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CHAPTER 1:RATIONALE

1.1 General Introduction

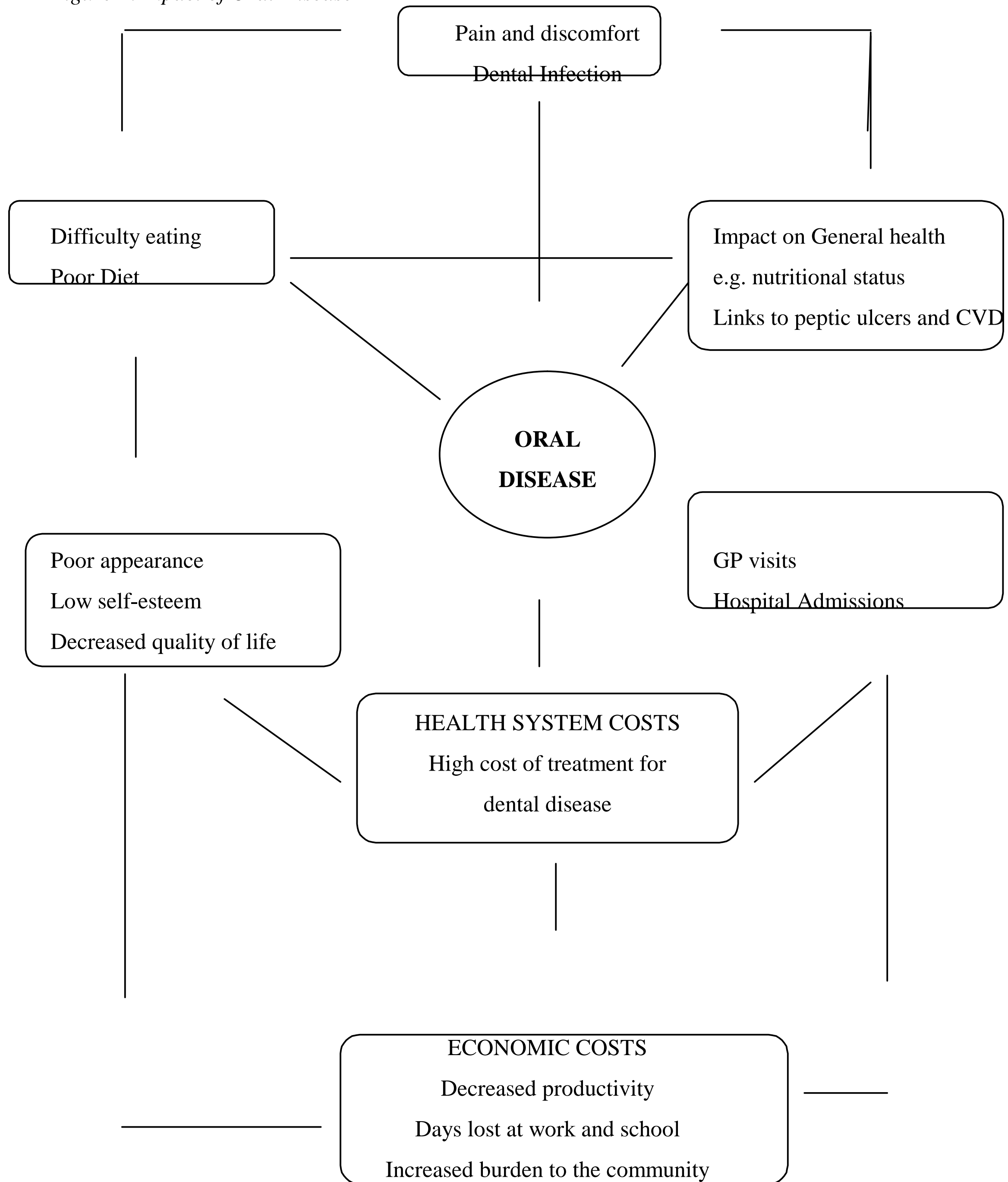
The importance of oral health, and the impact it has on overall health and well being is internationally recognised (Department of Health and Human Services, 2000*)* and is strongly advocated in Ireland through the Dental Health Foundation, Ireland who clearly identify the need to address oral health in the wider context of the Irish population's health, as does the National Health Promotion Strategy 2000-2005 (Department of Health and Children, 2000) .

In the course of the past 30 years, great progress has been made in improving the oral health of Irish people. However, not everyone is achieving the same degree of oral health. It has long been recognised that inequalities in both general health (Townsend et al., 1988) and dental health (Hinds and Gregory, 1995; Schou and Uttenbroek, 1995) exist in society. Socially disadvantaged groups, such as low-income, ethnic minorities and people with disabilities suffer disproportionately from the effects of oral diseases. O'Mullane and Whelton (1992) found Irish adults on low incomes, especially women, had poorer oral health than people with higher incomes. Medical card holders had the lowest levels of oral health and had more untreated decay than those without medical cards. As with general health, there are a number of possible overlapping explanations for the variation in oral health achieved by different groups in the population. In many instances, socio-economic factors are an explanation for the range of complex disparities in oral health. A lack of community programmes, physical and/or intellectual disabilities and illnesses are clearly also barriers to oral health in Ireland. Another major barrier to seeking and obtaining professional oral health care relates to lack of public understanding and awareness of the importance of oral health.

Oral health may be defined as *"a standard of health of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort and embarrassment and which contributes to general well-being"* (Kay and Locker, 1997).

The impact of oral health is significant on many aspects of a person's life (Figure 1). It can impact physically, psychologically, and socially, affecting how a person looks, speaks and enjoys food and has implications for self-esteem and feelings of social well-being. Dental ill health in Ireland is primarily dental caries and periodontal disease, both caused by an accumulation of plaque. The frequency of consumption of (non milk extrinsic) sugars, optimal exposure to fluoride, the effective control of plaque and the appropriate use of good quality dental care are all fundamental risk factors of oral health (Sheiham 1996). There are a number of behaviours such as smoking and excessive alcohol intake, associated with increased risk of dental caries and periodontal disease, which share a commonality with a number of other oral conditions, as well as with general health.

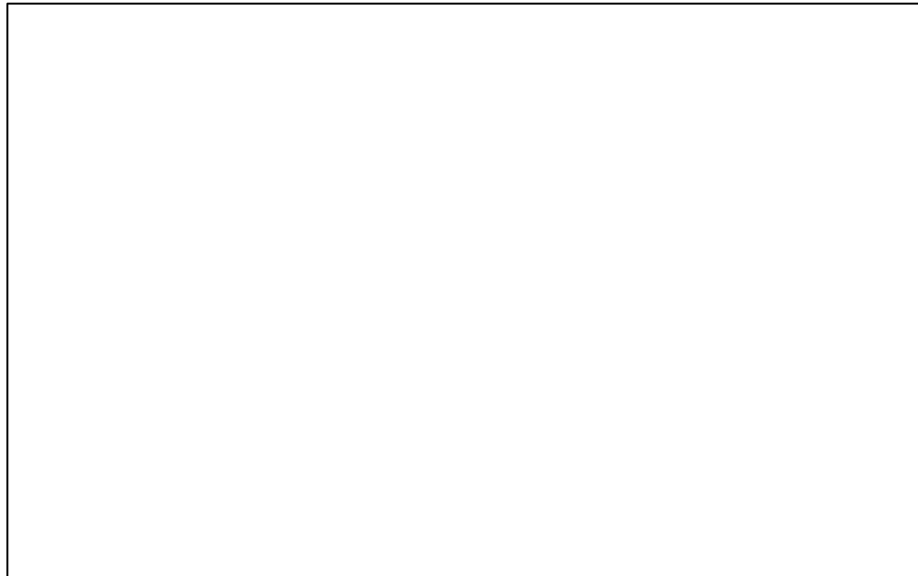
Figure 1:Impact of Oral Disease



Source: "Promoting Oral Health 2000-2004. Strategic Directions and Framework for Action". Public Health Division, Department of Human Services, Dental Health Services, Victoria, Australia

Achieving good oral health is a complex process as shown in Figure 2. The promotion of oral health goes beyond the biomedical aspect of disease and ill health, embracing positive health and well-being and incorporates all determinants of health including social influences. Oral health promotion has been defined as any planned effort to build healthy public policies, create supportive environments, strengthen community action, develop personal skills or reorient health services in the pursuit of oral health goals (World Health Organisation, 1986). Clearly a number of factors at various levels must interlink and complement each other to facilitate this. National policies and strategies through to local services and individual interventions all have a role to play in the propagation and maintenance of good oral health. The planning and provision of both dental and oral health promotion services is often driven by national policy related to health services. At the regional level, policies, service plans and resources direct the development of these services. Importantly, attendance at such dental services, and compliance with dental recommendations is mediated by people's attitudes, knowledge and behaviours. Planning and development of oral health education/ promotion, preventive and primary dental services must acknowledge and be informed by the diversity of community skills and needs.

Figure 2.



1.2 Oral Health Promotion

The development of oral health promotion in Ireland began in earnest in the early nineties and was given specific recognition in the 1994 Dental Health Action Plan (Department of Health, 1994) and the recent National Health Promotion Strategy 2000-2005 (Department of Health and Children, 2000). Oral Health

Promotion is recognised by Schou and Locker (1997) as having three main concepts which embrace the five principles of the Ottawa Charter (WHO, 1986):

- Equity and equality – which is achieved by equal access to services and reducing barriers faced by certain subgroups within the population
- Empowerment – by provision of health education and skills and transfer of responsibility over to the recipients of health care. An increase in autonomy and confidence transfers responsibility of dental health over to the recipient of oral health care.
- Advocacy – health professionals and other organisations need to make decisions or take on responsibility for more vulnerable populations. Evidenced based practice should guide professionals and is best supported by research and evaluation of services.

The Dental Health Action Plan placed significant emphasis on the importance of oral disease prevention (primarily through the expansion of the national fluoridation programme) and positive oral health promotion through education measures supported by the Health Promotion Unit in the Department of Health and Children. The plan acknowledged that the benefits to be achieved by oral health education and promotion would be long term as a result of changing norms in society. The support for these changes was to come "primarily from the transmission of accurate oral health messages in the family situation and these messages must be reinforced in healthcare, educational settings and through the media". (Department of Health, 1994, pg 9)

Instrumental to oral health promotion in Ireland is the Dental Health Foundation whose mission is to promote oral health in Ireland by providing effective resources or interventions, and by influencing policy through a multi-sectoral, partnership approach. It plays an important role in facilitating and supporting the promotion of oral health in line with the Department of Health and Children's Dental Health Action Plan, and works closely with the Department's Health Promotion Unit providing a focus for oral health within the wider context of health promotion in Ireland.

A change has occurred in the dental health services at Health Board level, with posts being created which have a special remit to oral health promotion. Each Health Board has dedicated funding for an oral health promoter and a dental surgeon with responsibility for oral health promotion. Whilst there is national and regional commitment to oral health promotion, there is currently no strategic, co-ordinated approach to provision of oral health education / promotion through the public or private sector.

Oral health promotion's shift away from focusing on the individual's lifestyle recognises the wider determinants of health and oral health. It is also clear that when considering strategies for the control of oral diseases, they should not be developed in isolation but as part of a "common risk factor approach" designed

to control the risks common to a number of chronic diseases (Sheiham, 1992). Although all the identified common risk factors can be modified to a degree at an individual level to promote oral health, individual's behaviour is complex and influenced by a range of social, psychological and political factors. It will rarely change on the basis of good advice alone. Schou & Locker (1997) highlight the concept that dentistry for the large part negatively focuses on the extraction and restoration of teeth due to trauma or disease. Most health services practice primarily on the elimination of diseases and rarely on the concept of well-being.

Various social factors can promote positive or negative health effects on oral health behaviour (Gift 1993). These social factors operate within the different levels of society as proposed below by Petersen (1990):

- The Micro level: individual sociodemographic and economic characteristics such as education level or type of employment may encourage or inhibit positive oral health behaviour.
- The Meso level: interactions with other groups, social networks, institutions or dental health practices.
- The Macro level: represents the larger government structure, policy and cultures. Although they have no direct contact with the individual, they are largely deemed the most influential factors over health and dental health.

Therefore oral health promotion operates at different levels with a range of strategies applicable at each stage. At each level there are variations in experiences of oral health by specific population groups. These groups are often referred to as "special needs groups".

1.3 Special Needs Groups and Oral Health

Various definitions of the term "special needs" have been proposed. A Discussion Document for Dental Health in Europe (Pan European Task Force, 1998) defined people with special needs as those with medical, physical, developmental or psychological conditions, who are at increased risk of developing oral health problems (Pan European Task Force 1998). Davis (2000) expanded this definition to include those that are socially disadvantaged or excluded. The National Development Plan describes social exclusion as *"cumulative marginalization from production (unemployment), from consumption (poverty), from social networks (community, family and neighbours), from decision-making and from an adequate quality of life"* (NDP 1999, p.187). Structural inadequacies are deemed to be a main influence on social exclusion, as are inappropriate attitudes and policies which fail to understand and respond to the circumstances of the individual (Percy-Smith, 2000). The groups delineated for the purpose of this study as having special needs are people with disabilities (physical and intellectual), older people in long-term health board care, members of the traveler community, refugees/asylum-seekers, homeless people and medical cardholders.

Information on the oral health of special needs groups in Ireland is limited. An effective oral health service for these groups would be characterised by low levels of unmet need. However, it would appear that people with special needs, such as those in the groupings identified, have a high level of unmet need and their oral health status is for the most part poorer than that of the general population (Desai, 2000, Cumella 2000, Feeney, 2000, Shapira 1998, Beal 1996).

1.3.1 People with Disabilities

According to official estimates people with disabilities form 10% of any average population and equates to 360,000 Irish people (Quinn 2001). Within the context of this report disability refers to people '*whose oral health may be considered within the normal range, but who may have some physical and/or mental or emotional condition which may prevent them from being treated routinely in the dental situation*' (Soble 1974 in Nunn, 1996). Oral health of people with disabilities may be impacted negatively by medications or special dietary requirements or by the difficulties, which people with disabilities may have in cleaning their teeth thoroughly on a daily basis (Casamassimo, 1996). Some disabilities themselves are however associated with an increased risk for oral health problems. Periodontal disease has been shown in many studies to be high amongst people with disabilities (Holland and O'Mullane 1986, Costello 1987, Holland 1990, Nolan 2000 Cumella et al., 2000). People with disabilities have tended to receive less oral health care, or of a lower quality than the general population and have been subject to more extractions and less fillings than people without disabilities (Cumella et al., 2000, Shapira 1998, Hinchliffe et al., 1998)

1.3.2 Older people

Population projections for Ireland, up to 2031, predict that the overall population will become more mature with a striking increase in those aged 65 and over and particularly those over 85 years of age (Department of Health and Children 1999). Similar to people with disabilities, the group older people is not homogenous, with members having varied needs and self care abilities (Dolan 1993). Some older people may find difficulty in maintaining oral hygiene through a loss of dexterity and become reliant on others. In this situation carers knowledge and skill is important in maintaining oral hygiene practices. It has been frequently reported in the literature that institutionalised older people, more likely to be dependent on others for oral hygiene needs, have poor oral health and that it is poorer than those who live independently in the community (Steele et al, 1998). However the normal processes of aging does mean that older adults have particular oral care needs (Fitzpatrick, 2000) demonstrated by the increased incidence of edentulousness with increasing age found in many countries (Ettinger et al., 1993). As well as age related issues, factors such as drug therapy present implications for the oral health of older people with many medications prescribed to this group inducing xerostomia (Sreebny, 1997). Little current data are available on the oral health status of older people. The national survey, Oral Health of Irish Adults (O'Mullane and Whelton) published in 1990 reported that 48% of all adults 65 years and over were edentate. Overall levels of tooth

loss amongst Irish adults were about the same as those reported in other developed countries at the time (Steele et al., 1998). These findings are also similar to findings of surveys from the UK and the USA (McCord et al, 2000, Nunn et al, 2000), where it was shown that there has also been a marked increase in the number of filled teeth, suggesting that the increased experience of restorative dental treatment is reflected by a lessening experience of tooth loss, a pattern likely to be replicated in the Republic of Ireland.

1.3.3 Asylum Seekers

An asylum seeker is anyone who has fled their own country to escape persecution and who usually apply for refugee status in the country they have fled to. According to Aldous et al. (1999) refugees are the most deprived and excluded of all social groups. The needs of refugees are multiple and complex and often require more than medical intervention. There is a general lack of information on asylum seekers and as a consequence reference is made to literature on socially excluded ethnic groups. Ahdieh and Hahn (1996) describe ethnicity as "*social groupings that people belong to because of their culture, which include religion, language, dietary and marital customs and other factors which relate to ancestry*"(p.95). Although reference to ethnic minority groups may indicate cultural difficulties experienced, ethnic groups may have adapted or gained social inclusion, political rights or understandings of the healthcare systems of the host country (Bhopal, 1999) and therefore care should be taken with reference to this literature. It has been found that ethnicity and culture can influence dental health (Johnston 1993, Gift 1993, Beal 1996). Differences have been shown between ethnic minorities and the dominant society. These variations have been related to dental disease, service usage, attitudes and behaviours (Beal, 1996). Todd and Gelbier (1990) in a study of Vietnamese immigrants showed that while socio-economic factors could not be overlooked, culturally determined differences were still relevant. Verrips et al. (1993) showed that ethnicity was an indicator of caries risk in the primary and permanent dentition.

