

How to Improve Prevention and Early Detection of Oral Cancer?



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The Role of the Dental profession

12th of June, Paris



Opening Address

Catherine LAPORTE
French Department of Health

I am very happy to open this European conference on detecting oral cancer, organised jointly by the French Department of Health, the French National Cancer Institute (INCa) and the European Regional Organisation of the Fédération Dentaire Internationale (FDI - International Dental Federation). Today we are addressing two major concerns. Firstly, oral cancers are very frequent and serious, but remain neglected. So it is important to increase awareness if we are to improve prevention. The second point concerns the role of dental surgeons. Their particular place in the health system means that they can play an important part in cancer detection.

Oral cancer remains very largely unrecognised. 274,300 new cases appear each year worldwide, causing 127,500 deaths. It ranks eleventh in cancer incidence. In France, 12,270 cases are detected each year, leading to 7,000 deaths. France is one of the countries worst affected by oral cancer. In 75% of cases, the onset of cancer is related to excessive smoking and alcohol consumption. It mostly affects men over 45, so incidence mirrors drinking and smoking habits. Because it is often diagnosed late, death frequently occurs in less than five years. Moreover, surgery is often disfiguring. It has severe consequences for survivors who have a reduced quality of life.

Despite its frequency, the general public and health professionals alike underestimate oral cancer. Most of the cases occur in people from lower socio-economic groups. In addition, medical professionals do not seem to pay enough attention to oral diseases. Relatively few doctors examine patients' mouths routinely. So this is a major public health issue that needs special attention. In France, the Ministry of Health has introduced oral cancer into the oral health plan, to mobilise all care providers. Cooperation must strengthen any approach taken.

This conference intends to go further than just drawing attention to a poorly recognised cancer. It also wants to highlight the important part that dentists could play in informing about, and early detection of, oral cancer. There are some 390,000 dental surgeons in Europe, who examine about 10 patients a day, making almost 4 million mouths. So the dental profession is a vital ally for tackling oral cancer, and there can be no doubt that primary prevention is the most effective tool. The best way to reduce incidence and optimise improvement in public health is to reduce smoking and drinking, and information is the key to changing behaviour. Prevention is an integral part of the public service remit of dental surgeons. Detection at the pre-cancerous or cancerous stage is another vital issue, because early diagnosis and management increase the likelihood of survival and improve quality of life for patients after remission. Even though oral cancer sufferers are from groups that do not visit the dentist very often, involving dentists would be a major asset in tackling oral cancer. So it should feature large in CPE (Continued Professional Education).

Although hospitals and clinics carry the main burden of patient management, dentists should also work with oral cancer patients to avoid complications, because maintaining good oral health substantially reduces the risk of complications.

Many thanks to INCa, the European Regional Organisation of the Fédération Dentaire Internationale and all the participants of this conference.

Introduction

Professor Dominique MARANINCHI
President, French National Cancer Institute (INCa)

I would like to begin by paying tribute to the Department of Health's involvement in getting all players working together in this field. Thanks too to Patrick Hescot, who was the driving force behind our work, and all our colleagues who have agreed to take part in this conference.

All major actions need to be managed at an international level. This seminar will allow us to discuss best practices, and initiate actions that could be widened to a world level. Oral cancer is both highly targeted in terms of location, and very diffuse in terms of symptoms. The word cancer always covers a wide variety of reality and diagnoses. The diversity of diseases, people, tools and risk factors means that campaigns have to be carried out widely, aimed at the general public, but also with very specific targets.

The Department of Health is soon to launch a new cancer plan. This will encourage diversity in management and will attempt to tackle social, epidemiological, geographical and genetic inequalities. The French National Cancer Institute's remit is to decrease the mortality and morbidity due to cancer. It is true that oral cancers are not well recognised. There are less oral cancers than other types, and they are also easier to avoid. Primary, secondary and tertiary prevention plans must be put in place. Development of the disease must be better understood, and the best means of prevention identified. Information is a very powerful tool in this respect. Information must reach the general public, but also patients and professionals, and not only doctors or oncologists. Dental surgeons are in the front line of health care. They must be capable of handling the information that they receive. Multi-disciplinary information accessible to all is the only way that the fight against cancer will progress.

Clinical trials are vital. Strategies are currently being tested in the highest risk groups. These are vital steps in drawing up an effective action plan. As a scientific agency, we support, follow and go along with this type of action. Where applicable, we will circulate information and recommend integration of measures within the public health system.

Research programmes must also make it possible to anticipate future trends. In particular, it is important to know why certain geographical areas are more affected than others. It is true that certain patients have a combination of risk factors. Some cancers are also undergoing mutations. In addition to tobacco and alcohol, other carcinogenic products present in the environment increase the incidence of these cancers. Scientists have identified new potentially carcinogenic viruses implicated in cancers of all orifices. These trends must be anticipated. Prevention is better than cure, but we need to act. Prevention will make it possible to use less disfiguring surgery. All too often, oncology sees treatment, cure and prevention as opposites. INCa wants to develop a new type of prevention that incorporates all these aspects. This type of comprehensive approach should extend to other professions and places.

Dr Patrick HESCOT
President, European Regional Organisation (ERO)
of the Fédération Dentaire Internationale (FDI)

My thanks to the French government and INCa for their support in organising this vital international conference on cancer issues that affects all Europeans.

The FDI wants to put dental surgeons at the centre of the health system. Dentists must see themselves as having a real role in society, not just treating patients. They must be educators. The mouth is "the entry point for all diseases". Dentists must have a cross-functional role within the health system. They must also take part in defining health policy. There is regular mention of health "deficits". But health should not be considered as an economic product. Although obviously economic issues should be considered, the specificity of what is at stake in regard to health must also be measured. A healthy population is more productive and helps a country develop. We need to help bring about a change of mindset among policy makers.

Technical progress has led to the extreme specialisation of health professionals. Increasingly they focus on specific organs. However, they share the same concern for the whole person, including family and social aspects. The major preoccupation is to prevent a disease appearing, and after remission, prevent relapses. Dental surgeons are effectively involved in primary, secondary and tertiary prevention. Health professionals must centre all their work around prevention.

As far as oral cancer is concerned, dental surgeons must inform patients about the risks of smoking and drinking, and yet in France, the recent campaign against smoking, involved all health professionals except dentists. Dentists are not treated like other health professionals, despite the important role they play. Dental surgeries can be places of prevention and primary education. In France in particular, the Alliance Against Alcohol has great difficulty getting sufficient information across to young people. The FDI would like to enhance the contribution that dental surgeons can make to the actions other health professionals are already taking.

In terms of secondary prevention, many countries have launched various action plans. Discussions should enable us to optimise our respective initiatives. For example, in the United Kingdom, the NHS has issued a CD-ROM with information to help dentists detect oral cancers. INCa could reproduce some of these measures.

Dental surgeons can also participate in tertiary prevention. Good dental health directly contributes to maintaining quality of life, and this is the responsibility of the dental surgeon. My personal experience has convinced me of the importance of our contribution, over and above basic dental treatment, in maintaining people's quality-of-life and self-esteem. Oral cancer is only one of the vehicles that should remind us all of the core business of dental surgeons. Relationships with other health professionals must be strengthened.

Throughout the day today, there will be many subjects that we can discuss together. This is a place for learning from each other so that we can build the future together. By the end of the day, I hope to be able to offer a practical action plan. The FDI wants to encourage these rapprochements between countries through listening and talking together. Health is a cultural problem centred on people. However, national cultures have their own specificities. Although we want to share our concerns and produce joint plans, we must make sure we keep our own specific means of delivery.

Part I: Current Issues in Oral Cancer in Europe

Oral Mucosal Lesions: **What General Practitioners Need to Look At**

Professor Jacky SAMSON
School of Dental Medicine, Geneva, Switzerland

I have given this presentation a deliberately broad title, because I want to talk to GPs, as well as dental surgeons.

At the international level, comparisons, trends and the measurement of results require harmonised definitions, but definitions are far from being harmonised as yet. For example, in France, the very definition of the mouth does not correspond to the WHO definition. This is also true for the clinical presentation of cancers. English-speaking countries have adopted a classification that is much less specific than the French one. However, it is important to avoid terms that have little meaning.

In France, medicine has always used literary terms. However, these seem to provide a more precise description of the different types of diseases. It is impossible to carry out a reliable diagnosis without a degree of rigour and precision, and so the observed disease needs to be described precisely. If this is not done, it is simply not possible to detect cancer. Apart from clinical appearance, terms must also enable a description of the results of a palpation, or the consistency of a tumour, allowing a more informed decision to treat. Therefore, French descriptions have real value.

Several rare types exist. Proliferating types are very varied. Dead teeth are sometimes extracted without the underlying medical condition being identified. This was recently the case in a twenty year old patient with epidermoid carcinoma. Practitioners cannot suspect these types of cancer if they are not familiar with them. Because there was no early diagnosis, the tumour developed, although finally treatment led to remission. Therefore it is important to be very familiar with the different types of medical condition. And to be familiar with them, one must also be able to describe them.

The infiltrating type is neither exophytic or endophytic. So this type is very tricky. On palpation, a surface lesion reveals an induration which is in fact a carcinoma. Infiltrating types can develop under mucosa while retaining a topical aspect. Thus descriptions cannot be limited to the most common forms. Verrucal carcinomas develop on a proliferative hyperplasia. They are extremely tricky because this type is composed of two carcinomas. The very rare epithelioma cuniculatum is often taken for a simple infection due to its endophytic proliferation.

