

**The Inaugural All Island Meeting on  
the Public Dental Services**

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The Society of Chief and Principal Dental Surgeons of Ireland  
The Dental Directors Northern Ireland Public Dental Services  
Dental Health Foundation, Ireland

# The Inaugural All Island Meeting on the Public Dental Services

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## PREFACE

Dental services on each side of the Border have much to learn from each other. The environment, structures and resources used North and South have been quite different since the 1960s and as a result we have tackled some fundamental dental problems in very different ways. The success or failure of these strategies provide useful lessons for everyone in the field of public dental health.

As a Principal Dental Surgeon working in the North Western Health Board , I have been involved in cross-border public dental health work with colleagues in the Western Health and Social Services Board (WHSSB) since 1997. This work has led to developments which neither side could easily have managed on its own. As an example, data analysis tools developed for School Dental Inspections initially by Stephen Brightman in Donegal and Diarmuid O'Donnell in Derry have been combined, refined and expanded in this collaboration. This package currently forms the basis for a pilot project involving community dental practice in the Republic, Northern Ireland and Scotland. Similarly, excellent oral health promotion projects developed and evaluated in the WHSSB are currently being applied in Sligo, Leitrim and Donegal.

In the early 1990s, a conference took place on cross-border dental public health. This was organised, perhaps not co-incidentally, by my predecessor in Sligo, the late Dr. Paddy Dockry, and the then Principal Dental Surgeon for Donegal, Dr. John Murray. No attempt was made at that time to set up any formalised structure for ongoing contact.

In 2000, the Society of Chief and Principal Dental Surgeons invited colleagues from the public dental services in Northern Ireland to a scientific course run by the Society, with a view to exploring the feasibility of cross-border co-operation in public health dentistry. As a result of this and a subsequent meeting, it was decided that a major symposium be held to bring all those interested in the management of public dental services together, with a view to putting in place a structure for ongoing collaboration. The “volunteers” to take this forward were Dr. Judi McGaffin, Director of Dental Services with the WHSSB, and myself. This is a report on the scientific presentations made at that symposium.

In order to attract top quality presenters, Judi and I sought the advice of the Dental Health Foundation, Ireland's Executive Director, Deirdre Sadlier. With the support and expertise of the Foundation, we were able to obtain the services of Dr. Brian Gaffney, Professor Mike Lennon, and Dr. Bob Mecklenberg. Their respective topics of general health promotion, water fluoridation and issues around tobacco provided a wide and thought-provoking agenda for the day and beyond.

And so the Inaugural All Island Meeting on the Public Dental Services came to be. While it is “Inaugural” in the sense that it is the first of a planned permanent series, the plaudits for the first initiative in this area must remain with the pioneers of the previous decade. For the current project, the aforementioned work of Deirdre and Judi were central to its success. I must also mention the support received from the Chief Dental Officers, Department of Health and Social Services, Dr Doreen Wilson and Dr Gerard Gavin, of the Department of Health and Children and the Chair of the Society of Chief and Principal Dental Surgeons, Dr. Dan O'Meara, in whose bailiwick of Mullingar the meeting and symposium took place.

**Joe Mullen**  
**Principal Dental Surgeon**  
**Sligo-Leitrim**

## PROFILE OF SPEAKERS

### **Dr Brian Gaffney**

#### **Chief Executive of the Health Promotion Agency, Northern Ireland**

Dr. Brian Gaffney began his medical career in Dublin where he completed his primary degree. Following training in both Northern Ireland and England he was employed as a General Practitioner in Downpatrick, Northern Ireland. Dr. Gaffney then took up a lecturing position in Belfast at Queen's University Medical School. Following this teaching position, Dr. Gaffney became a Consultant in Public Health Medicine for the Eastern Health and Social Services Board, Northern Ireland. In 1996 Dr. Gaffney was appointed Chief Executive of the Health Promotion Agency for Northern Ireland. Dr. Gaffney's specialist research interest is the field of cardiovascular disease.

### **Professor Michael Lennon**

#### **University of Liverpool**

Professor Michael Lennon completed a BDS at the University of Liverpool and a DPD at the University of Dundee. He also holds a FDS RCS from the University of Edinburgh and a MDS from the University of Manchester. In 1989 he became Professor of Dental Public Health at the University of Liverpool. Professor Lennon is an Honorary Member of the Faculty of Public Health Medicine of the Royal College of Physicians (1996), and a member of the Medical Research Council's Working Group on Fluoridation. He is also Chairperson of the British Fluoridation Society and the Oral Health Task Force, North West (NHS) Regional Executive.

### **Dr. Robert Mecklenburg, D.D.S., M.P.H.**

#### **National Cancer Institute, United States of America**

In the 1980s Dr. Robert Mecklenburg participated in the first Surgeon General's report on The Health Consequences of Using Smokeless Tobacco when he chaired the committee on Non-cancer Oral Effects of Tobacco. In 1991 Dr. Mecklenburg was one of the co-organisers for the first International Conference on Smokeless Tobacco or Health. For the second conference, held in 2000, he served as the chairman. Dr. Mecklenburg currently serves as the Coordinator, Tobacco and Oral Health Initiatives for the Tobacco Control Research Branch at the National Cancer Institute. From 1990-1999 he served as chairman of the principal dental coalition on tobacco issues, the National Dental Tobacco-Free Steering Committee. Dr. Mecklenburg has also represented the dental profession on the expert panel of the Agency for Health Care Policy and Research. This panel developed clinical practice guidelines for smoking cessation originally released in 1996 and revised in 2000 as a U.S. Public Health guideline entitled *Treating Tobacco Use and Dependence*. Dr. Mecklenburg is committed to promoting the greater involvement of health professionals in the creation of a tobacco-free society.

## WELCOME

**Dr Joe Mullen**

**The Society of Chief and Principal Dental Surgeons of Ireland**

Dr Joe Mullen welcomed all those attending the Inaugural All Island Meeting on the Public Dental Services. He told how in May 2001 the Society of Chief and Principal Dental Surgeons of Ireland issued an invitation to Senior Dental Managers in Northern Ireland to attend a symposium being hosted in Athlone. The symposium was regarded as an outstanding success. Feedback from participants indicated that the symposium provided a unique opportunity for dental health professionals on either side of the border to share experiences. On the strength of this feedback, the Society approached the Dental Health Foundation seeking support for the Inaugural All Island Meeting on Public Dental Services. The response from the Dental Health Foundation was extremely positive and the possibility of future symposia would be discussed at a business meeting, to be held on the day following the Inaugural All Island Meeting, and all were welcome to attend.

Dr. Mullen concluded his welcome with a brief outline of the day's proceedings. Introducing all three speakers, Dr. Gaffney, Professor Lennon and Dr. Mecklenburg, Dr. Mullen commented that the calibre of speakers bode well for future symposia.