1.3.4 Travellers

Travellers as a group can be described as an ethnic minority community according to Ahdieh and Hahn's (1996) definition of ethnicity and have been recognized as such by The Irish College of General Practice (1995). There is an estimated 4,000 Traveller families in Ireland accounting for 25,000 people, comprising approximately 0.5% of the population. The age structure of travellers has changed little over the last twenty-five years and differs markedly from the general population, containing higher percentages of children and relatively fewer older people, (Barry et al, 1989). There are little published quantitative data on the dental health of Travellers in Ireland. However, in one report by the Travelling People Review Body (1983), dental disorders were the sixth most frequently reported health problem of travellers. Graham et al (1996/8) conducted research in the Southern Health Board comparing the oral health of traveller children with the general population living in a fluoridated area. The results showed poorer levels of oral health among traveller children, although the total caries experience did not differ between the groups. Traveller children

had higher levels of untreated caries in permanent teeth, higher levels of trauma to permanent incisors, and a lower percentage had fissure sealants.

1.3.5 People who are Homeless

There is reportedly just over 5,200 homeless people in Ireland (DoE 1999). Absolute homelessness is used by the United Nations to explain those without any form of physical shelter, whereas “relative homelessness” is used to describe those who have a physical shelter but which does not meet basic physiological needs (Maslow, 1954). Social exclusion and material deprivation are both a major contributor and a major consequence of being homeless. As with the other groups, information on the dental health of homeless people is limited but it is recognised that homeless individuals generally suffer from poorer dental health than the rest of the population. Normative need measured by biomedical measures is always greater than the perceived need of homeless people (O’ Neill 2000, Waplington et al. 2000, Clark 1999 and Holohan 1999). It is consistently reported that homeless people engage in increased levels of adverse health behaviours such as smoking, alcohol consumption and drug taking which impact on oral health, as well as suffering generally from a wider range of health problems notably nutritional deficiencies, chronic diseases, communicable diseases (tuberculosis) and dental health problems (Holohan 1999, Feeney 2000, Langnase 2001).

1.3.6 Barriers to Dental Care

People in special needs groups have generally poorer oral health than the general population. It has been argued that it is not membership of a special needs group itself that affects oral health, rather that underlying issues of social class and poverty are more relevant and by focusing on the group, attention is diverted from the cause of the problem (Plamping et al., 1985). Inequalities in oral health have been identified amongst different socio-economic groups, with those from lower socio-economic groups experiencing poorer oral health (Schuller, 1999 & Locker, 2000). In the early nineties only one third of Irish adults claimed to have attended dental services regularly, that is attend without symptoms (O'Mullane and Whelton, 1992) and that figure was lower for medical card holders who were also found to be more likely to attend only when they were having problems. The adults on low incomes were less aware of the need for dental care than those on higher incomes and it has been found that mothers from higher social classes were more aware of dental health messages than those from lower social classes (Beal & Dickson, 1974). The survey by O’Mullane and Whelton (1992) found the main barriers to dental care in the general population were low felt need, cost and fear. A similar survey in England identified anxiety and cost as the two main barriers with perceived need, access, organisation and the image of dentists as the other identified barriers. People from lower social classes were more likely to report being anxious about going to the dentist, would take painkillers if they had a toothache, found dental treatment expensive and did not want it (Todd and Lader 1991).

It would appear that belonging to a special needs group is likely to contribute to feelings of powerlessness, hopelessness and social isolation which may adversely affect health care service utilisation and uptake of preventive services (Plamping et al., 1985). The use of services by special needs groups is generally in one-off attendance in emergency or acute situations and is exemplified by the perception of dentistry as problem solving so that service use is in relation to emergency treatment rather than prevention (Knabe et al., 1997, Bradley 1998). Sanderson (2000) summerised the barriers given in the literature in accessing services that those who are socially excluded may experience. These include:

- Lack of information (e.g. concerning arrangements, entitlements, existence or outcomes of a service)
- Financial barriers (e.g. lack of benefits or alternative sources of income)
- Physical or spatial barriers (e.g. lack of transport or no lifts)
- Cultural barriers (e.g. where attitudes and stigma on the part of the professionals who do not understand the circumstances or cultures behind these individuals.)

Victim blaming and discrimination as well as a lack of understanding of the health professionals were also thought to be possible deterrents for many from using the services. Fear of the dentist and treatment has also repeatedly been reported as a barrier for many special needs groups as well as the general population (O'Donnell 1996, Russell & Kinirons 1992, Cummella et al., 2000, Edwards & Watts 1997, O'Neill 2000).

1.4 Irish Dental Services

Since their establishment in 1970 the Health Boards have been charged with providing free dental care to certain categories of people:

- Pre-school children under the age of six
- Children under twelve years of age who attend state schools
- Patients in long stay institutions managed by Health Boards
- Medical card holders and their dependants.

Medical Card holders are those who are entitled to free medical, dental and optical services under the General Medical Services Scheme (G.M.S.). Entitlement to a medical card is assessed by a means test and provided to those with specified disabilities and illnesses. In recent years entitlement to free dental care has been extended to post-primary children up to fourteen years of age and some children in the fourteen to sixteen age groups.

The publication of the strategy document 'Shaping a Healthier Future' (Department of Health 1994), marked a major milestone in the development of the health care delivery system in Ireland. Underpinning the strategy are three key principles, equity, quality of service and accountability. Treatment or care therefore must be such that the best possible outcome is achieved in return for the resources committed to

it, that access to care is determined by actual need rather than the ability to pay or geographical location and that differences in population groups needs be addressed. Accompanying the Strategy was a four-year Dental Health Action Plan (REF), formulated to address the deficiencies in the existing public dental services with explicit targets for improvements in the health services for a range of population groupings and identifying the means by which they would be achieved. It focused on the following key areas:

- Greater emphasis on primary prevention
- Expansion of primary care for children
- Provision of comprehensive services for the handicapped and institutionalised
- Expansion of Health Board orthodontic and oral surgery services
- Provision of structured services for medical card holders and their dependants.

To facilitate this, the Dental Treatment Services Scheme (DTSS), under the Department of Health and Children, was introduced in 1994, whereby general dental practitioners contract with the Health Boards to provide treatment for medical cardholders and their dependants. Under this scheme routine dental treatment is being extended, on a phased basis, to all adults (persons aged 16 years and over) with medical cards. This is one strand of three by which individuals can gain access to dental care. The second is through the Dental Treatment Benefits Scheme, which entitles employees, who make Pay Related Social Insurance (PRSI) contributions and their spouses to fully or partially subsidised dental care for a limited range of treatments. Notwithstanding the schemes outlined above, the final strand by which general dental care for adults in Ireland can be provided is through dentists in private general practice with people paying for services carried out in the surgery.

CHAPTER 2: WHY THIS RESEARCH?

Traditionally, epidemiological assessments of oral health status have used indicators such as the number of decayed, missing and filled teeth (dmft) and surfaces (dmfs). However, much earlier in the exposure-outcome pathway, we know that attendance at and compliance with dental health services is mediated by people's attitudes knowledge and behaviour towards dental health (REF). It is therefore necessary to explore and measure these factors in users and potential users of the dental services in order to inform the effective, efficient and equitable development of dental health initiatives. This is supported by Government recognition of the importance of consulting with user groups to facilitate the development of services in other areas of health service provision (Department of Health 1995).

The Department of Health and Children recognised a deficit of information which would advise the re-structuring and development of dental health services in Ireland. The Eastern Regional Health Authority on behalf of the Department of Health and Children commissioned a National Survey of Oral Health in 2000 under the direction of the Oral Health Research Centre, University College Cork. This research shall advise and assist health boards in developing a methodology and co-ordinate the implementation of a programme that is compatible with international criteria (for example WHO and British A. S. Community Dentistry) and therefore capable of retrospective comparisons nationally and internationally, to determine on an ongoing basis, and at an agreed frequency, both for the general population and special needs groups, at local, regional and national levels oral health status and prioritization of preventive and treatment needs. Integral components of this research were to review oral health promotion and education carried out nationally. Also, no research had been previously conducted at the national level that ascertained the attitudes, knowledge and behaviour of people with special needs' towards their oral health and also their perceptions of the dental services. Similarly, attitudes, knowledge and behaviour of dental health service providers towards people with special needs were unknown. These aspects of the study were undertaken by the Centre for Health Promotion Studies, National University of Ireland, Galway beginning in September 2000 and are presented in this report.

The central role of valid meaningful information was regarded as crucial to the proper implementation of the strategy. The Dental Health Action Plan (ref) also reiterated the need for robust scientific data on which to base service development and also recognised the challenge to reform the health service order to achieve the oral health goals. Research in the past has provided quantitative information on the oral health status, as well as the attitudes, knowledge and behaviour of adults and children in the general population (ref.). There is however a lack of information, especially qualitative, regarding people with special needs and their perceptions of their oral health. No assessment of oral health promotion activities taking place nationally or regionally has been previously undertaken.

2.1 Study Aims and Objectives

The component of the work undertaken by The Centre for Health Promotion Studies, NUI, Galway comprises two parts:

2.1.1 Oral Health Promotion Review

Firstly, a review of all oral health promotion/education activities carried out in the past 10 years in the Republic of Ireland was undertaken (CHECK TIME). The aims of the oral health promotion review were as follows:

1. To gather information on the (a) structures (b) process and (c) outcomes of oral health promotion/education initiatives and resources
2. To identify performance indicators for programmes reviewed
3. To identify success factors for oral health promotion
4. To develop a future framework for action for Oral Health Promotion/Education

A range of professionals was identified as key stakeholders in the development and provision of oral health promotion. The research aims to explore previous, current and future issues in relation to policy, management and strategic planning of oral health promotion. It was also planned to audit as fully as possible, oral health education/promotion activities undertaken at national, regional and local level and where available, to comment on the findings of process, impact and outcome evaluation. Specific objectives for structures, process and outcomes of oral health promotion/education initiatives and resources are reported in appendix **XX**

2.1.2 Special Needs Groups

Secondly, a survey, using both quantitative and qualitative approaches, was performed to identify the attitudes, knowledge and behaviour of people with special needs' in relation to their oral health, and also in relation to their perceptions of the dental services. A survey on the attitudes, knowledge and behaviour of dental health service providers towards people with special needs was also carried out.

The aims of this aspect of the study were:

1. To explore the attitudes, knowledge and behaviour of special needs groups in relation to their oral health.
2. To identify the perceived availability, accessibility and acceptability of dental services for special needs groups.
3. To explore the attitudes, knowledge and behaviour of dental service providers towards special needs groups.

Six groupings included in the survey were identified by the Department of Health and Children as having special needs;

1. Persons with Disabilities
2. Persons in long term care of the Health Boards – Elderly
3. The Traveller Community
4. Refugees
5. The Homeless
6. Medical Cardholders

In addition, a sample of the general population was also surveyed in relation to attitudes, behaviour and knowledge concerning oral health as were Dental Service Providers who were surveyed to determine their attitudes, behaviour and knowledge towards dental service provision to people with special needs.

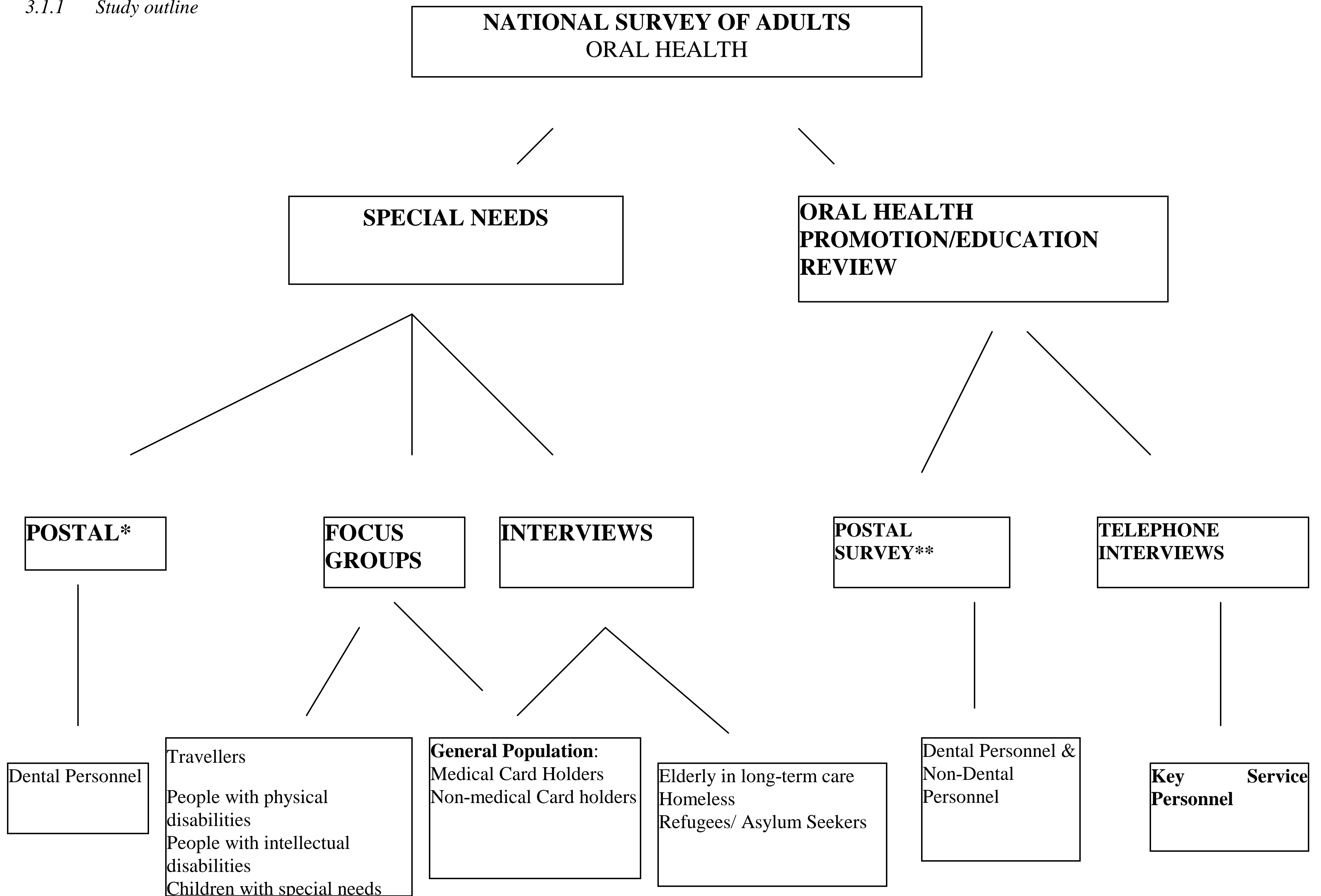
CHAPTER 3: METHODOLOGY

3.1 Overall Design

Methodological consideration and debates on approaches to health services research have for the most part been organised around the consideration of what are often portrayed as the opposing positions of the post scientific paradigm through quantitative approaches and a phenomenological tradition which underpins qualitative research (Tones and Tilford 1994). Traditionally there has been a reliance on quantitative survey techniques grounded in the post scientific paradigm. The assertion that perception of health services and their use is embedded in the context of society suggests that more qualitative methods may be appropriate to explore this issue. However, to simply replace one approach with an alternative appears inadequate as one set of disadvantages is traded for another. It has been suggested that quantitative and qualitative approaches can interact synergistically (de Vrais et al 1992). In this way it is possible to use both approaches, known as methodological pluralism. Tones and Tilford (1994) consider that both approaches are utilised but that less consensus surrounds the use of methodological pluralism within single studies. The complexity of aims and objectives for this study coupled with the need to gain perspectives from both the users and providers of oral health services suggests that a combination of quantitative and qualitative data collection methods through methodological pluralism is apposite.

As a result, the oral health promotion review involved both a postal survey of oral and health professionals using a self administered questionnaire plus telephone interviews with key personnel involved in policy and planning of programme delivery. Assessment of the attitudes, behaviours and knowledge in relation to oral health maintenance, and service use of people with special needs was made using focus groups and one-to-one interviews. The attitudes, behaviours and knowledge of service providers towards people with special needs were assessed using a postal self administered questionnaire (see Figure *).

3.1.1 Study outline



*Practice and perception of dental health service providers in relation to special needs groups

** Oral Health Promotion/Education in Ireland

3.2 Oral Health Promotion/Education Review: Telephone Interviews

Telephone interviews were conducted with key health service personnel at management level in health boards, voluntary and statutory organisations in relation to oral health promotion /education in Ireland.