The term "precancerous lesions" covers a wide variety of entities, and includes medical conditions that appear to be closer to true cancers, because in some of these lesions, cells have already effectively become cancerous, even if this transformation is not yet complete. The distinction we

make in France is not used internationally. Therefore it is important to make a clear distinction between precancerous lesions and real precursors. At the same time, we need to be very familiar with these lesions, because they do not all have the same potential for malignant transformation. Keratoses also need to be examined closely, because they are not all equally dangerous. Keratoses have some "favourite" sites. They are often caused by smoking. Different types carry different risks of transformation, so, they all need examining closely, especially since keratoses can sometimes be very difficult to detect. For common keratoses, malignant transformation is very rare. However, there are certain risk factors, and these must be considered. It is evident that it is not possible to recognise the different types if one is not familiar with them.

Early detection is vital. The earlier the diagnosis, the greater the likelihood of five-year survival. Much work must be done on this subject. Carcinomas must be detected at stage T1. Although our universities give top quality teaching, they place too much emphasis on the most developed and the most malignant types of cancer, and not on the initial types. We must always be wary of miracle cures. Adequate training is vital. There can be no question of entrusting mass screening operations to undertrained staff. Therefore, dental surgeons need better training. Smoking and alcohol remain the greatest risk factors. Oral cancer affects a specific population cross-section from disenfranchised groups, who often present with severe intoxication caused by heavy smoking. These patients often neglect their teeth, and do not visit the dentist very regularly. Given this situation, all medical professions must take part in screening to avoid this escape from the net. However, very often GPs are not familiar with the mouth, and campaigns are needed to change this.

Much work remains to be done. Many different groups of healthcare professionals must be involved. They must all work together. The oral cavity must be subject to rigorous examinations of "every nook and cranny". Resulting early detection justifies this. In addition, it will make significant savings in the health budget. Quite apart from CPE (Continuing Professional Education), initial education also needs to change, to make practitioners aware of these conditions. Some examination techniques are underused today, and these must be developed. Definitions must be harmonised internationally. Today, too many cases go undetected because doctors and dentists are not adequately trained. These cancers can also occur in healthy subjects showing no risk factors, and this is the worst situation, because they are very rarely detected, or detected too late.

The Importance of Early Diagnosis in Oral Cancer

Professor Silvio ABATI

School of Medicine and School of Dentistry, University of Milan, Italy

I'm very happy to be here today, and I'd like to thank INCa and the Ministry of Health for their invitation.

Oral cancer is a serious and growing problem. Last year 300,000 new cases were declared worldwide.

I. Incidence of Oral Cancer in the European Union

In the European Union, oral cancer makes up the seventh most common cancer. Over 60,000 new cases per year were registered over the past five years.

European Union incidence rates are from 1.3 to 32.2 cases for 100,000 people, with great differences between countries. The highest incidence rates are in France and Hungary and the lowest are in Greece and Cyprus.

The majority of the cases are in people over age fifty. Nonetheless, an increase in the incidence of oral cancer in young people has been observed.

Mortality rates over the past forty years have remained stable.

II. Aetiology

Oral cancer has multiple causes. The highest risk factors are the effects of tobacco and excess alcohol consumption, with over 80% of the incidence of this cancer being attributable to these causes. Combining heavy drinking and smoking multiplies risks by a factor by forty.

Other possible risk factors include diet, chronic candidiasis, human papilloma virus (HPV), heavy dental plaque, and immunodeficiency.

III. Survival Rates

Despite the advances of surgery, radiotherapy and chemotherapy, the survival rates for oral cancer have not shown significant improvement over the past four decades. Relative survival rates for oral cancer are among the lowest of major cancers. Only half of the patients of oral cancer survive five years after the initial diagnosis.

IV. Early Detection and Diagnosis

Diagnosing cancers at an early stage is crucial to improving survival rates and reducing morbidity.

Studies on delay report that patients usually postpone seeking professional advice for periods of up to three months after having become aware of any signs of disease. Delays may be longer due to the fact that oral cancer is not always suspected by primary care physicians. Consequently, many oral cancers are diagnosed at a late stage of the disease.

Of the available procedures, none has affected survival rates as much as early detection and diagnosis.

V. Oral Examinations

Clinical oral examinations (COE) pose little discomfort for the patient. Physicians, dentists, and other health providers have a unique opportunity to detect malignant oral neoplasias while they are still asymptomatic, to identify high risk behaviours, and to counsel their patients.

Most early signs of oral cancer are painless and are difficult to detect without a thorough head and neck examination by a dental or medical professional.

After examination, clinical records are drawn up with standard schemes and photographic archiving. If a lesion is detected and is not healed within two weeks, a biopsy must be performed. Immediate referral is necessary in case of redness, ulceration, persistence, rapid growth, bleeding, indurations, or fixations.

VI. Diagnostic Aids

Over the last ten years, a variety of commercial diagnostic aids and adjunctive techniques have become available to practitioners in order to assist them in the screening of healthy patients for evidence of otherwise imperceptible cancerous changes or to assess the biological potential of clinically abnormal mucosal lesions.

Diagnostic aids include Toluidine staining as a predictive marker of malignant transformation.

VII. Promoting Early Diagnosis

It is crucial to promote early diagnosis of oral cancer. Oral health care professionals are the providers of choice to perform examinations for the purposes of screening and detection. It will be necessary to develop skills among dentists and other oral health care professionals in detecting relevant potentially malignant lesions or cancerous lesions at their onset.

Raising public awareness about the importance of regular oral examinations will be an essential step toward early diagnosis and the reduction of mortality rates.

From Prevention to Early Detection: An Interdisciplinary and Intersectional Approach

Dr Gerhard SEEBERGER
President Elect, European Regional Organisation (ERO)
of the Fédération Dentaire Internationale (FDI), Italy

I. The Necessity of an Interdisciplinary Approach

Oral cancer is preventable. An interdisciplinary and intersectional approach to both prevention and early detection of the disease is essential.

Some countries reveal an extremely high incidence of oral cavity cancer. Nonetheless, the mortality rate for oral cancer in such countries is sometimes lower than in countries with low incidence rates. This is due to effective interdisciplinary measures.

II. Preventable Risk Factors

The risks for oral cancer are handled differently in different countries. Recent documents have demonstrated that oral cancer is preventable through risk factor intervention, such as the control of alcohol consumption, tobacco use, unhealthy diets, and infections.

By intervening and by influencing such risk factors, the dentist should carry out the social role of oral health consultant. This role should be recognized by other health specialists, including oral physicians and professionals working in cancer prevention in general. Cooperation between those who treat oral cancer should be significantly improved.

III. Cooperation between the Dentist and the Patient

Two parties play a role in the prevention of oral cancer: the dentist, who is the expert, with his intellectual capacities and in his social role as oral health consultant, and on the other hand, the patient, the oral health responsible.

IV. Drop in Consultations

In recent years, the amount of people who consult practitioners in order to be screened has dropped. The high cost to the patient may be an explanation for the decrease. Such a barrier is unacceptable. In all European countries, everybody, even the poorest, has the right to access care. Patients are born with human rights. We are disturbed by the ongoing global economic crisis. However, we may have forgotten that this very crisis needs to be handled by a healthy population.

V. Creating Awareness of Preventative Measures

One third of all cancer is preventable. Oral cancer prevention can start through the dental and medical professions. It should also start in families. The maintenance of proper health should be a main topic starting in kindergartens and in grade schools. The message must be spread.

The dental profession can influence habits. The entire profession should act to create awareness in governments.

VI. Growth of Poor Habits

Recent data indicates that overall cigarette sales have dropped. However, statistics relying on sales are not realistic. In Mediterranean countries, cigarette smoking among young people has considerably increased, as has alcohol consumption. The proportion of young people among alcoholics has also risen in recent years. In Italy, the total number of alcoholics grew by 187% over the ten-year period 1996 – 2006.

The growth of poor habits has been attributed to the global crisis, to lifestyle changes, and to changes in human relationships. A major factor may be that the family is no longer recognised as a social value. Existing social structures may no longer be a guarantee for a healthy future.

VII. The Role of the Dentist

In order to improve and to intensify the role of the dental profession in the early detection of oral cancer, the dentist must act both as a coordinator between the medical professions and as an oral health consultant for the patient.

Training in the recognition and treatment of cancerous oral lesions must be carried out from the first years of dental school.

There has been talk of “red and white aesthetics”, the desire for beautiful teeth. Allowing the patient to have a beautiful smile seems to be the major goal of dentists. However, aesthetics should not be the ultimate purpose of the dental act. The very first approach to our patients should be to seek “red and white oral health”.

Question and Answer Session

Sophie EMMANUELLI

As a dental surgeon, I want to emphasise the importance of the CD-ROM that was brought out recently. The approach was very interesting and very informative. However, biopsies and excisions of lesions raise many questions. We often hesitate before carrying out a biopsy on large lesions. It is also apparent that there are great disparities in the ability of dental surgeons to carry out this kind of intervention. Some regions have far more skilled practitioners than others. Practitioners need training to do this. For the moment, although they can detect these lesions, they cannot always treat them. The French health system seems lacking in this respect.

Patrick HESCOT

INCa is working on appropriate solutions for practitioners.

Marianne PERREAU-SAUSSINE, INCa Screening Service

Many practitioners do not know where to send patients when they discover these cancers. They can contact regional cancer networks, who can put them in touch with local people. Furthermore, as of 2009, depending on their level of activity in these areas, hospitals and clinics need special authorisation to perform surgery, chemotherapy and radiotherapy. By May 2011, the number of authorised centres will be considerably reduced, particularly for ENT cancers. This will mean profound changes in hospital cancer management, which will make it easier to identify reference centres.