## INTRODUCTION

**Mr Chris Fitzgerald  
Principal Officer  
Health Promotion Unit  
Department of Health and Children, Dublin**

Mr. Chris Fitzgerald extended a warm welcome to all those attending the Inaugural All Island Meeting on the Public Dental Services. He commended the organising committee for initiating an All Island symposium and hoped that this would result in greater cohesion in planning, policy and service delivery developments in public dental health. In particular, the Dental Health Foundation was commended for their facilitation of the symposium. Noting the broad spectrum of interests being represented at the meeting, from those employed in dental health services to those working in the health promotion field, Mr. Fitzgerald concluded his introduction by commenting that such collaboration boded well for the future developments of public dental health services in Ireland.

## **Dr Brian Gaffney HEALTH PROMOTION: A CHALLENGE FOR DENTAL HEALTH SERVICES?**

### **The Challenge**

Dr. Gaffney began his presentation by thanking the organising committee for inviting him to speak at such a prestigious and innovative symposium. Observing the title of his presentation 'Health Promotion: A Challenge for Dental Health Services?' Dr. Gaffney drew the audiences' attention to the question mark at the end of the title. The question mark reflected Dr. Gaffney's own dilemma as to whether health promotion is or is not a challenge for dental health services. Only those working in the dental profession can, according to Dr. Gaffney, answer this question. Dr. Gaffney acknowledged that in his role as Chief Executive of the Health Promotion Agency Northern Ireland, and speaking on behalf of Chris Fitzgerald his counterpart in the Republic of Ireland, Oral Public Health as a health promotion issue was rarely addressed. The omission of oral public health professionals from many generic health promotion activities is, for Dr. Gaffney, a challenge for dental health services.

### **Public Health: The transition from medical to holistic perspectives**

Introducing the area of public health, Dr. Gaffney identified recent public health strategies in Northern Ireland, targeting broad general health initiatives, and concurrent strategies in the Republic, targeting cardiovascular disease. Dr. Gaffney stated that these strategies reflect international trends outlined in documents such as the World Health Organisation's Health 21 Strategy<sup>1</sup> and the Global Agenda 21 Strategy<sup>2</sup>

While such strategies aim to promote health, Dr. Gaffney questioned whether there is any real international consensus among professionals regarding definitions of health. At one end of the spectrum public health professionals may define health in an aspirational manner, the goal being to enable people to reach a state of physical and mental wellbeing. At the other end of the spectrum, health may be defined in purely medical terms as a description of an individual's current illness. More recent definitions of health have broadened the scope of the term to reflect not only the health status of individuals but also of communities. Within this context health is perceived as a resource enabling both individuals and communities to reach their full potential.

Changes in the way health professionals define health have consequences for the methodologies used to measure health status. Traditional medical views of health, for example, promoted levels of

<sup>1</sup> Health21.- health for all in the 21st century. World Health Organisation. Regional Office for Europe. WHO 1998.

<sup>2</sup> Agenda 21: A guide for Local Authorities in the UK. Local Government Management Board LGMB, 1992

mortality and morbidity as indices of general health status. In contrast, more recent holistic definitions of health employ measures of general wellbeing and quality of life in an attempt to quantify health status.

The change in emphasis from a medical to a holistic approach to health has also been reflected in a parallel change in health promotion activities. Traditional health promotion activities focused on specific health education strategies. In contrast, recent health promotion activities are more likely to focus on the development of life skills. Life skills, according to Dr. Gaffney, enable individuals and communities to access opportunities such as education and employment that ultimately influence their general health status.

Within the holistic model of health, life circumstances are identified as a key determinant of health and wellbeing. For those working in public health the relationship between life circumstances and economic wealth is evident. Whether at national, county or local community level, those with greater wealth are consistently found to have better health when compared with those who are financially deprived. Tackling this inequality in health status has become a major focus of health promotion.

### **Health Promotion**

What are the implications of inequalities in health status for those working in health promotion? Dr. Gaffney commented that one implication is the growing number of increasingly complex models of health promotion which attempt to address this inequality. One of the simpler models demonstrated by Dr. Gaffney identifies three core components to health promotion;<sup>3</sup>

- health protection: focusing on legislation and regulation of health and environmental issues
- health education: focusing on the provision of information
- disease prevention: focusing on medical developments such as immunisation

This model of health promotion illustrates that concepts of health promotion limited to targeting health strategies at individual consumers have been broadened to strategies that inform policy makers at government, regional and local level about the implications of health developments on people's everyday lives. One consequence of broadening the remit of health promotion is that a considerably greater level of consultation and collaboration between health promoters and interested parties is undertaken.

<sup>3</sup> Health Promotion Models and Values. Downie R, Fyffe C and Tannahill A. OUP 1990

Outcome measure evaluations have provided empirical validation to a range of successful health promotion strategies including seat-belt legislation, parenting skills and fluoridation. More importantly outcome evaluations indicate that not only do such activities promote health and prevent illness, they enable people to develop a healthier attitude and lifestyle. A highly successful and innovative cardiovascular disease programme conducted in Finland in the 1970s illustrates the far-reaching impact of health promotion strategies.<sup>4</sup> The Finnish model went beyond merely informing people how to avoid cardiovascular disease. The Department of Agriculture, for example, subsidised the production of skimmed milk in an attempt to encourage its production and consumption. The indigenous berry industry, which had almost ceased production, also attracted new investment and is currently thriving. The Finnish experience illustrates that a creative approach to health promotion can, through the rejuvenation of indigenous industry, create employment that in turn contributes to a reduction in health inequalities.

### **Health Promotion in Primary Care**

Examining the role of health promotion for those working in primary care, Dr. Gaffney outlined a recent collaboration between the Health Promotion Agency, Northern Ireland, and a variety of professionals working within primary care. Dr. Gaffney commented that to his knowledge no dental health professionals were in attendance. The relevance of health promotion to primary care was examined across a range of themes including need, information, training, and knowledge among health care professionals. While an array of primary care professionals attended, their responses to these issues were broadly consistent. Health promotion was generally perceived as second only in importance to treating the client's illness and was narrowly defined as 'giving advice to patients'. Somewhat ironically, 'giving advice to patients' was identified as the worst aspect of health promotion because patients 'never listen to us'.

The Health Promotion Agency commenced a series of training programmes to assist health professionals impart health promotion advice to clients. Reaction to the training programmes differed amongst professions. GPs, for example, were open to a broad mix of health professionals attending the same training sessions. In contrast, public health nurses requested specific training among their own profession. They stated that while they had never received formal training in health promotion, there was a perception among the public and other professionals that public health nurses should be at the forefront of health promotion.