3.2.1 Sample

Key personnel in the Department of Health and Children, Dental Health Foundation and in each of the Health Boards were identified to participate because of their roles in oral health promotion at a management or strategic planning level. In total **XXX** key personnel with the following positions were interviewed:

- Chief Dental Officer, Department of Health and Children
- Principal Health Promotion Manager in the Health Promotion Unit, Department of Health and Children
- Director of the Dental Health Foundation, Ireland
- Head of the Dental Schools **(Title??? 2 participants JS)**
- Co-ordinator for the Specialist Certificate in Oral Health Promotion, Department of Health Promotion, NUI,Galway.
- Assistant CEO's for operational management in each health board (10 participants)
- Regional Health Promotion Managers (9 participants)

3.2.2 Design of Interview Schedule

A semi-structured interview schedule was constructed using the five areas of health promotion identified in the Ottawa Charter as the basis for the interview outline. Each of these areas was investigated relating to the practice of oral health promotion in Ireland within a past, present and future framework. A S.W.O.T.S. analysis was included at the end of each interview as a means of summarising the main points.

The interview schedule was piloted with the course co-ordinator for the Specialist Certificate in Oral Health Promotion. This enabled clarification of the questions and also an assessment of the time required to complete the interview. Material from this interview was incorporated into the final data set. Following the pilot, the Chief Executive Officers in each of the Health Boards were informed of the research project by letter. The key personnel were then written to and invited to participate in a recorded telephone interview at an agreed time.

3.2.3 Data Analysis

Verbatim transcripts of the recorded interviews were made. Transcripts were read and re read to gain familiarization with the data. Content analysis was carried out on the interview data to identify thematic content. The aim of analysis in qualitative research is according to Burnard (1991) to establish a detailed and systematic recording of themes and link them together in a category system. In this

instance a predetermined set of procedures provided by the development of the semi structured interview was used as the basis of the content analysis (Van Manen, 1990). Alternative forms of category development were reviewed and discussed by the research team with consensus being reached on the framework based on the initial semi structured interview schedule. First level coding of the data was undertaken where the transcripts were read and initially labels or codes attached to groups of words. Thus categories developed some of which were further divided into sub categories. The data also underwent second level coding where the initial codes were grouped into a smaller number of themes (Miles and Huberman, 1984). Content analysis of the data was conducted using the Nudist computer package. The data from the closed questions from the sections 'About your Mouth and Teeth' and 'About You' were analysed using SPSS version 10. Descriptive statistics including frequencies and valid percentages are reported.

3.3 Oral Health Promotion/Education Review: Postal Survey

3.3.1 Sample

The following professionals were identified as being key stakeholders in the development and provision of oral health promotion and surveyed accordingly:

- Public Dental Service - Principal Dental Surgeons, Senior Consultant Orthodontists for Special Needs, Dental Hygienists, Dental Nurses
- Department of Health and Children, Health Promotion Unit
- Dental Health Foundation, Ireland
- Healthcare Companies
- Training Centres / Universities
- Departments of Public Health, Regional Health Boards
- Departments of Health Promotion, Regional Health Boards
- Community Nutritionists

Sample estimates for dental personnel were based on results from previous surveys of dentists (Buckley, 1993). To detect an expected provision of routine dental service of 5% significance level, a sample of 478 dental personnel was required. This sample was proportionally distributed across the various categories of dental personnel. Some of these groups were very small in number and hence a census sample of such groups was used. Otherwise a random sample of personnel was generated.

Dental personnel names and postal addresses were supplied for each community care/dental area by the principal dental surgeons. A list of dental nurses and general dental surgeons in one dental area was not supplied for reasons of confidentiality. Details of orthodontist consultants, oral surgeon and specialists were obtained from the Department of Health and Children.

A random sample was drawn from the General Dental Surgeon (GDS) category. However, approximately 45 GDS's had been allocated the responsibility for special needs groups in the absence of a Senior Dental Surgeon with responsibility for that group, within some health boards. As a result a random sample of 30 was drawn from that list of 45, and substituted into the original GDS sample to ensure adequate sampling of GDS working specifically with special needs groups.

A sample of private dentists was drawn from a listing of dentists registered with the GMS as providing a dental service to medical cardholders. However dentists working in both the private and public sector were identified in this private dentist sample. Those identified as working in the public sector were reassigned to the GDS sample, resulting in an increase in the estimated GDS sample.

A census sample of 32 other personnel within the health boards and within the healthcare industry was incorporated into a total sample of 717, for the administration of the 'Oral Health Promotion/Education in Ireland' section only. Due to the restructuring of the Eastern Health Board to ERHA, personnel could not be identified at the time of this research for Health Promotion Managers and Directors of Public Health.

3.3.2 Questionnaire Design

The postal survey of oral health promotion/education was carried out in conjunction with that of service providers attitude, behaviour and knowledge around issues relating to special needs groups. Self administered questionnaires were posted from the National University of Ireland (NUI), Galway, with FREEPOST return envelopes enclosed, to a sample of dental and non-dental personnel, in the public and private sectors. The survey questionnaire consisted of two sections;

> Section 1: 'Practice and Perception of Dental Health Service Providers in Relation to Special Needs Groups'
>
> Section 2: 'Oral Health Promotion / Education in Ireland'.

The dental personnel sample received a combined questionnaire containing both Sections 1 and 2, whereas non-dental personnel received a questionnaire containing section 2 only, i.e. the section relating to Oral Health Promotion/Education. Three reminders and additional copies of the questionnaire were sent over a six-week period. A telephone follow-up was then conducted with 10% of the non-respondents, proportionally across the groupings that had a response rate less than 60%.

A questionnaire was devised consisting of two sections as already mentioned. Section 2 contained a total of 19 questions reviewing oral health promotion/education practice, policy, training and initiatives in Ireland. The majority of the questions were closed with the exception of three open ended questions which related to a) barriers to implementing oral health promotion strategies and policies; b) information in relation to what kind of initiatives the respondents were involved with and c) the main

aims and objectives of these initiatives. The final 11 questions ascertained socio demographic information of respondents.

The questionnaire was pre-tested with dental personnel from the Western Health Board. Feedback was obtained on individual questions enabling changes to be made to any ambiguous questions, and also allowing an assessment of the length of time needed for completion of the questionnaire. The finalized questionnaire can be seen in appendix XX.

3.3.3 Data Analysis

The data were analysed using the computer package SPSS version 10. Descriptive statistics including frequencies and valid percentages are reported for each question broken down by the different categories of personnel.

3.4 Special Needs Groups: Focus Groups And Interviews

Qualitative focus groups and individual interviews were conducted with identified special needs groups and a sample of people from the general population, which was obtained through a convenience sample such as unemployment centers. The Department of Health and Children specified the special needs groupings for this study, namely, older people and their carers in long term health board care, travellers, people with physical disabilities, people with intellectual disabilities and their carers, homeless people and asylum seekers.

3.4.1 Sample

The sample for the qualitative focus groups and interviews was identified through contact with thirty eight national voluntary organisations ensuring that each special needs group was represented by at least one national organisation. Initially, a postal survey of the organisations was conducted, which contained four questions relating to the organisation's identification of needs, perceptions of the dental services and the production of reports or resources on oral health. Some organisations, mainly the umbrella organisations, referred other organisations that they recommended being included in this research. The target number of interviews and focus groups in each special needs grouping is described in Table *.

Table *: Breakdown of special needs groups focus groups and interviews across the health boards

Special Needs Grouping	Target Number	Health Board	Specific Breakdown
Medical card holders	16-20 Interviews	SHB : 8-10 WHB: 8-10	50% Male 50% > 55 years
Non Medical cardholders	16-20 Interviews	SHB : 8-10 WHB: 8-10	50% Male 50% > 55 years
Elderly	24 interviews	12 in EHRA 12 in NWHB	50% Male 50% 65-75 years 50% 75+ years

Carers	10 Interviews	5 in WHB 5 in EHRA	50% Male 50% 65-75 years 50% 75+ years
Refugees	24 interview	EHRA- 12 WHB - 12	50% Male
Homeless	24 interview	EHRA- 12 WHB - 12	50% Male
Travellers	4 focus groups	EHRA WHB/MWHB	
Disability	12 Focus Groups	Parent (n=4) 4 WHB 1 MWHB 1 MHB Carers (n=4) 2 WHB 2 MHB Adults (n=4) WHB/MHB NEHB/WHB	 Services: - 2 Child Services 2 Adult Services 2 Physical Disability 2 Learning Disability

3.4.2 Interview / Focus Group Schedule

A semi-structured interview schedule was compiled consisting of 3 sections **(Appendix X JS).** The first section, 'About your Mouth and Teeth', contained 9 closed questions relating to oral health knowledge and behaviours; section 2 contained 14 open-ended questions relating mainly to perceptions of dental services, but also included some questions on knowledge and attitudes to oral health; and section three 'About You', consisted of 8 questions relating to socio-demographic information.

Two experienced fieldworkers were recruited to conduct the focus groups and interviews. Three students from the Masters in Health Promotion Course in NUI, Galway also collected data as part of their minor theses. Training sessions were carried out prior to administration of the interviews and focus groups to ensure that all the fieldworkers understood all the questions, and to ensure consistency of administration of the interview schedule.

Pre-testing of the interview schedule took place in both focus group and interview settings with modifications made, following which, the focus groups and interviews were organised and conducted over a period of six weeks, across nine health boards. Interviews and focus groups were conducted on the premises of the organisations and health boards through which the participants were recruited. Participation was voluntary and informed consent was obtained from the participants prior to commencement of the interview.

Administration of the first and third sections containing the closed ended questions was carried out by the researcher in the one to one interviews, but was filled out by the participants themselves, where

possible, in the focus groups due to the larger numbers. In some of the groups where literacy was an issue, the researchers administered the questionnaire at the beginning of the focus groups.

3.4.3 Data Analysis

The data generated from the interviews and focus groups were analysed using content analysis as previously described at 3.2.3.

3.5 Special Needs Groups: Postal Survey Service Providers

3.5.1 Sample

Sample estimates for dental personnel were based on results from previous surveys of dentists[1], (Buckley, 1993). To detect an expected provision of routine dental service of 5% significance level, a sample of 478 dental personnel was required. This sample was proportionally distributed across the various categories of dental personnel. The sample framework of dental personnel is described in section 3.3.2. As can be seen, the final target sample was greater than the required estimate. This was due to use of a census sample being used in some of the smaller dental groupings. Otherwise a random sample of personnel was generated.

Table *: Postal survey target sample of service providers to special needs groups

	Survey Population	Target Sample
Principal dental surgeons	30	29
Senior dental surgeons	26	25
General dental surgeons	303	108
Orthodontist consultants	12	12
Oral surgeons	1	1
Specialist consultants	2	2
Dental nurses	477	110
Hygienists	42	41
Oral health promoters	13	13
Dental hospitals	143	44
Private dentists	1224	300
Total		**685**

3.5.2 Questionnaire Design

As described earlier, dental personnel received a combined questionnaire containing both Sections 1 and 2. Section 1 of the self-administered postal questionnaire contained a total of 17 questions relating to service provision, knowledge of needs and perceptions of special needs groups. The majority of the questions in this section were closed with the exception of 2, which were of an open nature to elicit opinions from the respondents, relating to a) structures which could be put in place to improve co-

ordination and continuity of the dental services for special needs groups; and b) the sensitive aspects of dealing with each special needs group.

3.5.3 Data Analysis

The data were analysed using the computer package SPSS version 10. Descriptive statistics including frequencies and valid percentages are reported for each question broken down by the different categories of personnel.

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[1] Buckley, 1993

CHAPTER 4: RESULTS

4.1 Oral Health Promotion/Education Review: Telephone Interviews

Key health service personnel were interviewed by telephone, in relation to oral health education and promotion. There were a total of 22 personnel interviewed, made up of representatives from the Department of Health and Children's Dental Department and Health Promotion Unit, Health Board Assistant Chief Executive Officers, Health Promotion Managers, Heads of Dental Schools, Coordinator of Specialist Courses, NUI, Galway, Principal Dental Surgeons, Nutritionists, Executive Officers, Health Promotion Officers and General Managers.

The five areas for health promotion identified in the Ottawa Charter were incorporated into a past, present and future framework. The strengths, weaknesses, opportunities and threats of the present structure were also identified by each participant and are summarised.

4.1.1 Past

Three themes in relation to the past practice of oral health promotion emerged from the interviews and are described below.

1. Ad hoc system for Oral Health Promotion

In general participants considered that there had been an ad hoc approach to oral health promotion without any formal structure and that oral health promotion primarily involved dental health education on either a one to one basis or *'going out giving lectures to groups'*, often within the school setting. This was carried out in a *'fragmented'* and *'ad hoc'* manner at both a national and health board level. Some limited financial support for dental health education was received from the commercial sector.

> **'..ad hoc chat when dentists were in schools but there was nothing formal. There was I think sporadic efforts over the years .. in conjunction with drug companies, but they were once off and weren't sustained..'**

2. Low priority placed on Oral Health Promotion

Participants reported that there was very little priority placed on oral health promotion in the past as evidenced by the limited formal structures and resources allocated to the area, most of which if in place were mainly at a national level.

> **'..Resources were very limited in the '70's and '80's…there was no central body really looking at general health education as such…until the health promotion unit in the department got started and then the Dental Health Foundation…so that gave us some focus…but it was mainly concentrated in the public health service to an extent, but they were poorly staffed..'**

This was mirrored in the lack of policy development in the area of oral health promotion specifically, although other policy documents that were considered conducive to oral health promotion were identified by some of the respondents at the national level;

> **'..in terms of past policy documents there have been very few that are specific to oral health. There are documents such as 'The Wider Dimensions' and 'Shaping a Healthier Future..'**

Participants recognised that the low priority placed on oral health and oral health promotion was not particular to the dental services but also reflected in other areas such as health promotion departments, dental education and the attitudes of the general population.

> **'..I think in the past, oral health promotion and oral health education wasn't a big factor in both education establishments and also in the community, I think we had a situation where dentistry or teeth were not a priority..'**

3. Treatment versus Preventative service

In the past participants reported that the priority was placed on treatment rather than prevention, reflecting again the low priority status of oral health promotion.

> *'..in the past there has not been a lot of attention being paid to the health promotion aspects of oral health…it's in common with a lot of our other services that we tended to be a curative service rather than taking the health promotion aspect..'*

It was also noted that this treatment orientated service was due not only to limited resources, but also due to lack of understanding.

> *'..the understanding of the disease process was not fully understood, that it was a dynamic process and that it could be reversed..'*

4.1.2 Present

The current oral health promotion practice at national and regional levels was analysed using the five areas identified within the Ottawa Charter for Health Promotion.

1. Conducive Policies

The following national policy documents were identified as being specific to or relevant for oral health promotion.

- Dental Health Action Plan 1994, which was an attempt *'..to try and put it (oral health promotion) into a policy framework..'*
- The National Health Promotion Strategy 2000-2005 was identified as being '*..explicit in its reference to oral health..'*

- The National Policy on Fluoridation, as a population based public health strategy, was identified as an influential oral health promotion policy.
- Other national policies such as the National Anti-Poverty Strategy, The National Children's Strategy, Tobacco and anti-smoking policies and legislation, Healthy Eating policies, Social Policies were considered conducive to oral health promotion by some of the participants.

At a regional level, the majority of participants stated that there were no regional or local policies in relation to oral health promotion specifically. Each health board has developed their own health promotion policy, linked to their service plans, and although a small number of the health boards would *'have a specific reference to oral health promotion'*, many of the participants considered that oral health promotion would be incorporated under the general health promotion policy. Other regional policies identified as conducive to oral health promotion were school policies and healthy eating policies, specifically healthy lunch policies and screening policies.

2. Supportive Environments

A variety of supportive environments were identified and broadly categorized into national and regional/health board levels. In general, the former were mainly identified by those participants working at a national level, whereas the latter tended to be identified by participants at all levels.

National

- Fluoridation was identified by approximately a third of the participants as providing a supportive environment, more so than as a conducive policy.
- The partnership between the Dental Health Foundation, Ireland with its recently established role in oral health promotion planning and development, and the Health Promotion Unit and Department of Health and Children was identified as being supportive for oral health promotion. Funding and resources for Oral Health Promotion posts at health board level, specific pilot initiatives and current research were all identified as encouraging oral health promotion nationwide.

Regional

- The assigned regional responsibility for oral health promotion to a principal dental surgeon within each health board, which was described as *'positive'* and *'useful'*, and was seen as an attempt *'to get a uniform approach across community care areas'*.
- More available resources in terms of personnel and training. However, this varied significantly across health boards and across the various levels of health professionals seeking further training and study leave.
- A positive and supportive attitude towards health promotion in general in the health boards was conveyed in many of the interviews. This was expressed in terms of *'willingness to invest'* in training in the area of health promotion and oral health promotion.

'..the entire health board's ethos is, I think, extremely supportive of health promotion of any kind, not just dental..'