From the panel

We observe numerous dissimilarities in the different European countries, resulting from the availability of specific services and to diagnostic delay. In countries such as the UK, regulations stipulate requirements for the availability of the system. In other countries, especially those of a lower economic level, oral medical technology services are not easily available. An improvement in availability of services could lower the prevalence of high stage cases.

Vinod JOSHI, Chief Executive, Mouth Cancer Foundation, United Kingdom

I am concerned about the considerable amount of work to be done in training dentists to learn to perform biopsies. Waiting for biopsies could complicate and delay the beginning of treatments. Dentists are not required to perform biopsies. They are required to report signs of cancer and to refer patients to local hospitals.

From the floor

The different speakers have reminded us of the importance of basic teaching, and I entirely agree with this. Researchers should be more involved in making diagnoses. The centres that exist now, do not have the capacity to deal with these new demands, because they are already overworked. Universities have the resources needed to do a first diagnosis. No special skill is needed to perform a biopsy.

From the floor

As a surgeon and oncologist, I would like to make sure we do not underestimate the question of biopsies. Any delay in diagnosis leads to serious consequences, so dental students need to be trained to deal with these issues. Several years ago, all generations of GPs were trained to examine the inside of the mouth. In less than three months, they were able to detect many conditions. So teaching is vital. Regional networks are often well organised and practitioners should use them.

How to Improve Prevention and Early Detection of Oral Cancer?

Didier MAURICE, UFR Odontology, University of Paris 7

I am responsible for training, and I can assure you that oral oncology teaching units exist in France. It is taught at the IGR Centre and at the Georges Pompidou European Hospital. So training is available. As soon as an examination raises the slightest doubt, patients must be referred to a specialist centre, even if they do not live in the capital. Early detection is vital and makes for much improved patient management.

Part II: Oral Cancer Early Detection Strategies

Worldwide and European Efforts on Oral Cancer Early Detection

Dr Rengaswamy SANKARANARAYANAN

**Section Head, Early Detection and Prevention (EDP), World Health Organisation (WHO),
International Agency for Research on Cancer (IARC), Screening Group, Lyon, France**

I would like to present the global picture of oral cancer and on the current worldwide status of investments in the early detection and treatment of this cancer.

I. Background

Oral cancer is one of the most common cancers. It is the eleventh most common cancer globally. In the parts of the world where oral cancer is most prevalent, public awareness of the disease does not exist. Around the world, the only public screening program is in Cuba. In most countries, the rates of occurrence are increasing.

Two thirds of oral cancer cases occur in developing countries. Tobacco and alcohol are the major risk factors. Most oral cancers are preceded by precancerous lesions.

II. The Current Worldwide Status

Over the last five decades, most oral cancer cases have been diagnosed in advanced stages. These cases require aggressive, multimodality management. Residual disease following treatment remains in over half of the cases.

Improvements in cancer treatments have resulted in enormous differences in outcome. Oral cancer is an exception to this rule. Further to treatments, the muscles, bone, skin, and lymph nodes remain the same.

Oral cancer is most prevalent in developing countries, where the five-year survival rate averages only 20%. In developed countries, the five-year survival rate averages 60%.

Observing incidence rates of mouth and tongue cancer in selected populations, it can be seen that the highest European rates are in France. The highest worldwide rates are in Pakistan.

III. Overview of Oral Cancer in Europe

For men, oral cancer incidence rates vary between six per 100,000 men in Finland to 32 per 100,000 in France. For women, incidence rates vary between three per 100,000 women in Croatia to five per 100,000 women in Switzerland.

The mortality rates vary between two per 100,000 men in Finland and ten per 100,000 men in Croatia. For women, the mortality rates vary between 0.8 per 100,000 and 1.7 per 100,000.

The men to women ratio in mortality of oral cancer varies from 1.5 in Nordic countries to 7.7 in Lithuania.

These incidence and mortality rates have remained relatively stable in most European countries in the past decades.

Nonetheless, a reduction in incidence in men has been observed in Nordic countries, France, Spain, and Slovenia. An increase in incidence in women has been observed on the overall in Northern and Western Europe. The five-year relative survival rate has improved.

France is an excellent indicator of the current status of oral cancer in different parts of the world. The mortality rate in that country grew from 1950 to reach a peak in the period from 1975 until the early 1980's. Since that time, the occurrence of oral cancer has been decreasing steadily. This drop is not a result of early detection of the disease but is essentially due to a considerable lowering in risk factor trends, especially in the reduction of alcohol consumption and smoking. Conversely, mortality rates have been growing steadily in Eastern European countries.

IV. Approaches to Early Detection of Oral Cancer

There are two approaches to the early detection of cancer, screening programs and clinical early diagnosis.

1. Organised Screening Programs

Screening for cancer implies testing for early forms of disease before symptoms occur. It involves application of an early detection test to a large number of apparently healthy people in order to identify those with a high probability of having clinically unrecognized cancer or precancerous lesions.

In Europe, there are currently no organised screening programs.

Screening programs are essential due to the fact that incidence and mortality rates reflect the trends in risk factors and that early detection does not clearly impact mortality. The five-year survival for node positive disease has not improved.

Screening for oral cancer is simple, accurate, feasible, and affordable. It needs to target a well-defined population group, tobacco and alcohol users over thirty years of age.

2. Clinical Early Diagnosis

The second approach to early detection of oral cancer is clinical early diagnosis. This approach necessitates raising awareness in the general public and improving access to health services for all segments of the population.

Early detection of oral cancer has several objectives. The diagnosis of oral precancerous lesions may prevent invasive cancer when the health care professional works with the patient to alter risk factors. The diagnosis of preclinical early invasive cancer may take place in asymptomatic subjects. It could also be possible to identify the disease before it spreads to adjacent sites, such as bones, muscles, and regional lymph nodes.

Early detection tests for oral neoplasia include the visual examination of the oral cavity, mouth self examination (MSE), oral exfoliative cytology, toluidine blue intravital staining, oral brush biopsy, chemiluminescence, tissue fluorescence imaging, and spectroscopy.

The visual examination of the oral cavity is the most widely evaluated detection test. It is simple and inexpensive. Health providers can be rapidly trained to perform it. Although this test should be an integral part of any physical examination, it is not currently carried out systematically. The positive predictive value (PPV) of the visual examination is greater than 30% in populations having a high risk of the disease.

V. The Trivandrum Oral Cancer Screening Study (TOCS) 1996 - 2004

First evidence from a randomised trial that screening reduces oral cancer mortality was revealed in the Trivandrum Oral Cancer Screening Study (TOCS), set up in collaboration with the Regional Cancer Centre (RCC) in Thiruvananthapuram, India. The study evaluated the efficacy and cost effectiveness of oral cancer screening by visual inspection of the oral cavity in detecting early stages of oral cancer and in reducing mortality. It also investigated the determinants of population compliance for intervention.

The analysis involved a control group undergoing usual care of close to 100,000 participants and an intervention group undergoing oral visual inspection by trained health workers, of another 100,000 participants. In the intervention group, treatment was given for pre-cancers and for cancer cases. After the investigation, a follow-up was carried out to assess oral cancer incidence and mortality.

The study revealed that the mortality rate among tobacco and/or heavy alcohol users, high-risk individuals for oral cancer, was greatly reduced in the intervention group. The cost per life year saved amounted to \$457 for all individuals and to \$156 for high-risk individuals. These amounts are considerably less than the GDP per capita in India in 2004, being \$2900. Organised screening programs are therefore highly attractive for developing countries with a high incidence of oral cancer.

VI. Conclusions

Dental care services are expensive in every country. In Europe compared to other countries in the world, the highest proportions of the populations seek dental care services. Nonetheless, one of the major problems for the prevention and early detection of oral cancer is the lack of suspicion of existing cancers.

It must be emphasised that organised screening presents immense opportunities. Screening could be implemented through routine dental care and primary health services. It should begin with population groups starting at thirty years of age, that is, twenty years before the peak incidence of age fifty. Wide scale campaigns are needed to raise public awareness and to create broad participation in the screening.

Patrick HESCOT

Denis Bourgeois was one of the instigators of today's conference. He has also developed new health indicators.

Implementation and Development of Common Instrument Guidelines for Use of Oral Health Surveys in Europe

**Professor Denis BOURGEOIS
Dental Faculty, University Lyon 1, France**

In 2003, the European Commission envisaged setting up new strategic dental health indicators. Various guidelines were proposed, from a public health perspective. Information was often no more than lots of tables and variables, with no obvious connection to political decisions, practical action or improvement of public health. So the Commission decided to create a task force on the subject. Their mandate was to produce guidelines adapted to existing international and regional policies.

But as far as chronic disease is concerned, international health policies are based on the principle of integration. This means that they encourage development of partnerships and transversal approaches. This is possible because these cancers share risk factors with other conditions, which means that the same prevention regimes can be used. According to the WHO and a publication dated 2002, an important reform of the health professions managing chronic disease is imminent. The professions were to work together to produce integrated approaches, develop their competencies and widen their scope. The new guidelines obviously had to take account of these changes.

Before working on these health indicators, professionals needed to adopt as wide a view as possible covering the whole health system. In addition to the results, they also needed to consider the use of services lower down the chain, risk behaviour and future changes in environmental policy which will soon impose new obligations for fluoride use. Thus our work had to be integrated into European policies and cover as many areas as possible, dealing with questions of prevention, reducing health inequalities, quality assurance and the setting up of a monitoring system.