<sup>4</sup> The North Karelia Project. 20 year results and experiences. Puska P. National Public Health Institute of Finland. WHO/EURO 1995

One of the main issues for professionals attending the training seminars was their clients' failure to comply with health promotion advice. Trainees commented that clients simply didn't listen to the advice they were being given. The Health Promotion Agency's task was to provide the trainees with evidenced based communication strategies that would assist them in conveying health promotion messages. A series of stages from pre-contemplation of a health issue, through to contemplation and beyond to action were outlined to trainees. An understanding of these stages would help clarify for professionals why clients did or did not comply with the advice they were being given.

The Health Promotion Agency was also involved in reviewing the role of nutrition in healthy lifestyles and consequently, in identifying the role of a variety of professionals, from caterers in schools to retailers in coffee shops, in promoting healthy eating. While a wide variety of professionals were involved in this work, Dr. Gaffney stated that the dental health profession, despite its core role in promoting sensible eating, had been omitted from the research. This omission should concern both health promotion and dental health professionals.

### **Summary**

In concluding his presentation Dr. Gaffney reaffirmed his belief that health promotion has grown beyond its original role of providing advice to people regarding their medical health. Health promotion comprises an array of activities including professional education and training, organisational and policy development and strategic planning. Health promotion should be targeted not only at individuals, but also at community, regional and national levels. For Dr. Gaffney each profession is required to define its own role in health promotion. Each discipline should have a vision and goal as to how it intends to best serve its clientele. This is the challenge of health promotion.

## **Professor Michael Lennon HIPS, TEETH AND POLITICS: THE FUTURE OF WATER FLUORIDATION IN THE UK**

Professor Lennon's presentation outlined five key areas in the history of water fluoridation in the United Kingdom from its' origins in the 1950s to the present situation:

1. Historical perspective of water fluoridation in the 1950s
2. Scottish legal case presided by Lord Jauncey
3. Water Fluoridation Act 1985
4. Difficulties experienced with Water Fluoridation Act 1985
5. Future direction for fluoridation in the UK

### **1. Historical Perspective of Water Fluoridation in the 1950s**

In the early 1950s the UK government commissioned an expert committee to examine the effects of water fluoridation schemes operating in the United States and Canada. Following a six months tour of these schemes, the committee reported that the hypothesis that fluoride can reduce dental caries was overwhelmingly supported. Professor Stone also recommended that the UK government carry out a series of 'demonstration' studies to determine the application of these schemes within the United Kingdom. On the basis of this recommendation demonstration schemes were established throughout the United Kingdom. The findings from these schemes were unequivocal: levels of dental caries reduced in fluoridated areas. Findings from Kilmarnock, Scotland, for example, where water fluoridation was introduced in 1956, were compared with findings from a control area in Ayr. Baseline levels of dental caries in both regions prior to water fluoridation revealed an average dmft of seven. In 4 year old children within four to five years following fluoridation the level of dental caries halved in Kilmarnock but remained stable in Ayr. However in 1963 the local council in Kilmarnock voted to cease the water fluoridation scheme. Levels of dental caries examined five years after the cessation of the scheme revealed both regions to report average dmft figures in 4 year olds close to the baseline level of seven.

Results from the demonstration schemes culminated in the UK government adopting water fluoridation as an official policy in 1964. Local government authorities, responsible for water services, were encouraged to introduce water fluoridation schemes. The period from 1964 to 1975 heralded the implementation of several water fluoridation schemes throughout the UK. In 1975 however responsibility for water management moved from local government to regional water authorities. In addition, the role of local government in health matters was passed to the newly established health authorities. A consequence of these developments was increasing barriers to further water fluoridation schemes being implemented throughout the UK.

### **2. Scottish Legal Case Presided over by Lord Jauncey**

The 1970s also saw the failure to implement a major water fluoridation scheme proposed by the health board and local council in Strathclyde, Glasgow. Local resident Mrs. McColl challenged this

development in the High Court. Mrs. McColl claimed that fluoridation was not beneficial to teeth, and moreover caused cancer. Irrespective of the effects on health however, Mrs. McColl's main argument was that the health board and local council did not have the legislative authority to implement fluoridation schemes. The case, presided by Lord Jauncey, lasted over two years and received representations from national and international experts both for and against fluoridation. In his judgement Lord Jauncey ruled that while the benefits to health were evident, 'the individual's right to choose how to care for his or her health should only be encroached upon by statutory provision in very clear language'. That is, while Mrs. McColl had failed to demonstrate harm and lack of benefit from fluoridation, she had demonstrated that there was inadequate legislation permitting the water authorities to implement fluoridation schemes.

### **3. Water Fluoridation Act 1985**

The political fallout from Lord Jauncey's ruling was that the legal position of fluoridation at least in Scotland was now in stark contrast to the Department of Health's position encouraging water authorities to implement fluoridation. New legislation was required to restore the status quo favouring fluoridation. In 1985 Ken Clarke introduced this legislation under the Water Fluoridation Act. With all-party support.

In 1991 the Water Fluoridation Act in England was incorporated into the Water Industry Act. The Act stated that decisions regarding water fluoridation were now the responsibility of the District Health Authority. Prior to any decision being finalised regarding fluoridation however, the District Health Authority was required to undergo an extensive process of consultation. The Act specified that at least three months prior to the proposed implementation of a water fluoridation scheme notification of the scheme must be published in local newspapers. The same notification should be republished a further seven days later. Consultation with each local authority was also required. The result of this process of consultation should then be debated in an open forum within the health authority. Once a decision had been formalised in favour of fluoridation, the District Health Authority was directed to apply in writing to the water authority requesting permission to fluoridate the water. According to the Act the water authorities, now privately owned, 'may increase the fluoride content of the water supplied by them within the area affected'.

### **4. Difficulties experienced with Water Fluoridation Act 1985**

This process of consultation as defined by the Act was tested by the North East of England Health Authority in the early 1990s. The health authority had implemented water

fluoridation schemes since 1964 and wished to extend their usage across Northumberland. An extensive consultation process was undertaken with local authorities, consumers and interested parties to determine the level of support the fluoridation scheme would attract. Following this process of consultation, the health authority approached Northumberland Water, as the relevant water authority in the region, to request their co-operation in the fluoridation programme. Northumberland Water was now privately owned by a French company based in Lyon. For over three years the health authority failed to elicit a response from the Northumberland Water regarding their commitment to fluoridation. Finally, a letter was received by the health authority stating that Northumberland Water had decided, after due consideration, not to accede to the request for fluoridation. The refusal challenged the Department of Health's understanding of the Water Fluoridation Act. The Department claimed that the North East of England Health Authority had complied with the guidelines outlined in the Act. Firstly, the authority had illustrated that water fluoridation was technically feasible. Secondly, the authority had complied with the consultation process outlined by the Act. Finally, the authority had presented a formal request to Northumberland Water and agreed to cover the costs of fluoridation. Without the co-operation of Northumberland Water, the health authority was forced to withdraw the proposed fluoridation scheme.