- Collaboration/communication between different departments or personnel, at both national and health board levels, emerged as a supportive environment. This was especially so in terms of facilitating multi-disciplinary inputs on projects of increasing awareness between the disciplines and departments, and in terms of opening possibilities for future collaborative work. For example one participant stated that,

  'Our role is to develop policy and to plan and review that policy. Now obviously we can't do that in isolation and we have to engage with the various relevant health professionals in developing any policy and we do in terms of oral health promotion we do have a dental advisor…. we work closely with the Dental Health Foundation in terms of I suppose identifying priorities and identifying needs in the development'.

Participants based within educational establishments mentioned education and training through the establishment of specialist courses for oral health promotion in NUIG, and curriculum for dental schools to include broader perspectives on health and oral health promotion and prevention as helping to create supportive environments. The research units in Cork, specialist posts in Cork and Dublin Dental Hospitals in the area of special needs and expertise and increased knowledge of oral health and promotion also contributed in this way.

There was a range of factors identified as hindering oral health promotion. They are simply listed below:

- The developing area of health promotion in general, with no history of oral health promotion, and only relatively recent commencement of limited training courses and posts. The current expansion of the health promotion teams across all the health boards was referred to by some of the participants as taking time to establish programmes and initiatives, as present efforts are directed towards establishing the infrastructure.
- Time pressure on personnel in terms of the workload, as well as recruitment and retention difficulties.
- Personnel untrained in the area, supervising oral health promotion and *'imposing medical models'*.
- General scepticism about the effectiveness of oral health promotion.
- Inconsistencies within the health boards as a result of having 30 different community care areas and potentially '*30 different systems'*.
- The lack of clear policy for oral health promotion
- Low profile and lack of awareness of the importance of oral health in the general population and in the health boards, although this was contradicted by some participants who did feel that

there was an increasing awareness of oral health, that may be related to a greater emphasis on general hygiene practices and appearance.

- The private sector were identified as being *'outside our control'* by one health promotion manager and the 'fee per item' system which mitigates against engagement in oral health promotion/education by the private sector.
- Commercial advertising was seen as having a negative impact on diet.

3. Community Participation

Community participation was felt to be a relatively new concept that is only now beginning to be developed. As a result, in the past there was little in terms of community participation in any of the health services.

> **'..There's been no emphasis on community participation at all really, it isn't that there wasn't interest on the part of the boards and dental departments, it was a matter of resources and lack of personnel, it is after all a relatively new concept..'**

Initiatives involving communities were given, ranging from dental health education to community development projects. An important question was raised in one interview about the concept of true community participation and

> *'..letting the communities decide, are we ready for that?'*

In mainstream health promotion, this is only beginning to change as the Departments of Health Promotion are being established and are taking on pilot projects or initiatives to engage in a consultation process to identify the needs of the community, as the first stage in the process. One participant identified that the regional structures were now in place with the advent of the health promotion departments and, now it is *'a matter of engaging with the various community enterprises'*. The importance of a regional rather than central emphasis on community participation having a greater impact, was also made by the same participant.

In relation to oral health promotion to date, community participation has therefore also been largely non-existent, apart from specific projects, for example the traveller initiative and the current fluoridation forum. However, some of the participants identified structures in place that facilitate community participation in health and social services in general, examples of which were the Integrated Services Department and co-ordinating committees that would have service user representatives. An interesting point was made that in some parts of the public dental service there is very limited contact with adults so that

> *'we don't have a mode of communication with adults except with parents who come in with their children for treatment'*.

4. Personal Skills

A range of skills were identified as necessary for oral health promotion, which included communication and teaching skills, leadership and team building skills, change management and evaluation skills, development and planning skills. In response to the question as to whether dental staff have the necessary skills, many of the participants described the staff as having '*the basic skills'* or having *'some of the skills'*, presumably used in traditional dental health education activities, but needing up-skilling as stated by this general manager;

> **'..I think they would have basic skills, but obviously they would need some training, I'm told by the dental people that they do need some training and up-skilling..'**

Two points were made in relation to educational courses. Firstly, the need to have a greater emphasis on oral health promotion in the educational curriculum for dentists, and although the curriculum has changed recently to encompass a more holistic approach to oral health, the medical model was considered to prevail where the emphasis is still on technical skills. Secondly, the curriculum of the specialist course changed from an original focus on group skills, to one-to-one skills, to meet the skills needed by the course participants for their work.

Identification of Training Needs

At health board level, general training needs are currently identified by each department, who also have their own training budget, but whether specific training needs with regard to oral health promotion are identified was not clear, as this information was not known by many of the participants. One participant referred to a report in 1994 that was conducted by the Dental Health Foundation, Ireland and the principal dental surgeons of the community services that

> *'..clearly identifies that their priority was skills training in oral health promotion before they could properly engage in the reorientation of the health services'*, which reflects *'an acceptance in the profession of the need for formal skills training and a clear understanding that personal skills is beyond demonstrating tooth brushing skills..'*

Ongoing Professional Development

The majority of the participants highlighted that the departments of health promotion have in the main, set about identifying training needs and establishing training programmes in generic health promotion knowledge and skills for all personnel in the health boards; and secondly, that several of the health boards specified that dental personnel have completed the specialist course in oral health promotion, an equivalent course or a health promotion course.

Participants working within the Department of Health and Children felt the need to incorporate all levels of personnel in training

> *'..target people who are in charge of these people- they must have the training as well..'*

and the need to *'maintain the momentum'* with training in oral health promotion '*maybe through master classes'* in order to remain engaged in current thinking.

Oral Health Promotion/Education Posts

There are inconsistencies at a regional level in the existence of specific oral health promotion/education posts. Traditionally the dental hygienist was seen as the 'oral health promoter' within the dental department, and many of the participants referred to them when asked if there was a specified post of oral health promoter. The data would suggest that they usually also had clinical responsibilities with their oral health promotion role. A number of posts of either oral health promoters or dental health educators are already operational, or in the process of being advertised, in a small number of the health boards. These posts have been filled either by dental nurses or dental hygienist, with a qualification in oral health promotion or health promotion.

The majority of the participants see the role of oral health promotion, and consequentially any related post, within the dental department. One health board has a health promotion officer with a specified brief in oral health promotion within the health promotion department. Different opinions were expressed in terms of how they saw the role of oral health promotion either as a *'specialist activity, a specialism beyond health promotion'* or *'not compartmentalized away into either dental or health promotion'*.

5. Reorientation of the Services

Reorientation of the health services in general was identified by the participants as needing to occur on two levels, at a structural level and at an attitudinal/ethos level. The process was described as having started but being slow in nature.

> **'..it takes a long time to turn the ship. And I think what is happening now is the top is actually beginning to move, and to be turned around, at the same time the people are moving much faster at the bottom, so hopefully they will meet halfway somewhere so that it wont fall down around our ears in chaos..'**

Structural Level

Several elements were identified as now being in place at a structural level, which are in themselves indicative of a reorientation but should also facilitate future reorientation. These were at a national level, the inclusion of oral health in the present Health Promotion Strategy, and at a regional level, the regional responsibility for oral health promotion to assigned principal dental surgeons, and the funding for oral health promotion posts.

Attitudinal Level

At the attitudinal level, the need to change people's attitudes was identified as being important for the reorientation towards oral health promotion, but this process is much slower.

> **'..I think in terms of changing the entire ethos of the department and of the organization, it tends to be much slower..'**

The training that is taking place within the health boards by the health promotion departments was identified as part of the process of reorientation of attitudes within the health services towards health promotion in general. There was a general perception mainly expressed by the health promotion participants that there is little reorientation towards oral health promotion within the dental departments due to workloads and emphasis on treatment. Within the academic field, some reorientation was identified as occurring reflected in some changes within the curriculum;

> *'..the issue of health education/promotion comes up right through their curriculum..'*

4.1.3 Future

<u>1. Conducive Policy</u>

The majority of the participants identified the need for a national policy in relation to oral health promotion. The advocacy of a 'health proofing' policy, which was proposed within the current national Health Promotion Strategy, was also identified by some participants as being an important development for the future, and is reported by one as being a central role for the forthcoming Health Promotion forum.

> *'..What is hoped to achieve is that all policies emanating from the statutory sector, the government departments and agencies established under the department, that all of their policies that they issue, or under the action plans that they would advocate, would be health proofed to ensure there is no adverse effects on persons .In terms of oral health, that there would be no adverse effects on oral health..'*

At a health board level, many of the health boards reported that there was no specific future plans, of which they were aware, to develop oral health promotion policy at this time. In terms of policy development, one board reported that they would like to see the setting up of a '*board-wide strategy forum for all of our policies and strategies in the board as a whole'* with the aim of getting '*some consistency in terms of the sort of issues that we have raised for all of our care groups and all our services, and oral health promotion would be one of them. In other words what I would like to see is you know in every strategy we develop and every programme we develop including the existing programmes, I'd like to see some oral health promotion input'*.

This idea of future integration of oral health promotion within other policies was echoed by several of the participants, and reference was made to policies such as breastfeeding, school and workplace policies.

2. Supportive Environments

National Level

The Health Promotion forum was identified as acting as a potential support to oral health promotion. This would have inputs from a cross section of agencies including the Dental Health Foundation, and secondly the Health Promotion Liaison Group which takes

> *'..a strategic overview of what's required at national level and at regional level and I suppose the various initiatives and various programmes that are being developed are discussed …and oral health promotion would certainly be something that we would hope to engage with them..'*

Other supports that were identified as being required were that a greater emphasis be placed on Oral Health Promotion at national level, with the development of clear strategies and guidelines, and resources for initiatives set within an evaluative framework that would be sustained. '*Buy-in'* from the health boards for national targeted interventions was identified by one participant as essential for change.

> **'..if you have a government drive to tackle something and you have buy in from health boards it actually makes it much more concrete you know that you don't have just one section driving for change that you actually have a whole thrust of people that have on their agenda a particular issue, that they are working towards that change..'**

Regional Level

Greater collaboration and integration of services at health board level was identified by the majority of participants as being an essential environment that would be required for the future development of oral health promotion. The organisational structures of health boards was referred to as potentially facilitating 'closer links' between departments, examples given of these included area based teams, the development of care programmes, changes in reporting relationships, and health promotion committees. The school setting was the most commonly cited as offering the opportunity for greater collaboration.

Other elements that were identified as providing a supportive environment for the future development of oral health promotion are related to recent developments within the academic field, such as current research projects and the recent funding of a Professorship in Special Needs in the Dublin Dental Hospital and the hiring of a new consultant and lecturer in UCC with an expertise and interest in Quality of Life issues.

3. Community Participation

There was a general agreement among the participants that there is an increasing importance being placed on community participation and public consultation, although the structures are only now beginning to be developed. Two challenges were identified in relation to future community development. The first relates to the idea that

> *'..we are going to have to hand over that decision making power to the public rather than us making …paternalistic kind of decisions on their behalf..'*

and that

> *'..a real challenge for communities is to become intrinsic to health promotion policy, in terms of taking on board what consumers want versus what policy makers will be prepared to do, and also what our health statistics are telling us is needed to improve overall health..'*

The second relates to the challenge of getting participation from all the different groups within the community, especially groups with special needs and lower socio-economic groups. In response to questions around what is needed for community participation in the future, a range of answers were given and these are summarised below;

- Multi-agency collaboration where health services would work closely with support groups and voluntary organisations to engage with the public
- Oral health promotion being integrated into general health interventions with particular groups
- The health boards having to 'kick-start' initiatives
- The academic curriculum taking on more of a consumer perspective
- Enlightened policy-makers
- Improving knowledge of services, in terms of availability and accessibility
- Developing closer links between the public and the private dental sectors with a possible role for health promotion departments
- Use of existing community networks in more effective ways
- More research on methods for community participation

4. Personal Skills

Most health boards are engaging in a process of training needs assessment and planning training programmes for health promotion, as one participant stated,

> **'..we are trying to gear all our staff up to be health promoters in the very broadest sense rather than specialist health promotion experts if you like….Now obviously oral health promotion is part of that..'**

As already identified, many of the health boards had also stated that some personnel have completed oral/health promotion courses, and the idea of creating opportunities so as *'not to waste those skills'* was referred to by one participant.

The following were identified by small numbers of the participants; skills required for the strategic planning of initiatives within an evaluative framework, training in oral/health promotion for other groups such as managers, policy makers, teachers and other health professionals, greater awareness of the availability of the specialist course in NUI, Galway, and the need for a greater priority to be placed on oral health promotion in the educational curriculum of dentists with the new professorship being identified as offering a potential opportunity for this to occur. One suggestion was also made of making oral health promotion an essential requirement for health board posts within the dental service.

5. Reorientation of the Services

The concept of reorientation of the services in the future was linked closely with the concept of applying health promotion principals to every service, thus leading to the central role for health promotion in service planning and staff development. According to one respondent

> *'..everything we do needs to be looked at, with health promoting glasses..'*

Several elements were suggested as being required for future reorientation to happen and these related to:

- Attitudes in terms of changing the 'culture' or ethos of organisations, both service and educational, so change is fostered at every level.
- Resources allocated to health promotion so that there will be no competition from treatment services
- Evidence based practice that will produce a questioning attitude within the services
- Staff need to be equipped with the knowledge and skills to re-orientate the services

Suggestions for achieving a reorientation towards oral health promotion were made by some of the participants, which included joint planning structures in health promotion, funding mechanisms to require collaboration at local level, establishing partnerships between health board departments and between educational institutions especially dental schools and university health promotion departments. One of the main ideas in relation to the reorientation of the service is that the public dental service is in the slow process of change, a process which one participant summarized as;

> *'..the public dental service will gradually and slowly get geared up better to a bigger emphasis, and its main emphasis on promoting oral health …..it has already started …some of the resources and infra-structures beginning to be built up and geared in that direction towards prevention, but there's a long, long way to go yet..'*

4.2 Oral Health Promotion/Education: Postal Survey Results

4.2.1 Response Rates

Table * details the response rate to the questionnaire relating to the oral health promotion/education review. There was an overall response rate of 53% (n=360). In general there was a good response from each of the sub-categories of dental personnel, with the lowest response (36%) being from the largest target group, the Private Dentists.

Table *: Response rates to the Oral Health Promotion survey

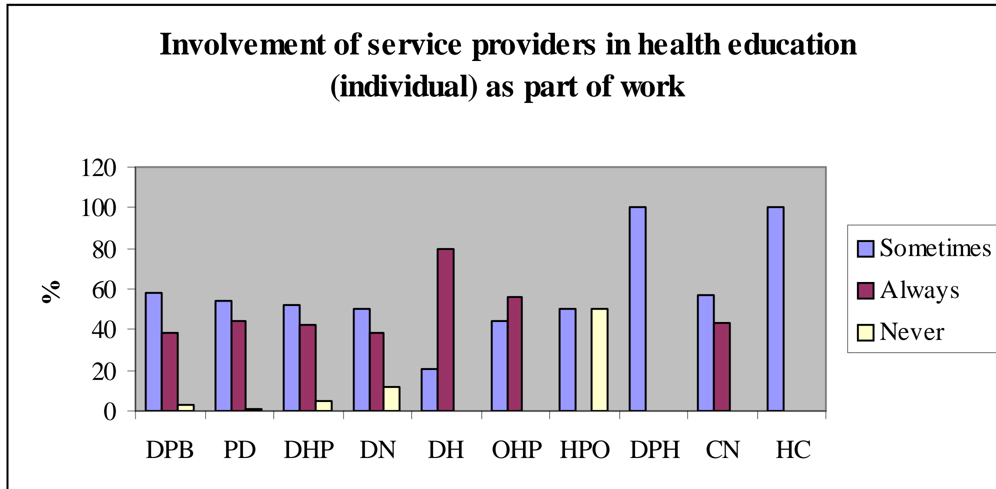
	Target Sample N	Response Rate N (%)
Principal Dental Surgeons	29	25 (86)
Senior Dental Surgeons	25	21 (81)
General Dental Surgeons	73 (+35 GMS list)	63 (58)
Orthodontist Consultants	12	5 (42)
Oral Surgeons	1	1 (100)
Specialist Consultants	2	2 (100)
Dental Nurses	110	58 (53)
Hygienists	41	29 (71)
Oral Health Promoter	13	11 (85)
Dental Hospitals	44	21 (48)
Private Dentists	300	109 (36)
Health Promotion Managers	7	2 (29)
Directors of Public Health	8	4 (50)
Principal Community Nutritionists	10	7 (70)
Healthcare Companies	8	2 (25)
	718	360

In the following presentation of results, personnel categories have been collapsed for ease of interpretation of the results in relation to the practice of Oral Health Promotion. The majority of dental personnel reported that they provide a service either always or sometimes to the various sub-groups of the general population, with the exception of refugees and the homeless where there was a high percentage of personnel reporting that they 'never' provide a service to these population sub-groups, as can be seen in Appendix 63. There are various settings within which each service provider works with different population groups. The most frequently cited setting for all groups is within the health service, some service providers reported working within the school and the workplace to a lesser extent, as seen in Appendix 64.