The initial work was done between 2003 and 2005. The objective fixed was to define forty strategic indicators spread across four families of health indicators: morbidity and health status; determinants; the health system; and strategy. At the time, 664 indicators were available; 40% of them concerned with health systems, 35% with determinants, 10% health results and 8% with quality of life. After that, committees of experts met regularly. In 2005, they presented a shortlist of 40 indicators, in the areas of determinants, action plans, health status and health systems. All these indicators were described and standardised for the whole of Europe. The purpose was to enable any region in the European Union to use the same data.

Oral cancer was one of the 664 indicators. In order to include it in the database, the indicator, its components and main terms needed to be defined beforehand, alongside the WHO classification. In fact the important element to consider is cancer prevalence. However, any public health policy needs to look at prior risk factors. In the strategy, three indicators target oral cancer: smoking, pregnancies and an indicator of the proportion of dentists who advise their patients to stop smoking. These are all part of a preventive approach. Armed with these facts, relevant policies for the next thirty years can be planned. For the moment, this type of data is not given enough consideration when public policy is defined. This objective is totally in line with national European strategies.

From 2005, after the Commission had validated the 40 indicators, proposals for data collection had to be drawn up. Oral health was one of the subjects included in the European monitoring provisions. It was supported by a network made up of natural partners such as the WHO. In order to develop data collection, the task force began by studying available indicators. The forty indicators were not recorded in the same way in all countries, so the information was not consistent, and varied from country to country. In addition, the median number of indicators available per country was only twelve. This needed to be dealt with, otherwise the system would remain under-effective. The task force needed to identify which countries collected data regularly, and which rarely collected data. Of the twenty countries, twelve claimed to collect data on the oral cavity regularly, despite the lack of available information. Therefore much work needs to be done to improve data collection.

Then we studied the actual information collection systems. For clinical indicators, we had envisaged creating a network of "sentinel dentists", given the potential dentists have for detecting oral cancer. So we developed a training guide and software. After that, a discussion arose as to whether dentists should participate in collecting data on the oral cavity. The group decided that it was more important that dentists should be familiar with mucosal lesions, and that cancer detection should be left to specialists. Thus dentists were to detect lesions, but also be aware of risk factors in order to collect information for the European indicators. So we developed questionnaires, with a training guide providing terminology, descriptions of different types of mucosal lesions and clinical case studies. This was tested at a seminar for dentists from eight countries, which obviously all had slightly different teaching systems. Today there are some 400,000 dental practitioners in Europe, so the coverage in terms of potential "sentinels" is very good. About 2000 European dentists have participated in seminars. The purpose of these seminars was to assess methods, but also to find out what dentists felt about the difficulty of identifying indicators.

The information obtained was analysed and a report presented to the Commission. This enabled us to rank data according to the difficulty of collection. Clinical reports often contained many errors. Depending on the model used, up to 80% of files returned contained errors, which differed in nature from country to country. However, for oral cancer, 66% of files were returned without errors. A study of the defective files showed that dentists did not give sufficient consideration to

age as a risk factor. So in most cases, "sentinel dentists" had no difficulty collecting information on mucosal lesions. In addition, most of them claimed to understand the proposed codes easily.

Therefore, the "sentinel" system posed no difficulties in terms of understanding, and so it appeared that this type of approach could indeed be developed. Neither does it take much time. However, several criticisms were made. These led us to improve the illustrations in the guide, and simplify certain sections. The success of this whole approach varied from country to country. The difference seemed to be due mainly to the quality of follow-up provided by the teams in the field. A competent leadership team is needed for a "sentinel" approach to work.

Finally the proposal was validated by the European Commission. Indicators are now available. Methods have been revised. A possible next stage would be for the "sentinel" networks to help prevent dental, cardiovascular or diabetes-related disease. All the data, publications and software are available on the Internet (www.egohid.eu).

Oral Cancer: **Specific Strategies to Improve Prevention and Early Detection**

Dr Paul KARSENTY
Ministry of Health, France

In order to combat oral cancer at the collective level, non-medical data must also be considered. This is essential for preventive action to succeed. So I will attempt to highlight these non-medical aspects of cancer prevention so that they can be incorporated into the strategies. Even when effective medical means of controlling cancer exist - such as drugs, treatments, staff, etc. – strategies can fail if cultural, economic or social data is lacking. We must remember that it took two hundred years from the discovery of the smallpox vaccination until the disease was eradicated. Today, strategic issues remain complex, even for conditions on which a great deal of work is being done.

Disparities in incidence and socioeconomic inequalities

The incidence of mouth cancer is very unevenly distributed throughout the population. There are disparities within gender, region, generation and social group. We do not have figures on the incidence of mouth cancer by socioeconomic group.

For cancers of the upper aerodigestive tract (UADT), in France differences in mortality rate according to educational level are among the highest in Europe.

Rates per 100,000 people are as follows: primary school education only: 95/100,000;
secondary school education: 63/100,000;
further education education: 18/100,000.

The Relative Inequality Index (RII) is based on: i) social group by educational level at the time of the census (INSEE) and ii) mortality (as given by the CépiDc study). An RII greater than 1 means that the risk of mortality increases as the relative social level decreases. The RII measures the size of this effect.

The trend in RII for death from UADT cancer shows an RII greater than 6 for the period 1982-1988. Deaths per 100,000 people are almost ten times greater in men than women. There is a very marked difference in mortality rate between the north and south of France.

The reasons for these differences in mortality from UADT cancer are:

- unequal exposure to risks;
- unequal access to and use of care.

Unequal exposure to risks:

Inequalities in exposure to risk are seen for the major risk factors, smoking and drinking. Figures show that women aged 26 to 75 with at least 2 years of higher education and men with at least 4 years of higher education are less likely to smoke than non-graduates [INPES (National Institute for Prevention and Health Education) 2005]. Job seekers are more likely to smoke than people with jobs (women: 39.2% vs 29.6%, men: 53.2% vs 37.5%).

Daily alcohol consumption is twice as likely in men with no higher education than in men with at least 5 years of higher education. Daily alcohol use is 40% more likely among job seekers aged 35 to 59 and "at risk" drinking is 30% more likely (INPES 2005).

The increased exposure of disadvantaged socioeconomic groups to risk factors partly explains the increased mortality from UADT cancer, but not the scale of the increase. Thus this "social selection" by risk factor seems very likely to be aggravated by less use of medical care and greater difficulty accessing specialist care.

So inequalities in mortality (caused by increased risk and less treatment) increase the inequalities in incidence (caused by increased risk alone) but are rarely recognised.

Unequal access to and use of care

a. Access to primary:

There are many obstacles to accessing primary care. Some obstacles are cultural:

- poor preventive consultation habits;
- different priorities in life (job, housing, family relations ...);
- the "macho hero" factor when faced with pain or illness (being proud of never going to the doctor);
- social distance from healthcare professionals and institutions, which are seen as "moralising", "judgemental", etc.
- psychological obstacles: not seeking treatment due to poor self-esteem;
- fear of diagnosis

There are also financial obstacles:

- the initial outlay before reimbursement, and the proportion of expenses not covered by insurance;
- quality of social protection: people with no additional health insurance are three times more likely not to seek treatment;
- the complexity of access to free health care (CMU, AME): In France in 2006, 1.2 million people who qualified for universal health coverage (CMU) did not ask for it.

There are also geographical obstacles (in France, regional care provision does not correspond to demand or need) or obstacles related to refusal to provide care: In 2002, 35% of dental surgeons refused patients with universal health coverage (CMU) and 53% refused "AME" patients (Survey by Médecins du Monde, 2002, survey on CMU, 2006).

b. Access to secondary care

As for access to secondary care, several studies (cf. particularly P. Lombrail et al. 2004) show that between the first contact with the care system and specialist disease management, a further selection takes place, which is partly patient related (social and psychological factors) but also sometimes due to the complexity, lack of coordination, etc. of the health system. These elements suggest that, after diagnosis, patient support with social and psychological follow-up – especially for the most vulnerable – would be very useful.

What anti-cancer strategy?

Primary prevention is without doubt the main means of improving the fight against cancer. Tackling alcohol consumption is the first step, through different measures:

- the law against advertising alcohol ;
- information campaigns on alcohol during pregnancy;
- making alcohol an aggravating factor in crime;
- prohibiting the sale of alcohol in petrol stations;
- stopping "open bars" and "happy hours".

The other important step is tackling smoking, through different measures:

- reducing demand (price / taxing, prohibiting smoking in public venues, education / communication, limiting advertising, help to stop smoking);
- reducing supply (controlling points of sale, reducing access for minors).

Developing early detection is also a vital part of tackling oral cancer. It is important to note that late diagnosis is largely due to social and behavioural factors. The proportion of late diagnoses attributable to "first line" health professionals is not known, but nothing suggests that figures are large. This emphasises the fact that mobilising and educating dentists is necessary but not sufficient. It is also necessary to reach "at risk" groups (cf. the test carried out in the Paris region).

How to Improve Prevention and Early Detection of Oral Cancer?

Some suggestions for avenues to explore:

- greater involvement of general practitioners and occupational health practitioners (who have greater contact with vulnerable groups);
- the role that the National Health Insurance system could have in mobilising these two professional groups;
- social workers providing social and psychological support for patients after diagnosis;
- widespread information for the general public on mouth cancers.

Dr Rosemary ANCELLE-PARK
Ministry of Health, France

We shall now examine the secondary strategies against oral cancer, screening and early detection.

I. Screening

1. Definitions

Screening involves the use of a test, examination, or other procedure to detect a potential marker of a disease in an apparently healthy population. Nonetheless, a screening test is not a diagnostic test.

The test classifies the population into two groups, a group with the marker and a group without the marker. The group with the marker should be referred for further investigation to confirm or infer a possible diagnosis in order to receive proper treatment.