In the face of such opposition the Health Authority turned to the courts. In a process of Judicial Review, chaired by Justice Collins, the courts were asked to clarify the Act and the authority of Northumberland Water to refuse a request for fluoridation. After a year of deliberations, Justice Collins found in favour of the Northumberland Water. The ruling stated that the primary responsibility of a privately owned water authority is to protect the interests of its shareholders. Water authorities in Scotland and Wales, which are state bodies, are accountable to the public and as such would be likely to comply with the Act where the consultative process had been successful. In contrast, water authorities in England, now privatised, are accountable to shareholders and are not obliged to comply with this process. Justice Collins stated 'It is, as I have said, and I am bound to say with some regret, open to the water company to adopt the attitude that it had. It is both proper and perfectly legal'. The ruling indicated that further legislation would be required to require water authorities to comply with the consultative process outlined by the Act.

The new UK government appointed in 1997 established a Ministry of Public Health. Tessa Jowell, the newly appointed Minister, expressed her dissatisfaction with the lack of progress regarding fluoridation stating 'the present legal situation is a mess'. 'We cannot allow decisions on the principle (of public interest) to be taken by a body that is accountable to its shareholders rather than to the local population'. Lord Hunt, speaking in the House of

Lords commented on the original wording of the Water Fluoridation Act which states that water authorities 'may increase the fluoride content of the water supplied by them within the area affected'. Lord Hunt argued that 'the key issue is whether the word 'may' should become 'should'.

Tessa Jowell commissioned the Centre for Reviews and Dissemination, University of York, to undertake a systematic review of the empirical evidence available on fluoridation. The report, known as the York Report was published in 2000 and clearly illustrated that fluoridation reduces dental caries. The report found no evidence to support an association between fluoridation and conditions such as bone fractures, cancer or Down's Syndrome. More recently two publications by Phipps *et al.*, (2000)<sup>1</sup> and Hiller *et al.*, (2000)<sup>2</sup> 'have confirmed that fluoridation is not a risk factor for osteoporotic hip fractures.

While the results of the Systematic Review found in favour of fluoridation, criticism was made of the fact that much of the research cited had been conducted throughout the 60s and 70s and would be of a considerably lower standard than comparative investigations conducted in the 90s. As a consequence the Medical Research Council was asked to re-examine the evidence base and produce recommendations for future action. The Council's recommendations are due in 2002.

## **5. Future direction for fluoridation in the UK**

While there is little empirical doubt regarding the effectiveness of fluoride in reducing dental cavities, further prospective research is required to evaluate fluoridation schemes. Research is required not only to expand the body of knowledge identifying the benefits of fluoridation, but also to assess possible disadvantages (such as dental mottling) and to determine the economic benefits of such schemes.

Comparative research between naturally and artificially fluoridated regions is also required. Similarities between both regions would allow researchers to extrapolate the experiences of generations of residents living in naturally fluoridated areas to those residing in artificially fluoridated areas.

Finally, the present situation regarding the failure of privatised water authorities in England to comply with the Water Fluoridation Act should be addressed. It is likely that additional legislation will be required to achieve this level of compliance.

<sup>1</sup> Phipps, K., *et al.*, (2000). Community Water Fluoridation, Bone Mineral Density and Fractures. *British Medical Journal*, 32, 860-864.

<sup>2</sup> Hiller, H., Cooper, T., *et al.*, (2000). Fluoride and Drinking Water and the Risk of Hip Fractures in the UK. *Lancet*, 335, 265-269.

## Dr. Robert Mecklenburg, D.D.S., M.P.H.

### TOBACCO AND ORAL HEALTH

Evidence of tobacco use is available in some of the earliest human writings, and may have been grown around 6000 BC. In 1492, tobacco was given to Christopher Columbus. In the 16th and 17th centuries, after its introduction into English society in 1565, tobacco was commonly smoked in pipes. In the 18th century, the use of nasal snuff became popular. Tobacco was finely ground and utilised by inhaling and then sneezing. This was followed in the 19th century by cigar smoking.<sup>1,2</sup> Cigarettes, also coming in to use at this time, were hand-rolled up until the 1880s when the Allan & Ginther, a Richmond, Virginia company, offered a prize for a cigarette mechanisation process. The advent of such a machine in 1881, allowing for the mass production of cigarettes, did little to increase the numbers of people who smoked them. It was not until after 1884, when James Duke bought the patent for the machine and devised new marketing strategies, that rolled cigarettes became widely available. Cigarettes that had been in little demand since they were devised early in the 19th Century, became the foremost tobacco product of the 20th Century.<sup>3</sup>

#### Prevalence of Tobacco Use

Looking at the current prevalence of tobacco use, Dr. Mecklenburg commented that approximately 1.1 billion people throughout the world smoke tobacco. This figure is expected to increase to 1.6 billion by the year 2025. Citing estimates from the World Health Organisation, Dr. Mecklenburg stated that one person in ten is currently dying from a tobacco-related illness and this is expected to climb to one in six by 2030.<sup>4</sup> Ireland in particular faces a growing public health problem regarding tobacco use. Life expectancy in Ireland is lower than most other countries in the EU. Lung cancer is the most common cause of cancer mortality in Ireland and higher than the EU average.<sup>5</sup> Smoking accounts for 21 percent of all deaths in Ireland. Also, 21 percent of youths ages 9-17 are current smokers with more girls smoking than boys. Indeed, in the lower social classes, 40 percent of girls ages 15-17 are smokers.<sup>6</sup> These statistics combine to make tobacco use a serious challenge for Irish health authorities.

<sup>1</sup> Von Gernet A. Origins of nicotine use and the global diffusion of tobacco (Ch. 1). In: *Nicotine and Public Health*. Ferrence R, Slade J, Room R, Pope M (eds). Washington, DC. American Public Health Association 2000.

<sup>2</sup> Tobacco Advisory Group. Tobacco smoking in Britain: an overview (Ch. 1). In: *Nicotine Addiction in Britain*. London, United Kingdom. Royal College of Physicians 2000.

<sup>3</sup> U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, Georgia, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease and Prevention and Health Promotion, Office on Smoking and Health 2000.

<sup>4</sup> The World Bank. Global trends in tobacco use (ch.1). In: *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington, DC 1999.

<sup>5</sup> Tobacco Free Policy Review Group. Tobacco related diseases in Ireland (Ch. 5). In: *Ireland – A Smoke Free Zone*. Dublin, Ireland. The Stationary Office, The Department of Health and Children 2000.