When asked about the frequency with which service providers were involved in dental screening as part of their work, the majority responded either always or sometimes, with the understandable exception of the community nutritionists. The majority of dental practitioners unsurprisingly stated that they were 'always' involved in treatment as part of their work.

4.2.2 Health Education/Health Promotion

Service providers were asked to report whether their work involved health education at either individual or group level. The majority of respondents reported sometimes or always including individual health education in their work, as can be seen in figure *.



DPB = Dental Surgeons in Health Boards
DHP = Dental Hospital Personnel
DH = Hygienist
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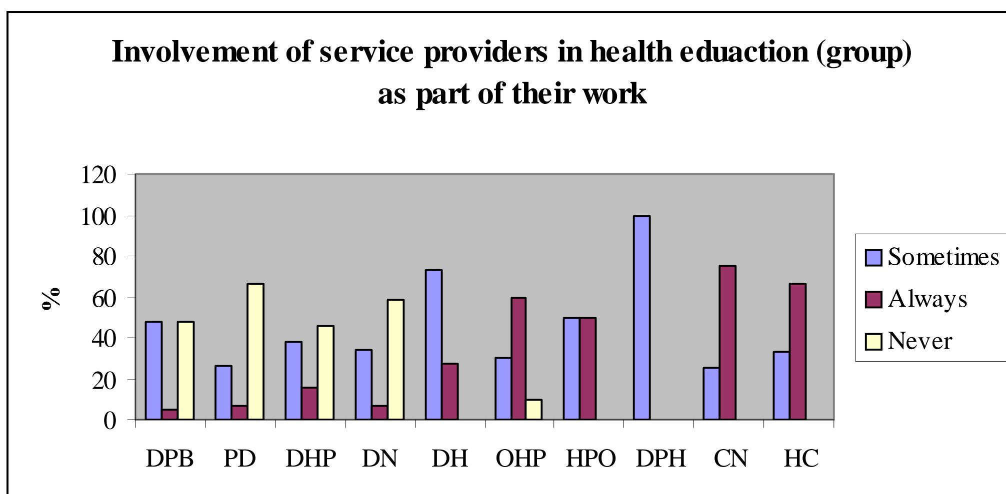
Respondents however were much more variable in relation to their involvement in group health education as part of their work, with higher proportions reporting 'sometimes' or 'never' as can be seen in figure *.



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Most respondents reported that health promotion/education was never a priority in their work with the exception of the community nutritionists and the healthcare company representatives who stated it was always a priority as can be seen in Figure *.

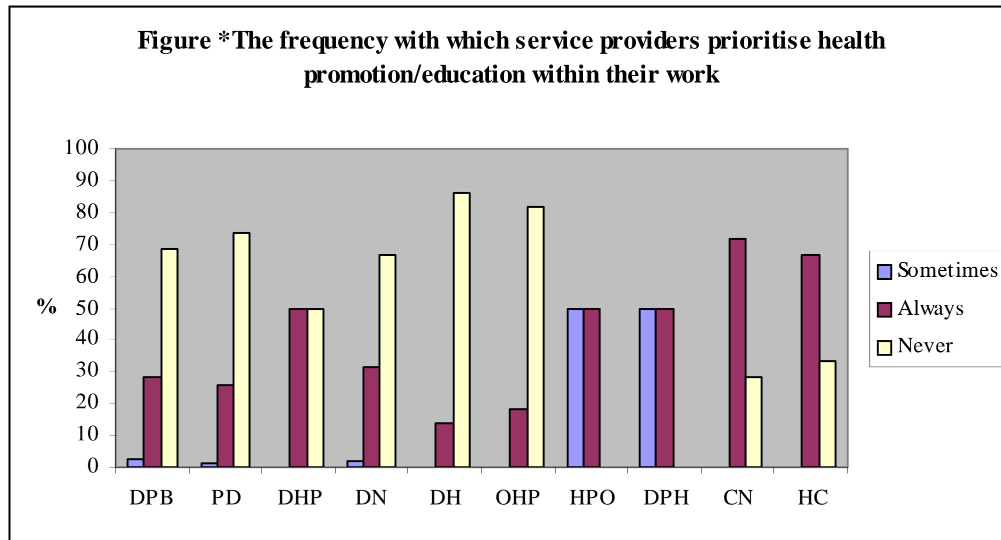

Figure *The frequency with which service providers prioritise health promotion/education within their work

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4.2.3 Resource Material

The majority of all service providers reported using oral health education resource materials, with the exception of the DHP's. Most respondents from the dental services who reported not using oral health education materials did so because they felt they were unavailable. This was also the case for dental nurses, hygienists and community nutritionists. Two of the three directors of public health felt the materials were inappropriate and around one third of the dental service providers reported not having time to use them, as can be seen in appendix 65. Table * details the service providers who use oral health education resource materials and where these materials were sourced. Most materials were obtained from the Health Boards, Dental Health Foundation, Ireland, Department of Health and Children, and the Oral Healthcare Companies. A number of service providers also reported using materials, which they developed themselves.

Table *: Source of Oral Health Education Materials used by Service Providers

	DPB N=92	PD N=83	DHP N=15	DN N=34	DH N=26	OHP N=11	HPO N=1	DPH N=0	CN N=4	HC N=2

	%	%	%	%	%	%	%	%	%	%
Developed Own	39	40	33	26	81	82	100	0	75	50
Health Board	64	19	13	79	77	82	100	0	75	0
UK	25	34	13	6	19	46	0	0	50	0
Dental Health Foundation	64	51	47	53	69	91	0	0	100	0
Northern Ireland	4	4	7	3	0	0	0	0	0	0
DOHC, HPU	30	18	13	47	38	46	100	0	50	0
Oral Healthcare Companies	56	76	73	47	65	73	0	0	0	50
Other	6	4	13	0	8	9	0	0	0	0

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4.2.4 Policies and Strategies

The majority of all service providers were aware of the National Health Promotion Strategy 2000-2005. However, when asked about specific oral health promotion strategies or policies in their own work places and implementation in their own departments responses varied as can be seen in figures * and *. Only those respondents with a specific remit for oral health knew of and were aware of implementation of these oral health promotion strategies.

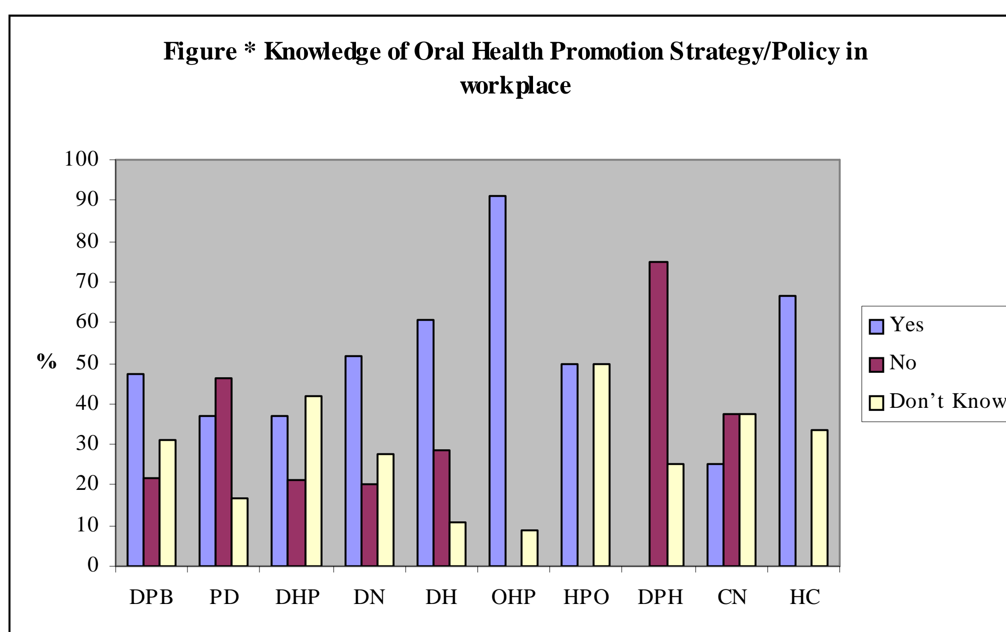

Figure * Knowledge of Oral Health Promotion Strategy/Policy in workplace

DPB = Dental Surgeons in Health Boards
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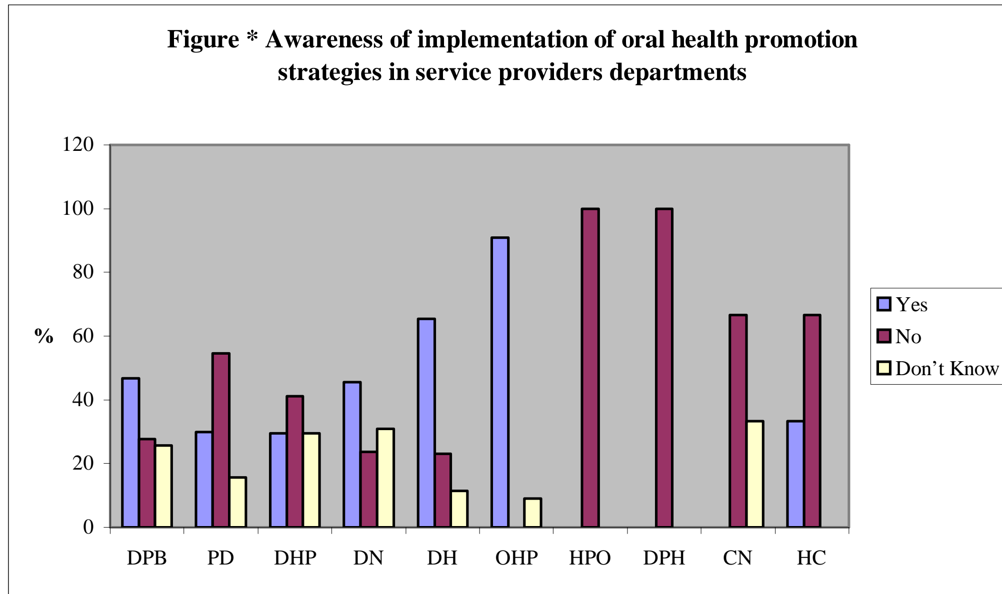

Figure * Awareness of implementation of oral health promotion strategies in service providers departments

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A number of barriers were identified to implementing these strategies/policies, including the lack of sufficiently trained staff resulting from lack of time to under-go training. Lack of communication and co-operation between dental departments and other departments in the health service were identified as barriers, in addition to the resistance to change within the system, in that the management are very much treatment orientated. For a strategy to work it was identified that co-operation from all colleagues working within the dental profession i.e. nurses, dentists, hygienists, health promoters and other health board professionals is necessary and that people need to work as a team in promoting oral health rather than one person doing it now and again. It was identified that management arrangements are needed for development of Oral Health Promotion.

4.2.5 Health Promotion/Education Networking and Training

There was varying levels in knowledge about the existence of an Oral Health Promotion Officer in the service provider's organization as seen in table *.

Table *: Appointment of Oral Health Promoter in Organisations of Service Providers

	DPB N=110 %	PD N=76 %	DHP N=20 %	DN N=57 %	DH N=27 %	OHP N=11 %	HPO N=2 %	DPH N=4 %	CN N=8 %	HC N=3 %
Yes	42	22	25	47	37	73	0	0	12	33
No	36	67	30	39	48	27	100	50	38	67
Don't Know	22	11	45	14	15	0	0	50	50	0

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Respondents were asked to identify if they networked with any number of a list of organisatons in relation to oral health education/promotion. As can be seen from table *, the organization networked varied between service providers, with high proportions of respondents citing the Health Board's Health Promotion Unit and the Oral Healthcare Companies.

Table * Networking of Service Providers in Relation to Oral Health

	DPB N=83 %	PD N=66 %	DHP N=13 %	DN N=33 %	DH N=26 %	OHP N=10 %	HPO N=1 %	DPH N=1 %	CN N=6 %	HC N=2 %
DOHC	31	12	46	27	38	40	0	0	50	50
HB HPU	57	15	0	64	69	100	0	100	83	50
Oral Healthcare Industry	41	46	54	27	65	80	0	0	0	100
Health Board PHD	30	9	23	39	35	40	0	100	0	50
Private Dentist	20	64	23	9	4	0	0	0	17	100
Voluntary Organisations	28	6	15	18	19	30	0	0	0	50
Academia	25	27	31	12	15	30	0	0	17	50
Public Health Nurse	43	8	15	36	58	90	0	0	50	50
Community Nutritionist	24	2	0	12	42	60	100	100	67	0
Other	19	2	0	6	4	20	0	0	33	0

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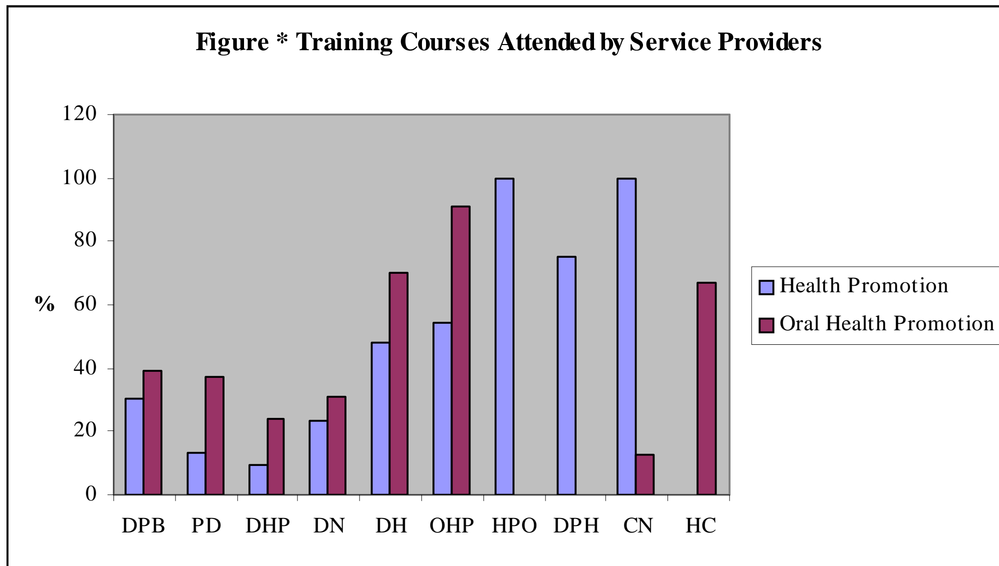
Other respondents reported networking with schools, the Dental Health Foundation, Ireland, Specialist Services, for example, the EMO Methadone service, Postnatal groups and Children's Homes.

Figure * details the types of some of the training courses which services providers reported attending. These courses included the Oral Health Promotion Certificate Course, NUI, Galway of which 64% of Oral Health Promoters attended, UK courses and In-service courses, as can be seen in Appendix 66. Other courses cited by respondents included Diploma in Dental Hygiene at University College Cork, Open University Certificate in Health Promotion and MSc. Community Dental Practice via distance learning with Kings College, London. The majority of respondents reported that they were either funded by their own organisation to attend these courses or they were self-funded.



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4.2.6 Oral Health Promotion Activity Involvement

Respondents were asked to state if they had been involved in any health promotion/education activities which either specifically or partly involves oral health, table * details these responses.

Table * Involvement By Service Providers in Health Promotion/Education Activity

	DPB N=105 %	PD N=89 %	DHP N=17 %	DN N=53 %	DH N=25 %	OHP N=11 %	HPO N=2 %	DPH N=4 %	CN N=8 %	HC N=3 %
Specific to oral health	59	24	41	26	88	91	50	25	38	67
	N=90	N=81	N=15	N=51	N=25	N=8	N=2	N=3	N=7	N=1
Oral health a part	36	5	20	20	56	50	50	67	86	0

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Appendix 67 and Table * details the types of activities with which the respondents were involved. General advice and/or information at consultation were the most cited amongst dental personnel, whereas the majority of oral health promoters (78%) best described their initiatives as school based. Other activities reported included working with antenatal classes, development of website for dentists and production of leaflets for PHN use (leaflets aimed at parents/ guardians).

Table *: Description of Initiatives/Activities Involving Service Providers

	DPB N=63	PD N=21	DHP N=9	DN N=15	DH N=20	OHP N=9	HPO N=1	DPH N=2	CN N=5	HC N=2
	%	%	%	%	%	%	%	%	%	%
General advice / information at consultation	59	62	56	53	50	11	0	0	0	0
Training in Oral Health	27	38	22	47	50	22	0	0	20	50
Initiatives with special needs groups	40	14	22	40	45	44	0	0	0	0
Media involvement	8	10	0	0	15	0	0	0	0	50
Pre-school Initiative	19	14	0	47	35	56	0	0	40	0
School Initiative	48	29	33	53	75	78	0	50	20	0
General adult Initiatives	5	10	11	20	20	11	0	50	20	0
Other	8	10	0	0	10	11	100	50	20	0

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Figure * details the level of involvement of the respondents in the above mentioned activities. As can be seen the majority of respondents reported being involved in the delivery of the initiative, with the exception of the Health Promotion Officers and the Directors of Public Health who were involved exclusively in the strategic planning. Other involvement reported included data collection and maintenance and evaluation.