2. Indications for Screening Programs in General

Indications and principles for screening programs, applicable to all infectious or chronic diseases, were set by Wilson and Junger in 1970 and remain valid today.

According to these indications, the disease should be frequent or severe and should have a long enough preclinical phase to allow early intervention. Such intervention must be useful and effective. The perception of the screening program by the population must be favorable. Last, the program has to be cost effective.

3. Cancer Screening in Particular

The aim of a cancer screening program is the reduction of mortality. The program must be a continuous, long term endeavour due to the fact that its effects could only be established after a period of at least ten years.

The effects of cancer screening are not always beneficial. The program has to find a balance between the relatively large proportion of false positives and false negatives.

One shortcoming in cancer screening is the “lead time bias”, that is, an advanced diagnosis with no positive effects on mortality. Another limitation is the “over-detection bias” of cancers which would have remained latent had they not been detected by the screening program. It is important to take these biases into consideration when procedures are set up.

For each cancer anatomical location, therefore, it is important to assess the benefits and the possible harm and to find the adapted procedures according to the characteristics of the particular cancer and the screening age or the screening interval.

4. Screening of Oral Cancers

In the case of oral cancers, a systematic screening program is not the best solution. Screening targeted “at risk” populations by means of clinical examination in specialised settings would be a more efficient measure.

II. Early Detection of Oral Cancer

Early detection performed by dentists in the overall population is probably one of the best strategies to be adopted. The organisation and training of dentists is necessary but currently insufficient.

To avoid late diagnosis, there is a need for an increased implication of general practitioners and occupational physicians who are closer to vulnerable populations. After diagnosis, it would be desirable to provide social and psychological accompaniment of patients.

It is necessary to raise awareness about oral cancers in the general public and to provide information on early detection.

III. Conclusions

The priority to primary prevention is the major strategy to develop. It would be desirable to work with NGOs and to develop European collaboration to exchange experiences and develop guidelines in screening and early detection.

Part III: How Can We Work Together to Improve Prevention and Early Detection?

Chairpersons:

Professor Denis BOURGEOIS
Faculty of Dentistry, University Lyon 1

Marianne PERREAU-SAUSSINE
French National Cancer Institute (INCa), France

We are going to talk about public health measures for prevention and early detection of mouth cancers. We will look at the different tests done in European countries. However, it is difficult to follow all that is being done in Europe. The measures are very diverse, and deal with a wide range of aspects such as informing and educating professionals, raising awareness among the general public or the practical early detection in the highest risk groups. Each speaker will describe what is going on in their own country, the results obtained, the lessons learned and the outlook for the future. This is the way forward for learning from each other and perhaps harmonising action at the European level. Next autumn, the European Union will begin a cancer control programme based on real public health action. A Request for Proposals will be made and programmes drawn up. We will ensure that early detection of oral cancer has its rightful place in this.

Round Table: European Initiatives and Experiences

Dr Francisco RODRIGUEZ-LOZANO
Association of Dentists and Stomatologists of Spain
Member, Commission on Tobacco, Ministry of Health, Spain

As a dentist, I have been in close cooperation with the health authorities in Spain on tobacco matters for quite a while.

In our country, oral cancer has an incidence of eight cases per 100,000 inhabitants per year. Approximately half of the cancer cases are diagnosed in the advanced phases of the illness. Only between 30% and 50% of the cases survive more than five years after diagnosis.

How to Improve Prevention and Early Detection of Oral Cancer?

A rapid increase in the mortality of oral cancer was observed during the twenty-five year period from 1975 to 2000. Since 2000, mortality has increased at a slower rate.

In various studies, it has been estimated that the total delay in oral cancer diagnosis averages one and a half months. Due to access to state medical social security for all citizens in Spain, there is no scheduled delay.

Several studies have been carried out to investigate the attitudes and knowledge of dental general practitioners regarding oral cancer. Comparing the situation in 1997 and 2004, improvements were observed in the performing of biopsies as a routine diagnostic procedure, in the systematic exploration of soft tissues, and in warnings about alcohol and tobacco.

The number of biopsies performed in Spain may be the highest in Europe. Half of the dentists in the country are physicians. Due to their medical education, the physicians have a different approach to cancer issues than dentists who are not physicians.

Starting next year, it will be compulsory for every dental student to finish his dental studies with the competence to practice biopsies.

In 1985, the Dental Association sent a course book to all of the dentists in Spain on how to prevent oral cancer. In 2007, a biannual National Campaign to Prevent Oral Cancer was set up in cooperation with the Ministry of Health, involving the “Early Detection of Oral Cancer Course” for dentists and a “Clinical Guide of Reference” for the general public.

The Dental Association has also produced leaflets for patients and has a micro-site on its webpage to inform patients about prevention and warning signs of oral cancer.

A Reference Guide is in preparation with indications of the local maxillofacial services. Cooperation with these services will help avoid delays.

Denis BOURGEOIS

You mention initial and continuing education for dentists that is obviously very high quality. But young Spanish people are changing their smoking and drinking habits. What are the likely trends for the next few years? Will the same strategies continue to work? Do you foresee this change in behaviour leading to an increase of oral-pharyngeal cancers?

Francisco RODRIGUEZ-LOPEZ

I think dentists will be better prepared in these matters. In universities, future dentists are studying how to detect oral cancer. Habits are changing. The role of the dentist will be the same. Nonetheless, dentists need continuous education. If the patient receives the message that the visit to the dentist is essential and if he is informed about the signs and symptoms of oral cancer, detection will be earlier and prognostics will be better. In Europe, with its high level of health, citizens cannot accept delays.

From the floor

This is no doubt true for many countries, including France. However, I'd like to go back to certain points raised this morning. Firstly, biopsies must be performed by people, whatever their initial qualification, are specially trained and available when required. Secondly, harmonised terminology is absolutely vital. There must be reliable bases for comparisons. Oral cancers are not always classified as such. INCa has certainly done some work in this regard, but much remains to be done.

From the floor

I've worked in many countries, and I can confirm that the issues of reimbursement and access to care vary widely from one country to another. The detection measures envisaged today seem to depend on voluntary work by dental surgeons. Other avenues should be explored, particularly occupational health practitioners or school doctors. Simply sending patients to the dentist is not enough. This can be envisaged in France, where there is a satisfactory level of reimbursement, but would be much less effective in some other countries.

Francisco RODRIGUEZ-LOPEZ

It is important to recognise that dentists have the responsibility of transmitting oral health issues to the general public including warnings about the risks of tobacco and alcohol. We cannot charge for it. Oral cancer is a public health issue and the dental associations are part of the public health system. In Spain and in France, every citizen has medical social security. In Spain, due to collaboration with the maxillofacial services, there are no scheduled delays. Access to treatment is a challenging situation in Europe as there are many various systems in different countries. Treatment and diagnosis could become free of charge for all citizens in the future. Health is an essential value in Europe. We need to convey to our politicians that health must be a part of solving the current economic crisis. We cannot accept that the crisis could affect our health systems.

Professor Cansu ALPASLAN
Professor, Gazi University Faculty of Dentistry,
Department of Oral and Maxillofacial Surgery, Ankara, Turkey

I. The Cancer Registry and Incidence Project

Cancer occupies the second rank after cardiac diseases in the causes of death in Turkey. The Department of Cancer Control of the Ministry of Health launched the Cancer Registry and Incidence Project in 1992. Within the framework of this project, a cancer registry system in eight provinces representing the overall Turkish population was established. According to this Registry, oral cancer ranks twenty-first among all cancer types. This rank appears to be erroneous as tobacco smoking is particularly widespread in Turkey.

II. Main Actions toward Early Detection and Prevention of Oral Cancer

1. Insufficient Actions by the State and by NGOs

The educational activities of the Turkish Association for Cancer Research and Control, a non-governmental organisation, are confined to other cancer types. No national program for prevention and early detection of oral cancer has been launched and no prevention strategy has been developed as yet.

2. Actions Conducted Within the Dental Profession

The undergraduate dental curriculum in Turkey covers all cancers in varying degrees. Causes, prevention, diagnosis and treatment are taught in these courses. As a result of a study on the awareness of dentists on prevention and early detection of oral cancer, we can conclude that there is a problem for dentists in using the knowledge they acquired during their dental education in their professional life. On the other hand, recognition of precancerous lesions is favourably high and biopsy or referral is usually the preferred choice of dentists.

3. Continuing Professional Training of Dentists

A majority of the dentists in our survey indicated interest in continuing professional development courses on oral cancer prevention and early detection. There is no predefined regular program in Turkey on oral cancer for dental professionals.

It would be advisable for regular courses on oral cancer to be set up by the Turkish Dental Association for the professional development of dentists. Topics on oral cancers should be mandatory for dentists in such training programs.

III. Actions Aimed toward the General Public

Awareness of oral cancer in the general public is low. Close to one quarter of the participants in a study reported having never been to a dentist.

No plan of action has been set up for the general public, neither in terms of information nor in terms of screening. Expert opinions are published occasionally in daily newspapers or in magazines. There is no established protocol for the screening of oral cancer.

To reduce the risk factors, the Turkish government banned smoking in closed places last year, and will ban smoking in restaurants and entertainment places in the coming month.

IV. Conclusion

In Turkey, prevention and early detection measures are far below a desirable level. Oral cancer is a global health problem that should be handled on international levels. Turkey needs solid collaboration with all of the international organisations dealing with prevention and early detection of the disease. It would be desirable to plan European projects on these topics.