<sup>6</sup> Centre for Health Promotion Studies. *The National Health and Lifestyles Surveys (SLAN and HBSC)*. Galway, Ireland. National University of Ireland 1999.

### **The Role of Irish Dental Health Professionals in Tobacco Regulations**

Dr. Mecklenburg commented on the current limited role of the dental health profession in tobacco cessation.<sup>7</sup> The situation is regrettable as tobacco use effects oral health detrimentally and should be an important consideration for dental health professionals.<sup>8</sup> According to Dr. Mecklenburg, the challenge for dentistry is for greater involvement in the promotion of tobacco prevention and cessation.<sup>9</sup> Dr. Mecklenburg commended recent Irish tobacco and oral health programmes that provide a framework for the concerted efforts of dentistry and other health professions in reducing tobacco usage.<sup>10, 11</sup>

Dr. Mecklenburg commented on the pioneering role of Irish dental health professionals addressing the issue of tobacco use. He cited the case of a young man in the United States, Sean Marcee, who died in 1984 from oral cancer after using smokeless tobacco (often termed 'spit tobacco') for 7 years. The young man's mother sued the United States Tobacco Company for failing to warn its consumers of the dangers of using such a product. The case illustrated that consumer information regarding tobacco use came largely from the tobacco industry. Consumers were not being made aware of the potentially harmful effects of tobacco use. To combat this lack of information, the Surgeon General commissioned research to be undertaken to determine youth use, adverse health effects, and addiction potential of smokeless tobacco use.<sup>12</sup> The report detailing this research was distributed to various health professionals, including country chief dental officers throughout the world. Dr. Seamus O'Hickey, Chief Dental Officer for Ireland, realised the importance of this research and brought it to the attention of the Irish Department of Health. Hearings were held, legislation drafted and, as a consequence, by the late 1980s, Ireland banned the importation and promotion of smokeless tobacco products. This legislation became a model for other European countries, so that a similar ban on the importation, advertising and sale of smokeless tobacco became a part of EU country trade policies for the 1990s (Sweden excepted).

<sup>7</sup> Dolan TA, McGorray SP, Grinstead-Skigen CL, Mecklenburg RE. Tobacco control activities in U.S. dental practices. *J Am Dent Assoc* 1997; 128:1669-1679.

<sup>8</sup> Christen AG, McDonald JL, Christen JA. *The Impact of Tobacco Use and Cessation on Nonmalignant and Precancerous Oral and Dental Diseases and Conditions*. Indianapolis, Indiana. Indiana University School of Dentistry 1991.

<sup>9</sup> Gould KA, Eickhoff-Shemek JM, Stacy RD, Mecklenburg RE. The impact of National Cancer Institute training on clinical tobacco use cessation services by oral health teams. *J Am Dent Assoc* 1998; 129:1442-1449.

<sup>10</sup> Dental Health Foundation. *Strategic 5 Year Initiative*. Dublin, Ireland, Dental Health Foundation 2001.

<sup>11</sup> Tobacco Free Policy Review Group. Future directions (Ch. 7). In: *Ireland - A Smoke Free Zone: Toward a Tobacco Free Society*. Dublin, Ireland. Stationary Office, The Department of Health and Children 2000.

<sup>12</sup> U.S. Department of Health and Human Services. *The Health Consequences of Using Smokeless Tobacco: a Report of the Advisory Committee to the Surgeon General*. Bethesda, Maryland. U.S. Department of Health and Human Services, Public Health Service, NIH Publication No. 86-2874, 1986.

### **Micro and Macro Research on Tobacco Use**

While the health implications of tobacco use have been studied extensively, Dr. Mecklenburg commented that research only recently has been conducted to examine the role of the tobacco companies in promoting the use of their products.<sup>13</sup> The messages emanating from tobacco companies through mediums such as advertising and sponsorship often target youths and undermine the messages from health professionals regarding the dangers of tobacco use.<sup>14</sup> Countering industry messages provide a unique challenge for those highlighting the damaging effects of tobacco. Few other health promotion issues face the might of an industry promoting a product that is detri-mental to health. Using the analogy of the host-agent-vector model for malaria, Dr. Mecklenburg commented that tobacco companies are the vector analogous to the mosquito.

In the United States, the National Cancer Institute at the National Institute of Health is developing models of tobacco use that incorporate the influence of messages emanating from tobacco companies and other cultural factors on consumer behaviour.<sup>15</sup> Previous such models have tended to focus on variables such as the consequences of tobacco-related diseases, the social cost of tobacco use, the disabilities associated with tobacco use, etc. More recently, the behaviours of those who smoke tobacco are being examined. Researchers are now examining a host of behavioural variables, including the reasons why people start smoking and why tobacco use continues in view of its known detrimental effects. Researchers are also interested in determining what happens during the process of cessation and what, if any, are the predisposing factors that sustain smoking. Identifying the role of the tobacco-company in some of these questions is a key task. Current topics of research can therefore be classified at three levels, those at the macro level (such as the tobacco industry and other societal factors), at the individual – personal level, and those on the micro-level, (such as cellular and genetic factors).<sup>16</sup> Dr. Mecklenburg suggests that while clinicians can identify and treat diseases at the individual level, cognisance must also be taken of the need to examine factors at the macro and micro levels.

<sup>13</sup> Advocacy Institute. *Smoke & Mirrors: How the Tobacco Industry Buys & Lies Its Way to Power & Profits*. Washington, DC. Advocacy Institute August 1988.

<sup>14</sup> U.S. Department of Health and Human Services. Regulatory Efforts (Ch.5). In: *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, Georgia. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health 2000.

<sup>15</sup> Tobacco Research Implementation Group. Biobehavioral model of nicotine addiction and tobacco-related cancers. In: *Tobacco Research Implementation Plan: Priorities for Tobacco Research Beyond the Year 2000*. National Institutes of Health, National Cancer Institute 1998.

<sup>16</sup> Abrams DB. Transdisciplinary paradigms for tobacco prevention research. *Nicotine & Tobacco Res* 1999; 1:S15-S23.

### **The Consequences of Tobacco Use**

Studies on the consequences of tobacco use are abundant and clearly illustrate the risks to health associated with tobacco use. Comparisons of the health status of non-smokers and smokers, for example, reveal that people who smoke tobacco have a higher mortality in mid-life and are three times more likely to die from cardiovascular disease. Research also indicates however that these differences diminish over time once a smoker quits.<sup>17</sup>

Recent research has concentrated on the effects of tobacco usage on the foetus. Studies have found that tobacco use can significantly decrease oxygen to the developing foetal brain, resulting in functional and structural abnormalities.<sup>18, 19</sup> Also, the placenta is no barrier against ingredients of tobacco such as cyanide and tobacco-specific nitrosamines. Current studies suggest that mothers smoking during pregnancy may produce lifelong cognitive, behavioural and physical effects in their children. Several studies have shown that children of mothers who smoked during pregnancy have higher incidents of cleft palates and cleft lips. There is also evidence indicating that these children are more likely to present with emotional difficulties and problematic behaviour. The 40% of young Irish women smoking should be of serious concern to health authorities about the long-term consequences to children who have environmental tobacco smoke exposure since their conception.