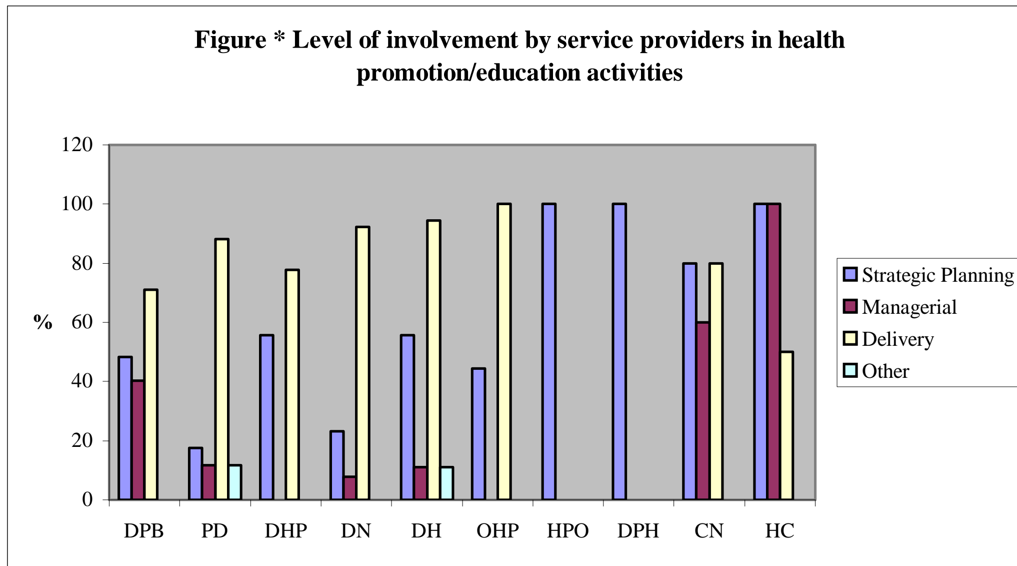

Figure * Level of involvement by service providers in health promotion/education activities

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4.2.7 Evaluation of Oral Health Education/Promotion Initiatives

The majority of all respondents reported no knowledge of any evaluation of the initiatives summarised in Table *. Of those for which an evaluation report was available, the outcomes identified were predominantly improved oral health knowledge and attitudes. Initiatives undertaken by oral health promoters and directors of public health were likely to include improved communication as desirable outcomes as can be seen in Table *. The least reported outcome was the improvement of service provision.

Table *: Breakdown of oral health promotion/education initiatives

Category	(a) Initiative Specific (b) Initiative Part	Type of Initiative	Level Involved	Aims and Objectives
PDS (N=22)	14 involved in initiatives both specific and part of oral health. 8 involved in initiatives specific to oral health only.	(i) Health education[1] (ii) Pilot Programmes[2] (ii) Designing programmes (iv) Project work (v) Screening programmes (vi) Health Promotion materials (vii) Fluoride mouth washes, fortnightly rinsing programme in schools (viii) Inter-school based oral health competition	7 involved at all 3 levels (strategic, managerial, delivery) 3 at both strategic and managerial level 3 in strategic only, 3 in managerial only, 2 in strategic and delivery and 4 in delivery only.	(i) To improve oral hygiene (ii) To improve dietary habits (iii) To put in place a specific oral health policy (iv) To increase awareness (v) To ascertain levels of satisfaction with delivery of dental services in an area. (vi) To increase level of knowledge of OH issues amongst expectant mothers (vii) Liaise with other health professionals in making them aware of the importance of oral health (viii) Introduction of new and attractive material into OH promotion arena (ix) Improve awareness of fluoridation, requirements under law, benefits, outcomes
SDS (N=12)	7 involved in initiatives both specific and part of oral health 5 in initiatives specific to oral health only	(i) Oral hygiene workshops (ii) Committee work (iii) OHP programmes with special needs groups, carers and parents (iv) Development of leaflets	Majority involved at managerial or strategic level while some reported participation at delivery level.	(i) To improve oral health of special needs groups. (ii) Oral health education to school children, teachers and carers of vulnerable groups in society. (iii) To develop suitable health promotion materials. (iv) To increase awareness of parents, teachers, healthcare workers of entitlements to use dental services.
GDS (N=19)	6 involved in both initiatives 13 involved in initiatives specific to oral health only.	(i) Oral health education in schools including talks, distribution of leaflets, class discussions, video presentations, demonstrations etc. (ii) OHE at individual level. (iii) Committee work (vi) Development of oral health promotion policy in	Majority involved in delivery only (n=11), 3 involved at all 3 levels, 2 in strategic and delivery, 1 at both strategic and managerial level while 2 did not specify level of involvement	(i) To promote awareness of oral health (ii) To promote better oral hygiene practices. (iii) To create awareness of dental services. (iv) To encourage healthy eating (v) Developing a sustainable oral health policy for pre-schools (vi) Educating carers in good OH techniques

		schools		
DN (N=12)	7 involved in both types of initiative 6 involved in initiative specific to oral health only.	(i) Health promotion in schools (ii) Collaboration work[3] (iii) Pilot programme[4]	All respondents listed their involvement in the delivery of the initiative.1 stated being involved at strategic as well as delivery while another stated being involved at all three levels.	(i) To raise awareness of good oral health amongst pre-school, national school children along with special needs (ii) To raise awareness regarding oral hygiene and diet. (iii) To train carers how to assist in tooth brushing.
HYG (N=17)	12 involved in both types of initiative 4 involved in initiative specific to oral health only 1 involved in initiative of which oral health is a part.	(i) Oral health promotion in various settings e.g. schools, pre-schools, parent-toddler groups, special schools etc. Talks to organisations. (ii) Lobbying government	8 respondents stated being involved at both strategic level and in delivery. 7 stated being involved in delivery only while 2 declared being involved at all three levels.	(i) Increasing awareness of importance of good oral health amongst both children and adults. Also house parents and carers and public health nurses. (ii) To increase people's knowledge of oral hygiene and healthy eating. (iii) Dietary advice for pre-school, schools for special needs and general public. (iv) To initiate an oral health programme for residents and carers of mentally handicapped patients.
OHP (N=10)	4 participated in both initiatives 6 involved in initiative specific to oral health only	(i)Programmes for travellers (ii) Disadvantage schools/early start programme. (iii) Den TV campaign 'Mighty Mouth' pilot programme (iv) Health promoting area in the health centre. (v) School based OHP for disadvantaged adults (vi) Designing of health promotion materials	6 reported being involved in delivery of initiative while the remaining 4 stated both participation both at the strategic stage and in delivery.	(i) To increase awareness of oral health and hygiene amongst school children (ii) To improve oral health knowledge, change in attitude and health behaviours. (iii) To create awareness of health services available. (iv) To advise teachers the need for a balanced school lunch and importance of oral health. (v) To evaluate the attitude, belief and behaviour of traveller mothers of pre-school children towards oral health (vi) To produce an oral health promotion material that is practical and down to earth.
SC (N=2)	One involved in both types of initiative while second involved in initiative specific to oral	(i) Oral health promotion for children with congenital heart disease, cancer, cleft palate and lip.	Both involved in delivery, one stated that he/she developed sheet/flyer for parents/children while the	(i) To promote good Oral Health and health practices in children with congenital heart disease. (ii) To improve the levels of oral/dental health in head and neck cancer patients who are due to undergo radiation

	health only	(ii) Advice to patients who are due to undergo treatment of head and neck cancer.	second reported being involved at a strategic level also.	treatment.
PD (N=11)	10 involved in initiative specific to oral health while one stated being involved in both types of initiative.	(i) Oral health education in schools including talks, presentations, video material, demonstrating how to brush teeth properly. (ii) Occasional talks to community groups	The majority indicated being involved in delivery while 2 were involved at strategic and managerial level also.	(i) Promoting oral health awareness and healthy lifestyle; importance of tooth brushing and diet.
DHP[5] (N=6)	4 involved in initiatives specific to oral health only while 2 involved in both types of initiative.	(i) Oral health education in schools. (ii) Designing oral health promotion materials (iii) Oral health and the elderly	3 involved strategic and delivery, 2 in delivery only while 1 involved at strategic level.	(i) To create awareness of importance of good hygiene and diet in maintaining good oral hygiene amongst school children and other groups.
HPO (N=1)	Involved in both types of initiative	Coordinating work of schools, Health promotion officers and community nutritionists. Meeting with principal dental surgeons to ensure common message and approach.	Involved at strategic level only.	To co-ordinate approach to oral health promotion
CN (N=6)	50% involved in both types of initiative while another 50% involved in initiative of which oral health is a part.	(i) 'Mighty Mouth' Programme (ii) Training with community care staff (iii) Oral health as part of nutrition projects in the community (iv) Development of healthy eating guidelines for pre-schools and schools. (v) Work with media and designing of leaflets.	50% involved at all three levels, 1 at strategic level only, I in delivery only while 1 did not indicate at what level they were involved.	(i) Improve knowledge of community care staff around nutrition/oral health in order to give constant advice and improve oral health- Include this information in resources produced i.e. weaning booklet for use in Health Board. (ii) To improve nutrition and diet of pre-school and primary school children. Develop a manual for use by pre-school managers within WHB and devise an assessment tool for pre-school assessment team to assess menu planning and food provision in pre-school establishments. (iii) Raise awareness of importance taking care of baby teeth. Provide information on role diet plays in oral health. (iv) Increase healthy eating and general knowledge of food

		(vi) Nutrition literature for <1 years, <5 years.		and drinks in relation to health. Improving cooking skills.
HC (N=2)	Both involved in initiative specific to oral health only.	(i) Training on oral health, teeth and what affects oral health.	1 involved at all 3 levels while second involved at strategic and managerial level only.	(i) To educate key personnel in relation to oral health. (ii) Improve oral health of general population.

[1] Health Education – Talks in schools, sheltered workshops, residential units, part of antenatal classes, carers of special needs groups.

[2] Pilot Programmes – Committee set up programme in schools called Schools National Advisory Committee (SNAC) Cross border committee with Western Health Board and social services and is funded by CAWT.

[3] Collaboration Work – Oral Health in school and to parents associations in conjunction with National Dairy Council and Healthier Lifestyle Group.

[4] Pilot training course for carers in 2000- review to be held this year.

[5] Two of these questionnaires were completed by dental nurses.

Mighty Mouth Programme: Pilot scheme involving children attending speech therapist. Liasing with speech therapist to promote Oral Health.

Evaluation Outcomes of Initiatives

1. Initiatives By Principal Dental Surgeons (PDS)– Five of these initiatives were evaluated, a report was written on two of them. Improvements were reported in knowledge, attitudes, behaviour, communication, service provision and higher morale amongst staff due to positive feedback from the public.
2. Initiatives By Senior Dental Surgeons (SDS) – One of these initiatives were evaluated and improvements in knowledge and service provision were reported.
3. Initiatives By General Dental Surgeons (GDS) – An evaluation report was prepared for one of these, with improvements both in knowledge and behaviour noted. It was also concluded that playgroup leaders have a vital role to play in health promotion.
4. Initiatives By Dental Nurses (DN) – Three of these initiatives were evaluated and a report was written on one of these. The conclusions drawn from the initiative on which the report was written was that there were improvements in knowledge, attitudes and communication. In the two other evaluated reports it was concluded that there were improvements in knowledge and behaviour in both of them while there was improvements in attitudes in the second also.
5. Initiatives By Dental Hygienists (DH) – Five of these initiatives were evaluated and a report was written on two of these. In general, improvements were observed in knowledge, attitudes, changes in behaviour, communication and service provision.
6. Initiatives By Oral Health Promoters (OHP) – One evaluation had been carried out and it was concluded that there were improvements in communication and service provision as a result of the initiative.
7. Initiatives By Specialist Consultants (SC) – One evaluated and it was noted that there were improvements in knowledge and service provision and in oral/dental health of the group.
8. Initiatives By Private Dentists (PD) - One of these initiatives evaluated and changes in knowledge, attitudes and behaviour were noted.
9. Initiatives By Dental Hospitals (DHP) – No conclusions (N=4), increased knowledge (N=1) and increased knowledge, changes in attitudes and behaviour, improved communication and service provision (N=1).
10. Initiatives By Health Promotion Officers (HPO) – This initiative not evaluated but improvements in communication have occurred as a result of the initiative.
11. Initiatives By Community Nutritionists (CN) – Two of these initiatives were evaluated. There was increased knowledge and service provision as a result of one of the initiatives and changes in attitudes as a result of the second.
12. Initiatives By Healthcare Companies (HC) – Improvements in knowledge, attitudes and changes in behaviour observed in one evaluated initiative.

Table *: Summary of Health/Oral Health Promotion Initiative Outcomes

	DPB N=48	PD N=13	DHP N=2	DN N=13	DH N=18	OHP N=8	HPO N=1	DPH N=2	CN N=3	HC N=2
Improved oral health knowledge	81	77	100	92	94	75	0	0	33	100
Improvement in attitudes	40	85	50	69	56	50	0	50	33	50
Change in health behaviours	31	62	50	54	50	38	0	50	0	50
Improved Communication	40	77	50	54	72	62	100	50	0	0
Improved Service Provision	15	3	5	9	28	36	0	29	12	0
Other*	30	14	33	0	16	33	0	100	33	0

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∗ DPB (N=53), PD (N=14), DHP (N=3), DH (N=19), OHP (N=9)

4.3 Special Needs Groups: Focus Groups And Interviews

Three themes emerged from both the focus groups and interviews carried out with people from special needs groups. The first is the impact oral health was perceived to have on people's lives. The second relates to knowledge of oral health which includes exploration of causes of health and ill health in relation to mouth, teeth and gums, as well as factors perceived to improve oral health. The final theme to emerge was in relation to oral health services including identification of information sources as well as issues of accessibility, barriers to use, perceived effectiveness of service provision and suggestions for service improvements. These results are reported under these themes with sub-headings relating to categories developed within each theme, which emerged from the data. The framework is therefore as follows:

Importance of oral health

- Impact of oral health on daily living

Knowledge of oral health

- Identified causes of healthy teeth, mouth and gums
- Identified causes of poor health of teeth, mouth and gums
- Factors perceived to improve the health of mouth, teeth and gums

Oral health services

- Sources of information
- Experiences of services
    - Access to Dental Services
    - Ease of use
    - Effectiveness of organization and treatment
    - Barriers
- Service improvements

The interview and focus group data are presented separately within the framework.

4.3.1 Impact of Oral Health on Life

Older people generally did not express any idea that oral health impacted on any aspect of their daily lives either positively or negatively. Some mention was made by a few people as to the effect oral health had on eating. In contrast carers of elderly people identified the impact oral health would have on eating and enjoyment of food as well as psychosocial effects such as speech, communication, appearance, self esteem and mental health as well as the impact on general health. One carer described the impact for a woman in her care of having dentures repaired and re fitted, *'She's mixing much better socially now as a result and her confidence has increased greatly.. this lady is 92 years old, perfectly*

with-it, got her hair done as a result and is even talking about going home for the day'. People across the remaining groups referred to the impact of oral ill health as opposed to health. Oral ill health was considered to have negative impacts on people's daily lives. People who were homeless referred to the effect oral health had on their appearance and hence social interaction. One person said "*when I'm with people I wouldn't know like, I'd be afraid to smile or anything……I'd be watching the way I smiled, so that people would not see the state of my teeth.*" Reference was also made in this group to the effect oral health had on eating. The impact of oral health in relation to social interaction and eating were also identified by asylum seekers. Non medical card holders identified a range of impacts their oral health would have on their day to day lives such as those on health generally, presence of pain, economic, mental health, social life and appearance. In common with other groups medical card holders identified, the effect oral ill health would have on appearance and social life as well as enjoyment of food.

In the focus group data for all groups the most common references were made to the impact on appearance, smiling and confidence, the impact of bad breath especially on social interaction, the effect of oral health on food choice and enjoyment, and the effect of pain on mood were also identified.

4.3.2 Knowledge of Oral Health

Causes of Oral Health

Consistently across special needs groups in the interview setting people identified good oral hygiene practices such as regular brushing as a pre-requisite for good oral health. Dietary factors were also referred to by many people in all groups in relation to the amount of sugar or types of foods to avoid. No reference was made by anyone to the frequency of the consumption of sugar containing foods.

Similarly in the focus groups, people identified oral hygiene and dietary factors as causes of oral health. All groups except adults with disabilities also identified visiting the dentist.

