monitor the inequalities in oral health to be able to show the National Governments effects of socio-economic policy at an early stage and warn them in case undesirable developments occur.
- Concerted action needs to be undertaken to improve the health status of those who experience the most severe inequalities in oral health.
- The remaining dental caries 'black spots' in European countries are a public health challenge which needs to be tackled.
- Improved mutual educational interaction between dentists and doctors is needed in order to improve quality of care.
- Considerations regarding task delegation and teamwork in dental care should be the basis for education of all members of the dental team and for an integrated dental workforce policy throughout Europe.
- The existing system of monitoring the standards of training in the dental schools of the EU is inadequate. A revised system which requires all dental schools to comply, is badly needed if the population of EEA member states is to be protected against inadequately trained dentists.
- The database on dental care, oral health, dental manpower and education in dentistry in Europe, developed by the Council of European Chief Dental Officers should be kept up to date, the data analyzed thoroughly and presented at regular intervals.



## 11 Action list

### Short term

- 1 Endeavour to define the 'black spots' and develop an oral health strategy (See appendix).

*Initiator: individual CDO's; CECDO*

- 2 Recruit partners and stakeholders (national and international) and develop programmes for cross-fertilization and actions. Possible partners and stakeholders include: Association of Dental Education in Europe, European Regional Organisation of the World Dental Federation FDI, patients' organisations, commercial and non-commercial bodies.

*Initiator: individual CDO's; CECDO*

- 3 Offer to provide 'first enlargement' countries with help in the revision of existing systems for the financing and delivery of oral health care and dental education. If this offer is accepted, involve volunteer present member states of the EEA in a needs assessment exercise.

*Initiator: CECDO*

### Medium term

- 4 Organise an invitational conference on the topic of dental public health in Europe between national representatives of professional organisations, dental schools, commercial and non-commercial bodies.

*Initiator: CECDO*

- 5 Initiate structured meetings between CDO's and local, national and international (ADEE) education institutes and organisations in order to develop a concrete interaction between professional practice and the content of the education system.

*Initiator: individual CDO's; CECDO*

### Long term

- 6 Organise 'touring teams' to run workshops on dental education, care systems or quality systems.

*Initiator: CECDO in collaboration with individual CDO's*

- 7 Support a system of regular visitation of all European dental schools and dental hygienist schools.

*Initiator: CECDO*

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## Appendix - An oral health strategy for Europe

*proposed by the Council of European Chief Dental Officers*

### Aim

An oral health strategy for the European continent is of value because:

- the significant improvements in the oral health of the populations of many member states of the European Union over the past ten to twenty years cannot be sustained without a conscious commitment and effort;
- active steps are needed to bring oral health standards up to the level of the best within individual States and across the EU as a whole.

### Starting point

An oral health strategy should concentrate on oral health education and promotion as well as on making use of 'active' methods of fluoridation in fluoride-deficient areas in which the decrease of dental caries has not reached the WHO 2000 recommended levels. These fluoride-programmes should preferably be offered to society by the public sector of a member state's dental care system. Other specific preventive measures such as professional applications of fluoride-varnish/gel and fissure-sealing should be funded from public resources for the groups at high risk of dental/oral diseases.

Given the above mentioned parameters, it seems reasonable to attempt to compose a list of basic guidelines and activities which should be taken into account when a Government strives to improve the oral health in a country. Such a list may function as a 'check list' for each Chief Dental Officer.

### Questions to be answered

The potential use of a check list depends on a clear description of distinctive responsibilities of the various partners in public health. In this respect, considerations should be given to the answers to the following questions:

- What is the responsibility of the Government? Where does it start and where does it end?
- Who are the partners of the Government in oral health promotion?
- What tools can be used to improve oral health?

### Responsibility of the Government

The following statements can be made:

- It is the responsibility of the Government to define an acceptable level of oral health for a population and to formulate a strategy to achieve it.
- The position of Chief Dental Officer should be established at the Ministry of Health or equivalent if appropriate. The Chief Dental Officer's main role is to advise to the Government and other politicians, the necessity for a defined oral health strategy for the country. The most effective instrument with which to influence politicians is an up to date set of reliable and relevant statistics.
- An oral health strategy for a country should be based on an analysis of recent epidemiological data with respect to both needs and demands of the population. Setting realistic goals to be achieved within a given period of time and developing a system of monitoring results, are important elements of an oral health strategy. The plan should be comprehensive and include workforce issues, legislation, co-ordinating policy and securing necessary funds. It may be the case that when workforce data are analysed, the development of a system of education of some auxiliary personnel, as well as necessary legislation for its establishment, should be considered.

### **Partners**

Partners of the Government in oral health promotion are the dental professionals and their institutions (EU advisory committee, dental/dental hygienist schools and professional organisations), other medical professions (e.g. gynaecologists, pediatricians, pharmacists, preventive workers, nurses), educators (school and nursery teachers), youth organizations, local authorities and administrators (municipalities), media, industrial and consumer groups.

The role of industry in the dissemination of information on oral health education for a society should be considered as a crucial one.

### **Implementation**

Definition of priorities, as well as of the regions and groups of those at special risk of oral diseases should help in developing a successful oral health strategy for a country. An increased risk of dental and oral diseases can be expected among deprived groups, immigrants, people from lower social classes, medically compromised or handicapped individuals, those on prolonged medication, smokers, drug-addicts, dental phobics and people who indulge in contact-sports. At present, because of changing patterns of migration, it is not clear whether or not groups of immigrants should always, and in every country, be considered as risk groups. It is also not universally evident that the socio-economical differentiation of the societies in some European countries is at such an advanced stage that it could influence the oral health strategy. In spite of these doubts, it is the responsibility of a government to recognize the situation and to introduce a system of oral health monitoring for these groups, if necessary.

Among the administrative instruments it seems possible to list legislation, Governmental policy (e.g. directed at reducing the market price of fluoride dentifrices and toothbrushes), systems of monitoring oral health and quality control, systems of funding, payment etc., and the influence of educational, health and industrial stakeholders all of which should be harnessed to support the implementation of the oral health strategy.

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