### **Tobacco Use and Oral Health**

*Tobacco Effects in the Mouth*<sup>20</sup> is a publication intended for the busy health care provider. It gives an overview of the adverse effects of tobacco on oral health. Dr. Mecklenburg believes that dental teams have a tremendous opportunity, more than many other health care providers, to influence people's use of tobacco. For example, individuals who visit a dental clinic usually have more time with their dentist than they would with a physician during a medical appointment. There are often fewer distractions as patients are usually healthy and practitioners often have more opportunity to address the issue of tobacco use than available

<sup>17</sup> U.S. Department of Health and Human Services. *The Health Benefits of Smoking Cessation: A Report of the Surgeon General*. Rockville, Maryland. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, DHHS Publication No. (CDC) 90-8416, 1990.

<sup>18</sup> Tobacco Advisory Group. Physical and pharmacological effects of nicotine (Ch. 2). In: *Nicotine Addiction in Britain*. London. Royal College of Physicians of London 2000.

<sup>19</sup> Larsen LG, Clausen HV, Jonsson L. Stereologic examination of placentas from mothers who smoke during pregnancy. *Am J Obstet Gynecol* 2002; 186:531-537.

<sup>20</sup> Mecklenburg RE, Greenspan D, Kleinman DV, et al. *Tobacco Effects in the Mouth: A National Cancer Institute and Institute of Dental Research Guide for Health Professionals*. Bethesda, Maryland. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health. NIH Publication No.96-3330, 1991, Reprinted 1994, 1996, 2000.

in a medical setting. Finally, the detrimental effects of tobacco use on an individual's teeth can be clearly indicated by literally using a mirror.

Referring to research identifying the detrimental effects of tobacco use on oral health, Dr. Mecklenburg cited the growing strong body of evidence linking smoking to periodontal disease with a positive correlation among the intensity of smoking, i.e., the number of cigarettes smoked per day, the duration of smoking (in pack-years), and the prevalence of periodontal diseases.<sup>21, 22</sup> A national survey in the U.S. demonstrated that smoking is a major risk factor for periodontitis and may be responsible for more than half of all periodontitis cases among adults.<sup>23</sup> For the dental health professional, assisting people to quit smoking is the single most effective method of treating periodontal disease. Evidence is now so strong, it could be regarded as professionally irresponsible for a clinician to not provide scientifically sound clinical smoking cessation services.

### **The Addiction of Tobacco**

When asked, most people who smoke tobacco believe the harmful ingredient in cigarettes is nicotine. It is the most addictive substance in tobacco smoke but it is not the most harmful. In fact, nicotine accounts for less than a half a percent of the total ingredients in the smoke. Other ingredients include tobacco-specific nitrosamines, pesticides, fungicide and herbicide residues and other burned organic products and particulate matter, (collectively called "tar," or "soot") accounting for approximately 10 percent. Gasses, including carbon monoxide, cyanide and ammonia, account for approximately 90 percent of smoke. Tars and gasses are the most harmful components. When people use tobacco to get a nicotine "hit," they are using a dirty delivery system. Nicotine mimics acetylcholine, a neurotransmitter. It acts throughout the body, but primarily on the pleasure, reward systems that are essential to life and feelings of well-being. As the brain adjusts, users can only feel "normal" when nicotine is present, and often suffer unpleasant feelings when brain nicotine levels fall, which they quickly do. Dr. Allan Leshner, former director of the National Institute on Drug Abuse, and others, describe the action of nicotine as 'hijacking' the individual's areas of the central nervous system that govern thought and behaviour. According to Dr. Leshner, tobacco addiction is 'fundamentally a brain disease embedded in a cultural context'. Dr. Leshner asserts that in addition to treating the physical addiction

<sup>21</sup> Grossi SG, Zambon JJ, Ho AW, et al. Assessment of risk for periodontal disease. I Risk indicators of attachment loss. *J Periodontol* 1994;65:260-267.

<sup>22</sup> Grossi SG, Genco RJ, Machtei EE, et al. Assessment of risk for periodontal disease. II. Risk indicators for alveolar bone loss. *J Periodontol* 1995;66:23-29.

<sup>23</sup> Tomar SL, Asma S. Smoking-attributable periodontitis in the United States: Findings from NHANES III. *J Periodontol* 2000; 71:743-751.

to nicotine, health professionals must address the psychological and social dependence of smokers. This dependency is reinforced by repetitive and ritualistic behaviours that are associated with smoking, and with certain environments that, once an individual is conditioned to them, promote craving.

Asking smokers why they smoke provides an ‘insider’s view’ of the addiction. Reasons cited include the fact that smoking is perceived to be pleasurable, is a relaxing activity and aids concentration. Smokers comment that abstaining from tobacco use result in stress, poor concentration and general not feeling well. Dr. Mecklenburg explained that these symptoms occur because nicotine addiction is a progressive, chronic, relapsing disease. Smoking is defined as “progressive” because individuals tend to begin smoking with an ‘occasional’ cigarette. Over time the ‘occasional’ cigarette can become a twenty or more cigarettes a day pattern of use. Smoking is defined as a “chronic” disease because tobacco dependent users will continue to smoke for decades, in spite of having a personal desire to quit. It is called a “relapsing” disease because the vast majority of those who quit, revert to smoking, especially during the first three months after quitting, the acute recovery period. Tobacco-dependent individuals’ brains are conditioned so that relapse can occur many years after quitting.

### **Effective Ways to Quit: Historical and Recent**

Turning to research identifying effective methods to increase smoking quit rates over self-help methods, Dr. Mecklenburg cited the work of Dr. Jerome Schwartz, who was contracted by the National Cancer Study to evaluate about two hundred techniques claiming effectiveness in tobacco cessation.<sup>24</sup> Dr. Schwartz reported that approximately one third of the methods were found to be effective, one third were not effective, and effectiveness of a third could not be determined. His findings demonstrated that a systematic, science-based approach would be necessary. During the 1980s, the National Cancer Institute funded a variety of innovative clinical and other trials to determine which methods would produce the most effective long-term (6 months or more) quit rates. The largest study showed that no single method was as effective as when a variety of methods were used simultaneously, that is, a combined approach involving media intervention, legislation, community support etc., increases the likelihood of success for those wishing to cease smoking. Research has also shown that the type of health professional providing

<sup>24</sup> Swartz JL. *Review and Evaluation of Smoking Cessation Methods: The United States and Canada 1978-1985*. U.S. Department of Health and Human Services, Public Health Service, National Cancer Institute, NIH Publication No. 87-2940, April 1987.

assistance in smoking cessation, whether nurse, physician, or dentist, is not an important factor in influencing the level of success attained. It is the methods used with patients that count. A combination of clinical intervention services increase chances for success, that is, motivational, skills development, pharmacotherapies, and follow up after individuals quit to help prevent relapse.