Causes of Poor Oral Health

Generally participants in all groups identified the causes of poor oral health as the opposite to that which they had previously identified as the causes of good oral health, with most frequent references to poor oral hygiene and diet. Additional causes of oral ill health were identified by some groups and included effects of medication, which was identified by some medical cardholders and older people. Carers of the elderly also referred to a lack of education of carers and ill-fitting dentures as other causes of poor oral health. Two thirds of the homeless group identified adverse behaviours, such as smoking, drinking alcohol or taking drugs, as having a major negative influence on their oral health either directly, or indirectly as a result of neglect due to these behaviours.

In the focus groups, as in the interviews poor oral hygiene and dietary factors were highlighted in relation to causes of poor oral health. Medication, having a disability and staffing difficulties were mentioned in three parent groups and three carer groups of people with disabilities. Medication was also identified by one traveller group as contributing to poor oral health.

Improvements for Oral Health

A variety of factors were identified by participants that were perceived as improving oral health. Within all the groups who were interviewed reference was made to aspects of oral hygiene practices mainly regular brushing, as well as diet. People in all groups also referred to aspects of the dental services. Variations were notable between the groups not only in terms of the frequency of references made to the dental services, but also in terms of the components of the dental services to which they identified as important to improving their oral health. Approximately 14% of the elderly and 27% of refugees /asylum seekers, as compared to 47% of the general population, identified dental attendance as improving oral health, although several participants in each group put this in the context of perceived need or '*as a last resort'*. A majority of the homeless group (67%) also made references to dentists in response to this question, but only four mentioned it in terms of regular attendance. The remaining participants put it in the context of overcoming barriers *'I suppose if I could bring myself to see a dentist'*. Three of the homeless respondents and one medical cardholder gave answers suggesting that nothing could improve their oral health in their opinion as it was so poor, as stated by this participants who said: *'Nothing at this stage, I'm too bad I need dentures'*

In the focus group data, oral hygiene and diet were also referred to in terms of improving oral health, as was dental attendance. As with the interview data variations between groups were identified in reference to the use of dental services. Early and regular access to dental services was important to parents, carers and adults with physical disabilities. All of the traveller groups referred to dental attendance as improving their oral health, although two groups put this in the context of the impact of identified elements of the service such as having '*to be comfortable going to the dentist that you are using, you have to be made like welcome'*, using the dentist for prevention versus treatment only and having choice of treatment.

4.3.3 Oral Health Services

Sources of information

The sources of information about the dental services are listed for each group in the tables below.

Table *: Sources of Information (Interviews)

	Medical Card Holders	Non Medical Card Holders	Elderly People	Carers of Elderly People	Refugee / Asylum Seeker	Homeless People
Health Boards	✔	✔	✔			✔

Local Dental Clinic/Health Centre				✔		
Dentist	✔	✔		* ✔		
Labour Offices						✔
No Need/ Don't Know	✔		✔			
Media	✔	✔			✔	✔
Family/ Friends/ Neighbours	✔	✔	✔		✔	✔
Social Worker					✔	
General Practitioner			✔		✔	✔
Staff Member in Organisation			✔	✔		
Local General Knowledge			✔			
Policy on Mouth Care				✔		
Support Organisations					✔	✔

* Referring to the dentist attached to the place of work for the carers of elderly people

In the general population group the most frequently cited sources were media, usually referring to the Yellow Pages, recommendations from friends or family for particular private dentists and the dentists themselves. The most frequently reported source of information for elderly people was a carer in the place of residence. The carers themselves cited staff colleagues, and in one unit the dentist attached to the residential home as well as the policy on mouth care, which was used as reference. All the responses which were categorised as not knowing or not receiving any information for older people and carers were from locations which did not report having a specific policy or guidelines on mouth care. Refugees / Asylum Seekers consistently cited the general practitioner as a source of information on dental services as did homeless people.

The sources of information about the dental services are listed for each group in the table below. In the group of parents of a child with a disability no parent identified a strong source of information. However there was a general sense that it was up to the individual themselves. One person said you have to, *'push for everything. Nothing comes to you'*. Adults with disabilities only identified two sources of information and one group did not respond to this question at all. Carers were the most forthcoming suggesting a number of sources of information as seen in table **XX.** The most common information source identified by Travellers was word-of-mouth from friends, family or in the Dublin groups, primary healthcare workers.

Table *: Sources of Information (Focus Groups)

	Parents of People with Disability	Carers of People with Disability	Adults with Physical Disability	Travellers
Don't know/no need	✔			✔
Health Board Clinic	✔	✔	✔	✔
Schools	✔			
Other parents	✔			
Doctor			✔	
Word of mouth/recommendations		✔		✔
Media		✔		✔

Dentists/dental surgeries	✓	✓
Books/literature	✓	
Own experiences	✓	
Primary Healthcare worker		✓
Citizen' Advice Bureau		✓

<u>Identified Dental Services Available</u>

The dental services that were identified as available are listed in the tables. Overall the general population participants mentioned private dentists most frequently, followed by the dental hospital although more medical cardholders did so. The majority of the elderly participants indicated a place or places in their locality, but often did not differentiate between public and private services. The most popular response for carers of the elderly was private dentists. The doctor was mentioned by one '*if you had an abscess you'd go to the doctor first*'. Asylum seekers/refugees identified the General Practitioner as the conduit to accessing available dental services. The responses from the homeless participants were quite evenly spread over the three services, although private dentists were the most frequently mentioned.

Table *: Identified Dental Services (Interviews)

	Medical Card Holders	Non Medical Card Holders	Elderly People	Carers of Elderly People	Refugee / Asylum Seeker	Homeless People
Health Boards	✓	✓	✓	✓		✓
Private Dentists	✓	✓	✓	✓	✓	✓
Dental hospitals	✓	✓		✓		
Accident and Emergency Depts.					✓	✓
Organisational visits		✓		✓		
Don't Know		✓	✓	✓		
Referral from doctor			✓	✓	✓	

Health Board clinics were the most commonly identified dental services available by parents, carers and adults with physical disabilities.. The two groups of adults with intellectual disabilities, when asked what they would do if they had a toothache or a problem, suggested various options which included visiting the dentist, taking 'panadol', telling the staff or their mothers. Travellers identified private dentists and health board clinics most frequently.

Table *: Identified Dental Services (Focus Groups)

	Parents of Children with Disability	Carers of People with Intellectual Disability	Adults with Physical Disability	Travellers
Health Board Clinics	✓	✓	✓	✓
Private Dentists	✓	✓		✓
Hospital	✓	✓		✓

Telephone Book	✔			
Organisation		✔		
School		✔		✔
G.P			✔	
Accident & Emergency				✔

<u>Information Received</u>

In the general population group only six people out of **XX** reported not receiving or not remembering receiving any information. The remainder reported receiving information on treatment needed, cost and follow-up appointments. Health education was mentioned but few referred to aspects other than oral hygiene instruction. Over half of the elderly and carer participants reported not receiving or not remembering having received information or advice. Some reported not receiving specific advice but were *'just told when to come back'*. Those that reported receiving information stated that it was generally in relation to after care following treatment or regarding care of dentures. One carer only reported receiving regular updates on oral health care in the work place and information on how to organise a temporary medical card for clients. Twelve homeless people received information usually in relation to tooth brushing and returning to the dentist mainly for extractions, with four having received specific information on smoking, diet and changing toothbrush. Nine participants reported not receiving or not remembering having received any information. The majority of asylum seekers (15) reported never receiving information but many of these had no experience of dental services. Reference was made by asylum seekers to traditional oral health practices. For example one participant said, '*the chewing stick is better than toothpaste and brushes. I know I'm right cause I've been in Dublin and London and I've seen people there'*. Four participants reported being frustrated with information or advice that they had received regarding appropriate pain relief and waiting lists. Only two participants received specific information on diet and brush type and one reported picking up leaflets in the surgery herself, as the staff were perceived to be too busy to give individual advice.

One focus group of adults with physical disabilities reported receiving advice on cleaning teeth and dentures, and one parent focus group received advice indirectly from the dentist, through the special school in which the visit took place, to maintain brushing and *'cut out the pickings and the juices'*. In three of the focus groups with travellers participants had received general advice regarding oral hygiene. One group talked of the role of the primary health care workers in relaying information to travellers in relation to oral hygiene and dental services. Participants in one group were advised about treatment required and another received a list of dentists and treatment you can receive, although this woman was unable to read the information.

Experiences of the Dental Services by Group

An overall perception of the dental services was ascertained to facilitate the identification of barriers as well as facilitating factors in relation to service use and is described for each group based on their accounts of their previous experiences with dentists and allied staff.

General Population

Descriptions of experiences of visiting the dentist by general population groups were mixed. The factors that influenced the perception of a positive or negative experience were the perceived personality and competency of the dentist and the presence of fear or phobia. The majority of the respondents related their experiences with dentists and their manner towards them, referring to allied staff only when prompted. The answers ranged from '*not too friendly*' ,'*o.k*' to '*very professional, talks you through the whole procedure,*'. The opinion was expressed that people with medical cards are treated differently than those without.

Elderly

Some older people had difficulty recalling their last visit to a dentist because for many it was up to 40 years ago. Those that could recall the event reported mixed experiences, some positive and some negative. Reported negative accounts were perceived as traumatic experiences for the participants and it is noteworthy that these were all reported as occurring in the distant past relating to extraction of teeth, usually multiple extractions, followed by denture fittings. One such account was provided by a man who described his experience as follows: *'it was terrible sore getting them out, because he had to cut them out. I near bled to death. I had to go back, I didn't get them out together. four or five at the time. he had to plug the gums to keep them from bleeding'*. The perception that things have improved since was however highlighted, *'it's different now as no one would stand for that. Dentures were not as nice then as now. The first set were too big so I just wore them home and took them out'* . More recent visits to the dentist ranged from 15 years ago to weeks prior to the interviews and all of these accounts were perceived favourably and most of them were for the purpose of denture fitting or denture repair Most older people, especially those who hadn't seen a dentist in a long time didn't differentiate between the different dental personnel that you may encounter on a visit, and it appeared that they were unsure from some of their responses: "*well, she had the whites on her*" . Everybody, with only one exception, reported that they were treated very well by all the staff they encountered.

Accounts from carers of the experiences they or their clients had received from the dental services or with accessing services revealed a range of perceptions also. Four of the accounts from carers were favourable from the patient's perspective. In relation to accounts of negative experiences, the main issue identified by carers was usually with the overall organisational system and not with the dental services per se. In particular reference was made to the difficulties presented in accessing dental services *'what happens when patients are admitted is that the medical card is automatically dismissed. There's no dentist appointed for the elderly so you have to get an appointment with a private dentist*

and the patient has to pay'. This presents huge difficulties for patients who don't have the money to pay for dental services and *'the system breaks down completely'*. Carers reported how the dental personnel were instrumental in providing information and assistance to help overcome this problem. There was mention of an individual who provides dental services: '*he has been very obliging... he doesn't get enumerated himself... he just obliges'*. In some instances, when a person can't be seen and has to wait *'pain can go on for weeks and meanwhile we have the doctors treating pain, but the bad tooth is still there'*.

Homeless

Accounts of dental experiences by the homeless were generally described in terms of treatment of pain, or in terms of failing to return for treatment. The latter was the result of life crises, or fear induced by bad experiences of pain or of treatment they received. Six of the homeless group described attending dental services regularly and these experiences were generally positive. One participant who regularly attends the dentist felt encouraged when his dentist told him "*just keep brushing three times a day and they will stay good', which I thought was nice"*. The majority of the homeless (13) participants described the manner of staff in positive terms. The responses varied from '*no problem with anyone*' to '*excellent very helpful and reassuring*'. Several described the considerate manner: '*the dentist went out of his way to be nice, he knew I was uneasy about my teeth and he made a special effort to comfort me. I really appreciated it. I thought it was very caring of him'*. Although one person remarked that dentists were all the same: *'thought he was a bit brutal, sort of.... But I suppose they are all like that'*. Five of the respondents described the manner of staff negatively, in terms of rudeness, abruptness, lack of understanding and condescending manner. On two occasions the receptionists were described as rude and a '*bit snobby'*.

Refugees/Asylum Seekers

Six of the refugees/asylum seekers had no experience with the dental services and this was usually associated with no perceived need as stated by this participant: *'I have never had a problem with teeth, so why should I bother going to the dentist'*. All of the participants who reported visiting a dentist associated the experience with pain, which occurred either before, during or after treatment: Pleasant experiences were described by three individuals and were usually dependent on the attitude of the dentist. Negative experiences were ascribed to dentist's behaviour towards them – *'the first problem with the dentist I saw the last time, he was a little racist...I had pain, I had a medical card. I said please [treat me]. He said 'no. you have to pay for this type of work'. The dentist said that to me so I just go home cause I didn't have the money'*. Poor dental treatments and difficulties with the system – *'went to my doctor, he gave me a form to take to the dentist, it took four months, but was in pain and couldn't wait, went back to the doctor and he gave me antibiotics and that helped the pain'*. Staff manner was described positively by nine of the participants. The responses varied from *'ok'* to *'they are kind and caring, they have good manner and are treating me right'*. A small number made

negative comments usually related to bad experiences and refusal to treat, as one participant stated '*He didn't want to touch me …he didn't want to do it, I say please, please, he say 'alright''*.

Disability Groups

Positive and negative experiences of the dental services and of interactions with dental staff were identified in the focus groups with disability groups, with several factors contributing to these experiences.

A perceived understanding of 'special needs' was considered to facilitate positive experiences of the services. This understanding may be attributed to either personal or professional experiences. One carer spoke of a dental technician who she considered to be *'excellent'* and suggested that because he had a son with a learning disability *'I suppose there is more of an understanding'*. However this understanding might also come from professional experiences of treating clients with special needs as stated by another carer who had had *'good experiences with that dentist and I find that dentists that deal a lot with people with learning disabilities and I would be looking at a (Health Board Clinic)…I found the dentist very good and his assistant as well, and he treated the client with respect and were sensitive to their difficulties'*. The level of the client's disability and therefore their ability to co-operate and comply were also suggested in carers groups to have implications for the treatment people with learning disabilities might receive, both in terms of staff manner and clinical treatment *'it takes them a while to get used to them too, the dental team to get used to the disabilities…it is a two way thing, there is huge learning both ways'*. Organsisational issues were also identified for people living in residential settings that contribute to positive experiences of dental services. In institutions where dental staff visit this was perceived as an advantage so, *'that the young people are familiar with the regular staff that are cleaning their teeth daily, and things that they couldn't do in a strange situation they would do for the dentist and the hygienist and everyone else'*.

Factors were identified by focus group participants that contributed to perceived negative experiences of dental services. This included the attitude or manner of the dentist towards themselves, their children or clients. The attitude was considered by some of the carer groups to result in a lesser standard of care for their clients which one carer put down to *'a lack of general awareness… they don't understand and are not being educated enough in terms of dealing with people with learning disabilities and challenging behaviour'*. One of the adults with physical disability felt insecure as to how she would be received by the dentist, while some parents felt that the reception that they had got or would get was a negative one. In general, participants in all the focus groups characterised the attitude of the dentist positively, even those adults who had expressed a 'hatred' of dentists. Not everyone had had contact with other dental staff, but again those who had, were unanimous in their praise of them: '*Lovely, they were all lovely down in the clinic'*.

Travellers

Descriptions of experiences by travellers were mixed, reflecting a variety of experiences. Positive experiences were attributed mainly to attitude/behaviour of the staff and ability to get an appointment when needed: One woman stressed that experiences depended on the dentist: *'It depends a lot on the dentist you get because there is a dentist over there…..she kind of does not take her time. She fills up the injection and she jabs it in so if you kind of jump any she says things like 'ah sure ye people shouldn't feel pain' so it depends on who you get'* and went on to describe another dentist *'she was a lovely dentist, she explains everything to you, what she's going to do and if you feel any tenderness, make sure to let her know'*.

One woman describes a change in the attitude of her dentist attributed to repeated contact: *'A bit abrupt, I don't know what it was…the first time I said to myself is it because we're travellers or what, and she sounded a bit off putting ..over the 3 to 4 weeks I was going her attitude changed. She got nicer at each visit, maybe she was just sensitive to travellers. I think she was unsure at the start, she became a lovely person'*. Factors contributing to negative experiences were fear, attitude of the dentist, waiting times, not receiving advice or choice in treatment, bad experiences with extractions. Literacy was also identified as a factor contributing to experiences perceived as negative. One women spoke of her shame and embarrassment at not being able to read *'If you walk into places and you are not educated right and see a group of settled people there, you're ashamed and embarrassed because you can't read and they say go over there and read the sign and you go over there and you would be dying of shame and in order not to get ashamed you would just walk out the door. That's what happened to me now'*.

<u>Barriers to Dental Health Services</u>

The barriers identified in the interviews are summarised in the table below.