Julian FISHER, FDI World Dental Federation, France

Most of the speakers have said that education is not a problem. You mentioned that using the knowledge in professional life and transferring knowledge into action is what many professionals find to be the real challenge. Dr Hescot made some extremely good points this morning about the necessity of dentists becoming primarily educators. My question is, in the undergraduate curriculum, is the fundamental problem in *what* we are taught or in *how* we are taught to become educators in oral cancer prevention?

Cansu ALPASLAN

It is not on the issue of oral cancer but on everything in our daily lives. The educational system from childhood is oriented only to the accumulation of knowledge, not on the use of it. I do not know how to solve this situation. We use different methods of teaching but should also provide students with training in using knowledge in clinical settings. That is why we included some practical assessment criteria in oral surgery clinics. We insist on having students make oral mucosal examinations and to get into the habit of performing examinations.

From the floor

I would like to come back to the issue of the practitioner. The patient report drawn up during consultation ought to appear in administrative records. We need to envisage positive, validated, if not remunerated measures if we want to guarantee that practitioners are really involved in prevention. Health service structures need to be able to document practitioner examinations. The health service in France is slow to change. So it is important to work at this very early in our discussions.

How to Improve Prevention and Early Detection of Oral Cancer?

Cansu ALPASLAN

Thank you for the appreciation.

From the floor

It is also important to look at the legal aspects. Could patients sue for faulty diagnosis?

Francisco RODRIGUEZ-LOZANO

I am surprised to hear this. I think it is absolutely essential for dentists to know about oral cancer. Dentists know how to watch mucosa and need to be competent in performing biopsies. The campaign in 2007 was very positive for the dental profession. Within a short time frame, the population became aware of the importance of dentists and realised that dentists deal with important issues for overall health. We have an agreement with the Ministry of Health and have drawn up a referral guide. We have established a group of experts from several universities and dental societies. Dentists are coming to our courses.

From the floor

When I see patients for the first time, I always examine them for at least an hour, sometime ninety minutes. This is my personal practice, and not all dental surgeons do this. Others only treat the patient's current dental problems. This type of practitioner runs a "fast-food" equivalent of dentistry. What might the legal responsibility be for this second type of practitioner?

Marianne PERREAU-SAUSSINE

I believe that this question goes beyond the scope of our debate today.

From the floor

There are major differences between countries in Europe. For example, what is the mortality from epidermoid carcinoma in Spain or Turkey? Are things very different in these countries?

Cansu ALPASLAN

There is not sufficient data at the present time to make a comparison or to draw conclusions.

Francisco RODRIGUEZ-LOZANO

I do not know the data in Turkey. In Spain, in the last five years there has been a spectacular rise in mortality due to oral cancer. It is increasing in women, probably due to tobacco. As a result of the public awareness campaigns, we expect diagnoses to be earlier. In Spain, dentists come from medical backgrounds. Only a few years ago, all dentists were physicians. Training in oral cancer

has always had to be a part of dental training. In the universities we always keep cancer pathologies in mind. That is why Spain is the European country in which dentists practice the highest number of biopsies. Unfortunately, we also have unfavourable figures, as we are discovering more cancers in the third and fourth stages. We need to have the population come to see the dentists more often so that we can detect the cancer at early stages. The aim of this conference is to pass the message to the general public: "Go see the dentist soon". It must be compulsory for the dentist to be able to do the work of detection.

Christophe LEMON

As a dental surgeon, I believe that this approach will soon become an automatic. However, if we want to guarantee this result, dentists need real support. At the moment the major problem for dentists is not so much diagnosing a cancer as knowing where to refer patients. This is what we need to work at. Is anything being done at the European level?

Marianne PERREAU-SAUSSINE

We mentioned what is being done in France this morning.

Cansu ALPASLAN

It should be the responsibility of dental associations in each country, in cooperation with universities, to guide the dentists by setting up a strategic plan and by organising regular courses for the continuous professional development of dentists.

Dr Jacques WEMAERE

General Secretary, Union Française pour la Santé Bucco-Dentaire (UFSBD), France

I am going to describe strategies developed by the French dental profession with the support of INCa and the Ministry of Health. It is important to note that the issue of mouth cancer is treated collectively by our institutions.

It is very complicated to try to put figures on mouth cancers. 12,270 cancers of the lip, mouth cavity and pharynx have been recorded in France. However, no data are available for mouth cancers alone, and these are estimated at 7000, causing 4000 deaths in 2005. France has the highest standardised incidence rate for mouth cancer, with 21.8 per 100,000 men affected. The survival rate is only 34%, and it has improved little over the past 30 years. Large differences are observed within Europe, particularly between Portugal and Spain, but also within countries. North and northwest France have a far higher concentration than other regions. At the moment, incidence is decreasing in women, but increasing in men. Oral cancer affects a wide range of people, not only smokers and drinkers.

Dental surgeons have been working on this issue for several years. There have been different initiatives in the last five years. 500 practitioners answered one questionnaire. They felt they had insufficient education on the matter. In 2008, an e-learning module for dental surgeons was set up on the Internet. It lasts 3 hours, and can be used at home. Alongside this, training courses are offered on primary prevention and early detection of precancerous lesions. A book has also been published on the subject. We should recognise the work that experts have put into all this.

The educational website is open to the general public. It was started in 2008, and lists risk factor, gives epidemiological information, describes elementary lesions and shows several case studies that be can used for diagnosis. Learning can take place gradually in one or more sessions. Exercises can be repeated to improve the training.

Work on prevention and early detection will continue in 2009 with education programmes for healthcare providers. Scientific appraisal will help improve knowledge. Other initiatives will work towards informing the general public and setting up specific projects for groups at risk. Today, the priority target is still the dental surgery. Everything must be done to enable dentists to deal with oral cancer. So, obviously, dentists had to be made aware of the issue and educated further, before patients were encouraged to visit the dentist. Information about the e-learning programme was sent by post to all dental surgeons in France. There were almost 1000 visits to the site each month in March and April. An assessment will be done at the end of the year. In 2009, flyers will be available in waiting rooms to inform the public. The World Day of oral and dental health will be held on September 12, and this year's theme is oral cancers. We will launch a huge information campaign for this. Strategies also need to be developed for healthcare providers other than dentists. Multi-disciplinary discussions need to be encouraged. A second version of the e-learning site should also be available for general practitioners.

For primary prevention, it is also important to develop the role of dental assistants, who could discuss smoking and drinking issues with the patient. These strategies will continue to be developed in 2010 and 2011. Since risk factors are concentrated in certain target populations, we have developed a pilot study with INCa at centres for treating alcoholics in the Paris region. These patients will be offered comprehensive clinical examinations, and will be referred to specialists. Consensus across the disciplines remains the best guarantee for success.

From the floor

I see that you have carried out numerous actions directed toward dental surgeons. The modules are impressive. Do you have a strategy for making sure that dentists are using the modules and for broadening their use?

Jacques WEMAERE

This is a very recent development that only started six months ago. We do not yet have enough data to assess the effect. The e-learning module alone will doubtless not be enough. Face-to-face training days will also be needed. But we will assess the results at the end of the year. Information in the professional press will encourage dentists to use the module.

From the floor

Jacques Wemaere has highlighted the need to educate dentists, in terms of both initial and continuing education. However, patient psychology is still a major obstacle. Patients are afraid of the diagnosis, but practitioners have in training on this field. A solution needs to be found, because this problems delays disease management.

Jacques WEMAERE

That is an important point. We want to include training on psychological support for the patient when communicating the diagnosis. We may develop an e-learning module on the subject on the Internet.

Dr Otilia LOPES **Faculty of Dental Medicine of Porto, Portugal**

Portugal has not acquired much experience in the improvement of the early detection of oral cancer. My objective today is to present the impact of oral cancer on the Portuguese population, the actions undertaken by the government and by the Portuguese Dental Association, and the actions in which I participated.

I. Impact of Oral Cancer on the Portuguese Population

The data published in May 2008 in the National Oncologic Register demonstrate the impact of oral cancer on the Portuguese population indicating the incidence in 2001. This information is a starting point for the development of prevention strategies.

Incidence of oral cancer is much higher among men than among women. The mortality/incidence ratio is also higher for men (51%) than for women (38%), but for both genders the number of new cases is highly superior to the number of deaths from the disease. We can conclude that prevention measures have not been efficient.

Through the data on new oral cancer cases registered by age brackets, it can be seen that the incidence increases with age. Considering age 20 as a starting point, we need to focus the primary prevention strategies on children. Specific prevention strategies need to focus on alcohol and tobacco, the major risk factors.

The disease starting age is also important to determine the secondary prevention, early detection. Screening, regulated by specific criteria, needs to be based on high risk populations.

It can also be observed that, by histological classification, squamous cell carcinoma is the most frequent type of oral cancer in Portugal.

II. Main Actions against Oral Cancer

1. Actions Aimed Toward Primary Prevention

The main actions aimed toward the general public include a program against tobacco addiction initiated in 2007 and culminating with a law banning smoking in public areas. A project with the National Health Organisation published a document entitled “Tobacco Cessation – Program – Type of Action.” A National Oncologic Plan has been set up stating its priorities in prevention, oncologic records, screenings, integrated treatments, investigation, and education.

2. Actions Conducted Within the Dental Profession

The Portuguese Dental Association has set up programs on tobacco cessation, including the Work Group on Tobacco and Oral Health. The Association also participates on the National Tobacco Addiction Council.

The Dental Association, in conjunction with the dental universities, has organised conferences, continuing education programs, and workshops for dental professionals on the role the professionals can play in early recognition of oral cancer.

Dr Sue GREGORY
Deputy Chief Dental Officer, Department of Health, United Kingdom

I would like to present the state of the art of oral cancer prevention in England.