Dr. Mecklenburg outlined a highly successful cessation programme that can be implemented with little effort on behalf of the health professional, the Public Health Service clinical practice guideline, "Treating Tobacco Use and Dependence."<sup>25, 26</sup> The guideline is based on an analysis of over 6,000 studies conducted throughout the world and published in peer-reviewed journals. The guideline is becoming the "gold standard" for all health care providers. It recommends that clinicians use the five "As," "Ask, Advise, Assess, Assist and Arrange." Ask the person about their tobacco use, advise them to quit, assess their willingness to quit, assist those who are ready, and arrange follow up for them. The clinical practice guideline methods recommended to assist patients quit are given irrespective of sex, age, or type of tobacco product used. Success rates are usually higher when patients have more education and higher income and lower if educationally and economically disadvantaged. Individuals who are mentally or emotionally disadvantaged and those who have multiple drug dependencies usually have lower success rates, thus might have to be referred to tobacco cessation specialists.

Although adoption of clinical practice guideline-recommended methods can produce a double to three-fold increase in patient long-term quit rates compared to self-help methods, physicians and dentists often erroneously believe that their help would not be effective. Patients, however, usually expect and would appreciate such help. It appears that professionals and patients differ in their expectations during this transition time. The clinical practice guideline is now accompanied by several supplemental materials for clinicians, patients and the public. (See [www.surgeongeneral.gov/tobacco/default.htm](http://www.surgeongeneral.gov/tobacco/default.htm) or [www.guideline.gov](http://www.guideline.gov) or [www.ahrq.gov/clinic/](http://www.ahrq.gov/clinic/) and click on "Clinical Practice Guidelines," or contact the Agency for Healthcare Research and Quality, DHHS, by phone at 01-800-358-9295.)

<sup>25</sup> Fiore MC, Bailey WC, Cohen SJ, et al. *Treating Tobacco Use and Dependence*. U.S. Department of Health and Human Services, Public Health Service, June 2000.

<sup>26</sup> The Tobacco Use and Dependence Clinical Practice Guideline Panel, Staff, and Consortium Representatives. A clinical practice guideline for treating tobacco use and dependence: a US Public Health Service report. *JAMA* 2000; 283:3244-3254.

### **The Way Forward**

Dr. Mecklenburg concluded his presentation by emphasizing that clinicians cannot be expected to spontaneously adopt this life-saving measure that in many ways benefits both patients and the clinical practice. There must be a commitment and good organization within government agencies and by dental professional organizations. Both private and public sector organizations need to underwrite the process of change so that helping patients prevent and discontinue tobacco use becomes a clinical practice norm. It can be expected to be a gradual process occurring through the leadership of national and regional dental officers and dental society representatives. For example, in the U.S. the American Dental Association helped launch the change by adopting policy positions supporting tobacco prevention and control and recommending clinician adoption of the services. Dozens of other dental organizations also adopted policies during the 1990s, each according to its own mandate. Among them were the American Dental Education Association, American Association of Dental Examiners, American Dental Hygienists' Association, American Dental Assistants Association, and State and Territorial Dental Directors. The American Dental Association established a procedure code in its official service code set. It devoted a chapter in their *Guide to Dental Therapeutics* dedicated to smoking cessation.<sup>27</sup> The American Dental Association also added a key identifying question to its standard patient history form. Where a patient is identified as using tobacco, the patient's motivation to quit is assessed and where quitting is desirable, support is provided.

The U.S. dental profession has not quickly embraced tobacco use cessation services for a variety of reasons. There has been some unfounded reluctance on the part of some clinicians who have not been trained in tobacco use cessation services. Some clinicians have not been aware that methods recommended are brief and simple, mindful of the practice time limitations confronting clinicians of all health care disciplines. Only 3 minutes of intervention help can significantly increase patient quit rates. Some clinicians have not recognized that their help substantially increases quit rates. Expectations are too high because they do not understand the nature of tobacco dependence as a progressive, chronic, relapsing disease. Some clinicians have been concerned that smoking patients would become angry when asked to quit. This hasn't been the case. For example, in one study involving 75 dental practices caring for over 35,000 patients, only one patient was

<sup>27</sup> Mecklenburg RE, Somerman M. Cessation of tobacco use. In: *ADA Guide to Dental Therapeutics, Second Edition*. Chicago Illinois, ADA Publishing Co.2000.

annoyed by the perceived interference of the dentist, and the relationship had not been good before that.<sup>28</sup> Some dentists have been concerned about the financing of the service. Financing methods are being developed, but the service is cost effective even without special compensation because of the more efficient care for those who are tobacco-free, fewer treatment and post-treatment complications and better success rates, especially for surgical, periodontal and hygiene services. Surveys suggest that most dentists believe they should provide tobacco intervention services but are reluctant to begin only because they do not have the information to know which methods to use and what to expect.<sup>29, 30, 31</sup> That is where the Public Dental Service could be so helpful by demonstration and leadership skills.

Dr. Mecklenburg concluded by stating that tobacco prevention and cessation services integrated into government and private practice oral health programmes could make the work more interesting, help clinicians with their overall treatment skills, and give them a means for working with other health care professionals and their communities against a major disease-producing, life-threatening behaviour; one that is driven by an industry that places corporate profits above the public's health and well-being. There are many resources available to help the dental profession in Ireland integrate tobacco intervention services into oral health care and prevention. Dr. Mecklenburg closed by thanking the Dental Health Foundation for organizing a visionary, stimulating Inaugural All Island Meeting on the Public Dental Services.

<sup>28</sup> Severson HH, Andrews JA, Lichtenstein E, et al. Using the hygiene visit to deliver a tobacco cessation program: Results of a randomised clinical trial. *J Am Dent Assoc* 1998; 129:993-999.

<sup>29</sup> Ibid. Dolan 1997

<sup>30</sup> Hayes C, Kressin N, Garcia R, et al. Tobacco control practices: How do Massachusetts dentists compare with dentists nationwide? *J Massachusetts Dent Soc* 1997; 46:9-14.

<sup>31</sup> Hastreiter RJ, Bakdash B, Roesch MH, Walseth J. Use of tobacco prevention and cessation strategies and techniques in the dental office. *J Am Dent Assoc* 1994;125:1475-1484.

## **DISCUSSION RELATING TO DR. MECKLENBURG'S PRESENTATION**

Opening the discussion Mr. Chris Fitzgerald invited questions from the floor. The first question, directed at Dr. Mecklenburg, explored the potential danger of radioactive components present in tobacco products. Dr. Mecklenburg explained that radioactive traces have been found in the soil where tobacco plants are grown. The failure of tobacco companies to wash tobacco leaves prior to the production process results in small amounts of these substances being present in manufactured cigarettes. In addition to these radioactive components, other carcinogenic substances found in tobacco products include fertilizers, pesticides and chemical substances introduced by tobacco companies to expand the smoker's airways.

Dr. Mecklenburg was then asked whether any benefits to cigarette smoking had been identified. The questioner explained that she had experienced difficulty in persuading people to quit smoking. Firstly, she argued, a number of elderly patients continued to smoke and appeared to experience no ill health as a result. Secondly, research had suggested that the prevalence of Alzheimer's is lower among those who smoke than their non-smoking counterparts. Finally, many female patients were reluctant to quit smoking as their addiction dulled their appetite and as a consequence, assisted them to maintain a low weight. These patients feared that by quitting, their weight would increase.

In response to these claims Dr. Mecklenburg first addressed the issue of smoking among the elderly. He cited the United States government's reluctance to identify an age at which individuals should be legally allowed smoke. After considerable pressure from the media, a government representative commented that people could start smoking 'at about 78 years of age'. Dr. Mecklenburg argued that, irrespective of age, smoking was harmful to health. Regarding the second part of the question examining possible benefits of smoking. Dr. Mecklenburg stated that there is no evidence that smoking tobacco in itself is beneficial. While some research has suggested that nicotine may be beneficial to people with Schizophrenia, Tourette's Syndrome and Alzheimer's Syndrome, Dr. Mecklenburg argued that the smoking cigarettes to obtain nicotine was a 'dirty delivery system' which counteracted any such benefits. Commenting on the uses of nicotine, Dr. Mecklenburg stated 'nicotine does have its uses, it makes a wonderful pesticide'. In response to the final claim, that smoking assists women in maintaining a low weight, Dr. Mecklenburg commented that individuals who have quit smoking would be required to gain approximately two hundred pounds in weight to equal the risk to health posed by their smoking behaviour. Statistics estimating the average weight gain for those who quit smoking indicate that some eighty percent of people who quit will gain between five to ten pounds in weight.

A delegate from the audience then asked Dr. Mecklenburg to discuss the influence of maternal smoking on children. Dr. Mecklenburg referred to the 1994 Surgeon General publication 'Children and Use'. The report identifies these children as being at a higher risk of smoking than children whose mothers do not smoke. Reasons for this higher risk include modelling, tolerance levels and possible changes in the chemical composition of the foetal brain.

One delegate commented on the health promotion strategies advocated by Dr. Gaffney, in his presentation on primary care, and by Dr. Mecklenburg, in his presentation on tobacco use. The delegate commented that while Dr. Mecklenburg recommended that dental health professionals offer advice and support to smokers wishing to quit, Dr. Gaffney had illustrated how such advice is rarely adhered to by patients. Responding to this comment, Dr. Mecklenburg argued that a variety of interventions including behavioural and pharmaceutical techniques are most effective. Using such techniques, research has estimated that between 18%-28% of individuals succeed in their attempts to quit smoking. For Dr. Mecklenburg this success rate is highly impressive. These interventions are life saving services and should be perceived as making a similar contribution to prolonging life as cardiac pulmonary resuscitation techniques (CPR). Dr. Mecklenburg informed the audience that while CPR has a five percent success rate in fatal situations, the odds of saving a life with smoking cessation techniques are considerably higher. While the dental health profession may be nervous of becoming involved in the health promotion of smoking cessation, Dr. Mecklenburg assured them that the benefits of saving a life far outweigh the anxiety of confronting a patient who smokes. Easily accessible training courses in health promotion should be available to dental health professionals to assist them in this life saving work.

The final question of the discussion forum concerned the influence of price control on tobacco use. Dr. Mecklenburg commented that numerous studies in Australasia and Europe had reported that as the price of cigarettes is increased, a proportional decrease in tobacco use is observed. The suggestion that price increases merely provide another source of tax revenue for governments was rejected by Dr. Mecklenburg. He commented that the major aim of price increases was to make cigarettes less accessible to young people. Research had indicated that the younger people start to smoke, the more severe the addiction. Delaying the age at which people start to smoke through price control would protect young people from early exposure to tobacco.

## CONCLUSION

**Dr. Judi McGaffin**  
**Director of Dental Health, Western Health and Social Services Board,**  
**Northern Ireland.**

Dr. Judi McGaffin concluded the day's proceedings by thanking the guest speakers: Dr. Brian Gaffney, who provided an outline of the role of health promotion and the challenge it presents for the dental profession; Professor Michael Lennon, who demonstrated the effect of politics on the topical subject of fluoridation; and finally Dr. Robert Mecklenburg, who outlined the challenges of tobacco cessation.

Dr. McGaffin commented that, on a broader level, the day's proceedings represented a first step in closer co-operation between those in public dental health North and South of the Irish border. Dr. McGaffin noted that professionals from both sides of the border had much to learn from each other. Further symposia should provide a forum for continuing information exchange that in turn would help inform policy, develop service delivery systems, and ultimately, improve the overall quality of oral health. Dr. McGaffin stated that this inaugural symposium had begun to address the challenge of greater co-operation between colleagues in the public dental health services either side of the border. The challenge for the future is to continue this collaboration.

In conclusion, Dr. McGaffin thanked all those who had assisted in the organisation of the symposium especially Mr. Chris Fitzgerald, Principal Officer, Department of Health and Children, and Deirdre Sadlier, Breeda Hyland, and Patricia Gilsean, Dental Health Foundation. Finally Dr. McGaffin thanked all present for their support in attending the Inaugural All Island Meeting on the Public Dental Health Services.

## ACKNOWLEDGEMENTS

We would like to express our appreciation to Doreen Wilson, Chief Dental Officer, Department of Health and Social Services and the Department of Health and Children, Dublin, Dr Gerard Gavin, Chief Dental Officer and Mr Chris Fitzgerald, Principal Officer, Health Promotion Unit.

We would like to acknowledge and thank all delegates for their support of this Inaugural All Island Meeting.

Finally, we would like to thank Ms Patricia Gilsenan, Dental Health Foundation for the organisation and planning of this event.

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### **No 7: left to right**

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