The crude rates for new cases in oral cancer in 2005 show 10.2 per 100,000 in the population for males, 5.3 for females, and 7.7 for both genders combined. A 34.1% increase is observed in the incidence rate over the ten year period 1995 to 2005. That is why we are concerned about primary prevention in England.

I. Main Actions for Early Detection and Screening

1. Maximum Two-Week Waiting Period for Biopsies

A major step has been the regulatory requirement setting two weeks as a maximum waiting period for an urgent referral for any suspected cancer to the date first seen in biopsies by a specialist. This has a tremendous impact in terms of the time lapse between a primary care practitioner identifying an issue and the patient having the beginnings of a definitive diagnosis.

We agree that the biopsy must be performed by the person with the skills, being either the oral surgeon or the maxillofacial surgeon.

2. Pilot Projects in Oral Screening

Two pilot projects have been undertaken to observe targeted screening of particular communities, one in the North of England, in Newcastle and Gateshead, and the other in a deprived area of London, Tower Hamlets and Newham. The projects were designed to increase knowledge of the early signs and causes of oral cancer among defined target groups. The projects also intend to increase awareness of actions that can be taken to detect the disease early and to influence attitudes towards early presentation to dentists.

3. National Program for Oral Cancer Control

We need a national program for oral cancer control. A paper is in preparation to the National Screening Committee in order to discuss targeted screening.

II. Professional Education

A considerable amount of action has been taken for professional education. One of the most important ones is the Computer Assisted Learning (CAL) package. It is available online. It provides details as to how to carry out a quality oral health examination for oral cancer. It also promotes oral cancer examinations at every dental visit.

III. Primary Prevention Initiatives

A primary prevention initiative is the toolkit entitled “Delivering Better Oral Health”, distributed to every dental practice in England. It is based on a common risk factor approach. The document includes a series of tables defining the advice to be given to a patient around the issues of risks. It goes on to describe all of the protective measures one would expect a dental team to undertake and includes sections on diet and oral health, hygiene, alcohol use and misuse, and smoking.

Initiatives for informing the public about signs and symptoms of mouth cancer have been created, including a “Mouth Cancer Action Month” and a Helpline. In support of the national initiatives, numerous local initiatives by maxillofacial surgery departments have taken action, including open access screening. Posters have been distributed to enable specific communities to understand what oral cancer might look like.

Julian FISHER, FDI World Dental Federation

Do you have any information, evaluation, or experiences about how effective dentists are in transferring and educating patients?

Sue GREGORY

No evaluation has been carried out so far. We are about to start evaluations on the targeted screening programs, and they will include that information. It is work that we need to do more widely to understand the effect that dentists have in this situation.

Julian FISHER

Dr Seeberger made an excellent point regarding oral health consultants. Do you feel that the general public perceives the dentist as a specialist in treatment and that the education should come from another member of the dental team, or do you think that the dentist should be the primary educator?

Sue GREGORY

It is a team approach. The other members of the team of dental care professionals support the dentist. Clearly, the dentist carries out the full oral health assessment and determines whether there is an issue. If one is detected, the team is equipped to deal with the concerns of patients. If the dentist detects that a patient has significant risk factors but no physical concerns in the mouth, it would be fine to pass the situation on to other members of dental team to provide a primary preventive message. The matter is about using time and skills as well as possible.

Julian FISHER

Regarding continuing education, do you find that dentists are being educated in a way that makes them effective communicators when they leave the dental university, so that continuing professional development can be carried out on a good basis?

Sue GREGORY

Communication is a fundamental part of the undergraduate training in England and elsewhere. It is one of the areas that effect outcomes. That is one of the reasons for using other members of the team who might be better at communication. Changes have been made in the contract for general dental services with an addition of a significant preventive element.

From the floor

Can you give us details of the future plan for the early detection of oral cancer?

Sue GREGORY

The plans for prevention and early detection are in the paper that is going to the National Screening Committee. We have to wait to see the outcome to see if we are to go forward with targeted screening.

Dr Bartolomeo GRIFFA
Associazione Nazionale Dentisti Italiani (ANDI), Italy

I. The ANDI Oral Cancer Awareness Campaign

In Italy there is a significant lack of communication between the population and the dentists regarding oral cancer. In 2007, we tried to make up for this deficiency by launching the ANDI Oral Cancer Awareness Campaign.

The Campaign is a three-year nationwide public operation to boost public awareness about oral cancer and to spotlight the dentist's role in helping to prevent the disease.

Information about the Campaign was diffused by media presentations in the press, in nationwide television, through billboards and through leaflets in dental offices.

The mission of the Campaign was defined as to show the importance of early detection and the necessity of regular dental check-ups and to provide general information to the public on prevention and detection of oral cancer.

II. The ANDI Oral Cancer Public Service Campaign

In October 2008, ANDI promoted the Oral Cancer Public Service Campaign:

- 13,000 private practicing ANDI associated dentists offered free oral cancer screenings to promote patients' health.
- 86 town squares were set up with billboards and gazebos in order to inform the public about oral cancer.
- 60 public health dental centres supported ANDI dentists.
- Presentations were broadcast on television and in local and national magazines.
- Advertisements were diffused on the internet.
- A press conference was held at Expodental, the largest dental fair in Italy.

III. Questionnaires

Questionnaires were distributed to the public, inquiring about oral examination habits, knowledge of oral cancer risk factors and about dental visits.

The conclusions of the study recognised the need for improved education regarding oral cancer.

IV. The Patients Help Project of 2009

The mission of this project is to recognise that prevention is intended to save lives.

- ANDI helps prevent “patient delay” with a free simple oral diagnostic DVD entitled “You can very easily watch yourself in a mirror”.
- A toll-free Helpline has been set up providing information on detection and referrals to local dentists.
- A 60-minute film “Mouth of Life” has been broadcast in cinemas, on national television channels, and on wide screens in railway stations.
- “Mouth of Life” advertisement is circulated through billboards, leaflets, magazine articles and on our website.

V. Oral Pathology Training

ANDI offers its associated dentists free access to the ANDI e-learning training centre to test and improve clinical know-how in oral cancer and oral pathology.

Pr Matthias FEICHTINGER

Department for Oral and Maxillofacial Surgery, University Clinics, Graz, Austria

I currently work at the Maxillofacial Department in Austria. I wish to shed some light on early detection and prevention of oral cancer as seen by a maxillofacial surgeon.

I. Incidence Rates and Mortality Rates

I would like to present a few statistics from the Austrian Statistics Institute collected in March of this year indicating the incidence of oral cancer in Austria from 1983 to 2008. For men, the incidence increased slightly over the twenty-five year period whereas the incidence of oral cancer in women nearly doubled. Moreover, the risk of developing oral cancer over a lifetime doubled.

Among men, mortality rates for oral cancer remained relatively stable over the period, whereas mortality rates for women almost doubled.

II. Incidence of Oral Cancer According to State of Tumour

Data collected between 2004 and 2006 indicates the stages at which the carcinoma was diagnosed. Carcinoma In Situ, when it would be desirable to make a diagnosis as treatment would be easy, represents only 1.2% of the tumours diagnosed. Seventy per cent of the carcinomas are diagnosed at a progressive stage where treatments are relatively complicated and necessitate reconstructions. The data reveals a complete failure of early detection and prevention in Austria.

III. Developments Since 2006

In 2006 there were 52 patients at our Department in Graz. The number increased by approximately 30% within two years. We now have 88 patients for which 77 cancers are treated with an operative intervention. Two years ago, 80% of the patients were male, and now the gender ratio is almost equal.

IV. Why Screening Programs Do Not Work

We do not have screening programs in Austria. The prevalence of oral cancer is among workers and farmers from the countryside who only consult a dentist or a physician if they can no longer work. They cannot work if they cannot eat, that is, if they have a carcinoma that has already spread in the oral cavity.

V. The Central Register of Oral Cancers

Germany, Austria, and Switzerland have created a Central Register for Hospitals for Documentation of Head and Neck Cancer (Dösak) for the recording, assessment, correction, management and statistical analysis of patient data. For patients presenting tumours of the lips, oral cavity, and pharynx, the data is divided into primary documentation (pre-therapeutic) and consecutive documentation (post-therapeutic). However, this register has no bearing on prevention.

VI. Actions for Prevention

The awareness of oral cancer in Austria remains extremely low. Until a few years ago, dentists were basically restricted to dental treatment. No nationwide prevention program among dentists is being planned.

The Bologna 1999 educational reform has led to a reduction in the training of maxillofacial surgery in Austria. The outcome is disastrous. Dental students are taught the right things in the wrong way.

VII. Conclusion

The dental profession is a difficult and serious profession. It is not about losing teeth. It is about losing life.

Many people will never be reached in screening programs. The best prevention is education which must start from early childhood in the family and in schools. It is essential to raise awareness in the population about the oral cavity.

From the floor

I have a question for Dr Wemaere about e-learning. Austria has highlighted that it has little in the way of continuing education for dentists. Do you include an element on your website to develop

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learning with regards to oral cancer awareness and education that could be used on a pan-European level? Do you have something you are piloting on your website in the French sector?

Jacques WEMAERE

We based ourselves on the UK experience when we created this. Today our concern is to try to get the existing tools used at the European level.

Marianne PERREAU-SAUSSINE

We have already approached the WHO to get the module translated for French-speakers. Access can be made even broader. A CD-ROM is available, as well as the Internet version. Each participant has received a copy.

From the floor

Many of the measures revolve around the involvement of dental surgeons. However, in the control of other forms of cancer, patient support groups are also very involved. Unfortunately, at present, no such groups exist for mouth cancer. As and when groups emerge, it will be important to include them in our preventive action, as INSERM recommends. Another point: we need to distinguish between telling patients they need a biopsy and giving a definite diagnosis, which is not in fact the remit of the dental surgeon. The doctor's surgery is the only place for this.

Marianne PERREAU-SAUSSINE

Your question is one we have often discussed with other experts. Since the "Cancer Plan" was developed, "diagnosis communication" visits exist in all oncology centres. A doctor, nurse and psychologist are all present when the diagnosis is communicated. Optimal conditions are needed for telling someone they have cancer, and this takes time to set up. Dental surgeons sometimes have to diagnose cancer. We are working on ways of helping them answer questions from worried patients.

Denis BOURGEOIS

What happens in other countries?

Sue GREGORY

In England, the dental surgeon would not reveal the result of the biopsy. That would be the job of the multi-disciplinary team within the hospital. As soon as a dentist suggests he is referring someone about a concern, the patient is already worried. It is important at that point to have good communication with clear, correct information. It is also essential not to raise unnecessary concerns.

Francisco RODRIGUEZ-LOZANO

In Spain, there are no problems on this issue. It is up to the dental health professional. If I communicate the results of a biopsy to some patients, there is no problem. If a dentist feels he cannot manage the situation he can leave it to another professional. There are no laws on this matter.

Sue GREGORY

The difference is that our biopsies are all done in a hospital situation. It is not the dentist who takes the biopsy.

Otilia LOPEZ

In Portugal it is the same as in Spain. It depends on the clinic. The clinics that feel competent to do the biopsy and who do the diagnosis are going to communicate to the patient. Some health professionals send their patients to the universities where there are services competent to carry it out.

Bartolomeo GRIFFA

Communication for us in Italy is the most important thing that we can do for our patients. We have to prepare our colleagues because there is unfortunately a lack of preparation about oral cancer. The new generation of colleagues is very well prepared but not the old one.

Denis BOURGEOIS

Perhaps the time has come now to talk about avenues we could explore together, or any weak points in our measures.

From the floor

We have talked about teamwork, working across disciplines and improving service to the patient. Networking must also be developed. A key element is obviously good interconnections between the dental surgery and final patient management.

Bartolomeo GRIFFA

We try to create a network with all the disciplines that are involved in oral pathologies. We work with maxillofacial surgeons, with oto-rhino-laryngologists, and with dentists. It is important to have a multidisciplinary in the work and to create a network involving all of the disciplines.

Francisco RODRIGUEZ-LOZANO

This is a very important point. We have improved our cooperation with the maxillofacial services during our campaigns. Dentists usually have a maxillofacial service that they know well. Sometimes there are bureaucratic problems because dentists work mainly in private practice. It is important to improve the link between private practice and the maxillofacial services. When you are dealing with cancer, it is important express very clearly to the patient that he must act quickly.

From the floor

In terms of primary prevention, a speaker said that dental surgeons must "take their place" in the measure, but not "take up the whole place". Primary prevention is everyone's job, so obviously dentists must participate. Ordinary oral hygiene products could carry a simple prevention message: "Smoking and drinking alcohol can cause mouth cancer. Talk to your dentist about it."

In addition, in France, 70% of cancers are detected in advanced stages, and 20% in early stages. Precancerous lesions are only detected in 10% of cases. Therefore seven times out of ten, it occurs too late. So secondary prevention needs to be at the sub-clinical stage. At the same time, we need to prevent cancer centres from becoming saturated, which could occur with mistaken diagnoses of lesions. Dental surgeons must have the necessary skills to make a reliable diagnosis and not refer healthy patient to oncology centres. They must have good reasons for referrals to specialised centres.

Concerning biopsies, the question of whether or not a dentist can perform biopsies is secondary. Communicating a cancer diagnosis is very difficult, and has very serious consequences. Dentists who feel capable of doing this would first need to become familiar with current practice in cancer centres. Others could refer their patients to competent institutions.

From the floor

One speaker emphasised the lack of patient support groups for mouth cancer. This is a very important factor. The level of funding and research efforts for a particular disease is directly proportional to the amount of social demand from pressure groups. This is one of the difficulties in fighting mouth cancer, despite the fact that it kills as many people as melanomas or cancer of the womb. It's true that most of the people affected by oral cancer are out of reach of the media and spheres of influence. However, we need more information for the general public on the subject. Health system user groups could help us in our efforts.

Vinod JOSHI

I am the Chief Executive of the Mouth Cancer Foundation. We are a patient focused charity. Our basis is patient advocacy and mouth cancer awareness. I would like you for a moment to start thinking in terms of what the patient would like. He would like to have his biopsy done by someone who is competent and who does biopsies most of the time, not someone who sees one or two patients for a biopsy in a year or in a lifetime. He also wants to have his diagnosis given to him by someone who can give him advice on what might happen next. It should be done in a proper setting by people who have been trained on how to break the news.

Francisco RODRIGUEZ-LOZANO

What I wanted to say is that it is up to the dentist or the health professional. I consider myself competent to tell my patients because I have a special relationship with them. It should depend on each individual situation. It would also be desirable to have a reference guide for dentists.

Otilia LOPES

The Portuguese Dental Association promotes numerous educational programs to dental professionals. The dentists frequently express that they do not feel competent to perform biopsies. We try to communicate to them that primary prevention is not only biopsy. Early diagnosis is most important. However, we also feel that when they are confronted with a suspicious lesion, they prefer sending the patient either to a university centre or to a public institute. In Portugal, there is no link between private oral health and public institutions. As a result, dentists are often afraid that they cannot guide the patients correctly.

Denis BOURGEOIS

All countries seem to have developed e-learning tools. I'm sure it would be good to put the different programs together and assess them. Several countries don't have the means of developing several programs, so it is important to use the best of them.

Perspectives and Conclusions

Dr Patrick HESCOT
President, European Regional Organisation (ERO)
of the Fédération Dentaire Internationale (FDI)

This seminar has helped us identify many important points that I will list. They will help us draw up a strategy and envisage actions that we can undertake together.

We all agree that we need a comprehensive approach to the issue of mouth cancer. This means we will have to work across the disciplines and each group must be able to get involved. Before drawing up a strategy, we need to define a general goal, a specific goal and a measurable target to reach. With these three things, we can identify the actions needed, and assess them later.

We know our first target: it is the general public. We must not limit ourselves to the groups at risk. Anybody can get mouth cancer. So the strategy should first encourage education and primary prevention for everyone. It is always possible to act indirectly. When family, friends, committees and social circles are informed and educated, they can reach an otherwise inaccessible target. The group at risk is the second target. Practitioners usually reach these groups very late. We need to develop targeted and specific education for this group, which will not be the same as that for the general public.

But several things need to be done before that. For public health issues, we always need to advance in stages, with a strategy over several years. We all agree on the urgency of the situation and the need to act rapidly. But to be effective, we need to act with method. In particular, we need to act higher up in the chain, with dental surgeons. Some speakers today have mentioned professional associations, others have not. However, it really is up to us, as associations of health professionals, to take charge of this whole subject for all partners, health professionals, governments, funders and civil society. We need to speak loud and clear of the importance of this public health issue and the need to find a solution. Without the associations, all the measures would be doomed to fail. In the UK, because there are no links with these associations, things are going badly.

Associations must also help to define the role of dental surgeons better. They need support to move towards a new role and to help them get out of the mindset of simply curing disease. Education is the most important component here. Dental surgeons will have to support education more than they do at present. We also need to envisage that the dental profession itself will change, and the immediate effect will be to include the control of oral cancer. Dentists must be educated to do this right from their initial education and through continuing education during their working life. They must be able to help patients improve their quality of life. Often patients have real problems with their mouth and teeth which affect their comfort, well-being or ability to chew their food.

Health professionals need to work more closely with dentists so that dentists can fulfil their role properly. All health professionals must be equally involved in this cross-discipline issue. Governments and funders must also play their part. They cannot expect dentists to take on the whole responsibility for the measure. Dental surgeons must be recognised in their new role. At present, road accidents cause the same number of deaths as mouth cancer, but there is no comparison between all the measures for accident prevention and measures for preventing mouth cancer. We can no longer tolerate the way governments are doing nothing about this. Medical

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associations must make them aware of the situation. Dental surgeons must be recognised for the work they will do. They must get some financial compensation.

And patient support groups are extremely important. They are the ones who tell us the felt needs of patients, and this is the real object of all our care and attention. So Patient Groups are indispensable. They must also contribute to discussions. In France, the National Cancer League does a lot of work for this.

Now we need to create a strategy for the role that dentists will have in controlling mouth cancer. And the FDI will go much further than making declarations on principles, it will work at a practical strategy so that each country can contribute to finding solutions. We don't want to produce disembodied rules. Rather, we want to produce guidelines that each country can follow as applicable. To do this, we need to work together and harmonise our experiences. It would be a shame to "reinvent the wheel", and duplicate work already done by others. Now we need to assess experiences, results and use of the tools that exist and create something that all countries can use.

We will have campaigns to promote the tool. Promoting dental health is vital. A major initiative will be launched on the world day of oral and dental health on September 12. In France this year the main thrust will be mouth cancer. The strategy will be constructed step by step. We must not launch public campaigns before the dental network is properly prepared and ready to meet expectations and answer worries. The network must get everyone involved around a common cause, so that patients can always find a competent health professional to help. A chain has to have many links. And a chain is only as strong as its weakest link. So in a network, everyone needs to work together.

You can rest assured that there will be further action after today's seminar. It will help us start practical actions. My hope is that, on leaving this room, each one of you will begin to act.