Table *: Summary of Barriers to Dental Services (Interviews)

	Medical Card Holders	Non Medical Card Holders	Elderly People	Carers of Elderly People	Refugee / Asylum Seeker	Homeless People
Cost (includes preferred treatments not under medical card)	✔	✔				✔
Physical access		✔				
Fear of dentists	✔	✔	✔			✔
Lack of Information	✔			✔	✔	
No perceived need	✔	✔	✔	✔	✔	✔
Previous bad experiences	✔	✔				
No Time/lazy/inconvenience	✔	✔				
Poor hygiene standards		✔				
Waiting lists		✔				
Nothing if needed or in pain			✔			
Underlying medical/psychiatric condition				✔		

Bureaucracy and red tape	✔		
Distance from service	✔	✔	
Dentist manner/attitude		✔	
Don't know services available			✔

In the focus groups of people with disability, their parents and carers a number of barriers to dental services and oral health were identified. Lack of information of oral health in general was identified as a barrier as was lack of practical advice to overcome particular difficulties with oral hygiene. The difficulties identified by carers and parents included physical difficulties caused by the disability such as inability to rinse, difficulty getting a toothbrush into someone's mouth, over sensitive mouth and tendency to gag. Lack of information in relation to service provision and availability of entitlements were also highlighted as barriers to oral health services. Limited availability of service provision with the medical card as well as perceived restriction of treatments available depended on level of disability. In one parents group it was considered that the only treatment offered to children with intellectual disability was extraction. This contrasts with the group of adults with intellectual disability who had only experience of fillings. Carers identified lack of parental awareness, education and involvement in oral health and a reluctance of parents to access dental services due to their own fears as a barrier. Lack of time and staff were also identified as barriers to oral health. Organisational issues were identified as barriers to oral health. These included difficulty in getting appointments, waiting lists, time spent waiting and lack of inter agency collaboration. It was reported by parents and carers that people with intellectual disabilities whose behaviour could be challenging were often unable to wait to be seen and when seen may not co-operate and comply with dental staff. The carers identified the lack of co-ordination of services and need for clients to wait, as a lack of awareness by dentists of the needs of people with disability resulting in perceived poorer standards of care. The environment was identified by many of the groups as a barrier. Reference was made to access to the building in which dental services were provided and difficulty in transferring into the dental chair. The group with intellectual disability identified the noise of the dentists drill as being a barrier to care as it induced fear. Fear was also identified as a barrier in relation to fear and anxiety of parents of their child's reaction to dental treatment. There was also a perception expressed that people with disabilities were discriminated against in relation to service access. Cost of treatment was identified as a barrier by groups.

Similarly travellers identified cost as a barrier to access dental services**.** Fear of dental treatment was explicitly highlighted as a barrier to accessing dental services by traveller groups**.** Lack of literacy was repeatedly identified as a barrier by this group as was lack of information about service provision and availability in relation to entitlements and medical cards. Lack of awareness by dental staff of traveller culture was identified as a restriction to service access perceived to be compounded by dental staffs poor communication skills resulting in misunderstanding creating anxiety. Travellers also stated that discrimination by dentists particularly some private dentists in not accepting travellers acted as a barrier. A lack of availability of dentists accepting medical cardholders, especially in smaller towns was also highlighted. The suggestion was made by groups that medical cardholders received different and

inferior services to those who accessed services privately. Organisational difficulties were highlighted in relation to waiting list times especially for orthodontic treatment. Not receiving reminders for check ups was identified which was compounded by lack of access to a regular postal service. Not receiving advice at consultation was also cited as a barrier to services. In relation to oral health travellers living conditions were identified such as lack of access to water and electricity as limiting oral hygiene practices. Distance and lack of transport was also identified as a barrier to service access.

Ease of Use of the Dental Services

The majority of both medical cardholders and non-medical cardholders reported that the dental services were easy to use, referring to paying for the service, getting appointments, waiting times and if the information is found. The twelve respondents who reported that the services were difficult to use referred to forms to be filled, waiting times or lists, and the use of a medical card. Most of the elderly and carers also stated that the services were easy to use, the former group because of ease of getting an appointment and the latter in terms of a dentist in attendance to the organisation. The difficulties identified by the carers of the elderly were the bureaucracy and organisation involved requiring perseverance by the staff, whereas the difficulties identified by the elderly were the physical pain and the psychological hurdle in getting to the dentist. Only four of the refugees/asylum seekers reported finding the services easy to use as compared to eight that found it complex due to getting appointments, finding a dentist or information, or the cost of the service. Similarly only a small number of the homeless found the dental services easy to use, whereas over half the participants identified the services as difficult to use referring to living circumstances, lack of information and difficulties in making and keeping appointments.

Across all the disability groups, the degree of disability was identified as the determining factor in the ease of use of the services. There was a general agreement in the traveller focus groups that the services were easy to use but this was qualified by certain conditions such as *'if you have the confidence'* or *'its up to you…the dentist is not going to come to you…its up to you to walk in there and make an appointment'* or *'I cant speak for the travellers out there …living in the country part, the other side of Dublin where there's no primary health care workers. They don't know where to go, its not easy, I don't think it is easy'*. Services were identified to be difficult to use because of lack of information, forms to fill or not being able to use a service at night.

Success of the Service in terms of Organisation and Treatment

Elderly people consistently stated that they found the organisation of dental health services successful. This contrasts with carers of elderly people only half of whom considered the services available successful. Those who considered the service successful were in institutions which had a policy on oral health and regular visits from dental personnel compared to those who considered the organisation of the service unsuccessful who had to access the service outside the institution. The majority of the general population considered the service successful. However the majority of asylum seekers and

homeless people considered the organsiation of services to be unsuccessful. Perceived unsuccessfulness of the services in terms of organisational issues includes references to being outside the system, long waiting times, lack of information, cost and not enough clinics.

In relation to the treatment received the majority of people in all groups considered it to be at least adequate and for many successful. Perception of the dental services as unsuccessful in terms of treatment included responses of having to return to the dentist after treatment due to problems, being treated roughly or getting the wrong teeth extracted. The latter references were made by the two homeless participants.

All groups of adults with physical disability and parents of people with disabilities were critical of organisational issues, mainly waiting times for appointments and waiting times in waiting rooms, especially for children with intellectual disabilities as they become '*agitated and then they re not going to sit still at all then'*. Carers who worked in units that organised visits from the dentists and hygienist thought the system worked very well. Oral hygiene programmes were considered to be particularly beneficial. However in other carer focus groups, the lack of regular routine visits meant that clients only saw a dentist when treatment was needed resulting always in a stressful experience.

In relation to success of treatment there was a range of answers indicating both satisfaction and dissatisfaction. Success was reported by adults with disabilities in relation to treatment of abscesses and satisfaction with dentures, whereas the latter was the cause of dissatisfaction for another individual. Some carers reported that the services were successful as they have had good experiences in the services for younger children and or that a child in pain is seen as a priority. A stronger sense that the services were unsuccessful in terms of treatment came from both the parent and carer groups, and this tended to relate more to not getting treatment that they perceived as needed. One parent described how they have *' come away from the dentist with the child still in pain…they said there were two teeth that were very decayed..they well decay away to nothing and then they'll never pain her so leave them, they'll decay away'*. Another talked about *'how many times have I told professionals that my child gags with anything in her mouth…and then they come out with the wonderful statement' rinse'. They just don't listen'*, a point echoed by other parents. When carers were asked if the treatment had worked for their clients, many took the opportunity to express their dissatisfaction at the limited extent of treatments that are available to their clients, the standard of care given and the attitude of the dentist, who it was perceived only sees the learning disability.

In three of the focus groups with travellers, participants reported that elements of the services were successful and not so successful whereas one group identified only unsuccessful elements of the services. The services were successful because of getting appointments through the primary healthcare workers, not having to wait too long and availability of information, which was identified by one woman: *"there's leaflets there when you go in and you can ask questions…and if there's something*

you don't understand you just go and ask like, and he says 'any questions, are you worried about anything?'". Also in the three groups, participants reported that they generally had had the treatment they perceived they needed, although one woman had orthodontic braces only because she had paid for them, and one commented that the treatment she had was *'good'*.

Reasons for dissatisfaction with the services were mainly in relation to organisational issues such as waiting lists especially for orthodontic appointments, which were mentioned in two of the groups, no reminders for follow-up appointments, and no advice received. One group referred to not receiving information re entitlements on the medical card and two referred to form filling and the difficulties involved around literacy and also the waiting time involved. One participant felt that the treatment that she had received had been unsuccessful as *'it doesn't work sometimes..if you have a break or your tooth is black and you get fillings after that, sure it gets black again doesn't it…it is whatever kind of rubbery stuff they put on your teeth*.'

<u>Improvements of Service</u>

Participants were asked how the dental services could be improved. The general population identified a number of areas where they perceived improvements could be made to service provision. Improvements in children's services generally were identified with more information and oral health education cited as potential improvements. Increased availability of services, notably orthodontic services were cited with easier access to all and reduced waiting times for all treatments. People with medical cards stated that the medical cardholders should have the same service as people accessing services privately. Similarly people who were homeless stated that treating all people equally would improve the services. People with medical cards also identified along with homeless people the need for twenty-four hour access to dental services. People who were homeless identified the provision of information on services and the reduction of waiting times as possible improvements. Asylum seekers stated that more readily available information on service provision would be an improvement as would reduced waiting times. Elderly people who were most satisfied with the service identified the fewest areas for improvements but those that were identified included improved services for children and improved communication within the system. Many elderly people stated that no improvements were necessary. Carers of elderly people suggested that visits by dental staff to organisations would improve service access for elderly people, which needed to be made easier. Carers of elderly people suggested that more information should be provided about access and eligibility of people for free dental care.

The groups that represented people with disability identified similar areas to other groups in relation to areas for potential improvements. Children's services were identified as a focus with regular check ups for all young people identified as an improvement, which would facilitate early intervention which was perceived as an advantage. For people with disabilities more co-ordination across service provision was identified as a potential improvement as was the development of specialized services with increased training and awareness for staff. Travellers identified areas of service improvement which included

education for young people as well as increased health education for all. It was expressed within the groups that information on oral health should be given as a matter of course as many travellers will not actively ask for information. Services generally it was felt would be improved if staff were trained in and had an awareness of traveller culture which would result in a traveller friendly service. The development of primary healthcare projects for travelers was perceived as potentially improving services as was an increase in staff and decrease in waiting times. A system of reminders for check-ups and follow-up would improve attendance to dental services according to the traveller groups. As with other groups identification was made that medical card holders should have access to a wider range of treatments and this was perceived as improving service provision.

4.4 Special Needs Groups: Postal Survey Of Service Providers

4.4.1 Response Rates

Each level of provider was surveyed in relation to their work involving people with special needs. In general, for the majority of sub-groups the response rate was high, for example 86% of Principal Dental Surgeons responded. The response rate from Orthodontic Consultants, Dental Hospital Personnel and Private Dentists however was low, only 36% of private dentists returned the questionnaire, as can be seen from table *.

Table *: Sample profile of dental personnel receiving Questionnaire Sections 1 and 2

	Target Sample	Response rates
Principal dental surgeons	29	25 (86%)
Senior dental surgeons	25	21 (81%)
General dental surgeons	108	63 (58%)
Orthodontist consultants	12	5 (42%)
Oral surgeons	1	1 (100%)
Specialist consultants	2	2 (100%)
Dental nurses	110	58 (53%)
Hygienists	41	29 (71%)
Oral health promoters	13	11 (85%)
Dental hospitals	44	21 (48%)
Private dentists	300	109 (36%)
Total	**685**	**346 (50%)**

4.4.2 Service Provision to Special Needs Groups

When asked which population groups service providers treated, the majority of respondents provided services for people with physical and/or intellectual disability and to children with special needs. Least contact was with the homeless as illustrated in table *. Appendices 5-12 detail the frequency with which each service provider has contact with the various population subgroups.

Table *: Population sub-groups to whom service providers provide a service

	PDS N=24	SDS N=21	GDS N=61	DN N=54	HYG N=29	OHP N=5	OC N=5	SC N=3	PD N=108	DHP N=21
	%	%	%	%	%	%	%	%	%	%
Physical Disability	96	90	88	87	97	100	100	100	91	100
Intellectual Disability	92	86	87	80	93	80	100	67	91	88
Children Special needs	100	95	95	96	100	80	80	67	49	71
Elderly residential	92	67	57	54	24	60	0	0	52	52

Medical Card Holders	71	71	46	32	48	60	20	33	97	90
Travellers	96	86	80	85	76	80	20	33	82	76
Homeless	42	38	26	22	4	40	20	0	43	52
Refugees	71	76	57	54	18	40	40	0	68	81

PDS = Principal Dental Surgeon
GDS = General Dental Surgeon
HYG = Hygienist
OC = Orthodontic Consultant
PD = Private Dentist
SDS = Senior Dental Surgeon
DN = Dental Nurse
OHP = Oral Health Promoter
SC = Specialist Consultant
DHP = Dental Hospital Personnel

4.4.3 Settings

There are various settings within which services are provided to the different groups of the population, the more common ones being hospital, school, health board clinic or general dental practice, the least common being a hostel. Appendices 13-19 detail each service provider and the settings within which he/she provides a service to different sub groups of the population.

4.4.4 Planning of Service

When asked about involvement in planning and development of the special needs dental service, a high proportion of all subgroups responded that they were involved, with the exception of only 17% General Dental Surgeons, 13% Dental Nurses and 3% of Private Dentists. All Principal Dental Surgeons and 75% of Senior Dental Surgeons stated they were involved in this planning and development.

4.4.5 Types of Service Provided

The services provided to different population groups varied depending on the type of service providers as can be seen in appendices 20-28. In general, the majority of dental surgeons (PDS, SDS, GDS) reported that they provide emergency services and routine treatments (TAN), to most population subgroups. Of all the service providers, the orthodontic and specialist consultants provided the most limited service.

4.4.6 Perceived Oral Health Needs of Special Needs Groups

All service providers were asked, from a choice of seven options, what their opinion was of the oral health needs of each special needs group. Appendices 29-36 detail the responses for each category of service provider. The three most cited needs by all service providers were

- Regular use of dental services
- Better oral health maintenance
- Health education

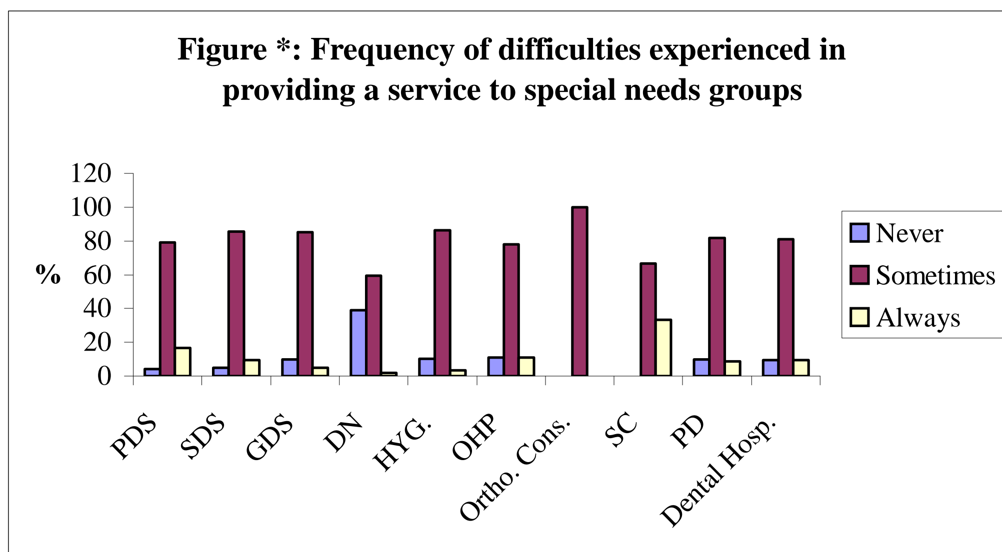
4.4.7 Meeting the Need

On a scale of 'never, sometimes, always, don't know or not applicable' the majority of service providers reported that the needs of the different groups were sometimes met and only a very low percentage of respondents reported that the dental services always met the needs of the different sub-groups. Appendices 37-44 detail the responses from each group of service providers.

When asked if the service providers experienced difficulties in providing a service to special needs groups the majority of respondents reported 'sometimes' as can be seen in figure *. Some of the difficulties stated included:

- Difficulties in accessing general anesthetic/sedation facilities for special need services.
- Long waiting lists for service.
- Cancellation of appointments due to shortage of hospital beds.
- No availability of GA facilities in dental practice.

Other difficulties noted were difficulty to access people with physical and intellectual disabilities, as no general register exists; Difficulties in obtaining medical histories from these groups and that there is no information on where to refer these groups to. Physical access for wheelchairs was difficult in a lot of cases due to the doorways being too narrow. Additionally, as some surgeries are located upstairs it can be difficult for people with physical disabilities to access them. Some service providers experienced communication and language barriers when dealing with travelers and refugees. It was also stated by some service providers that the lack of funding to spend the extra time needed with special needs groups was a difficulty. Appendices 45-50 detail the difficulties and the frequency with which the service providers experience these difficulties.



PDS = Principal Dental Surgeon
SDS = Senior Dental Surgeon
GDS = General Dental Surgeon
DN = Dental Nurse

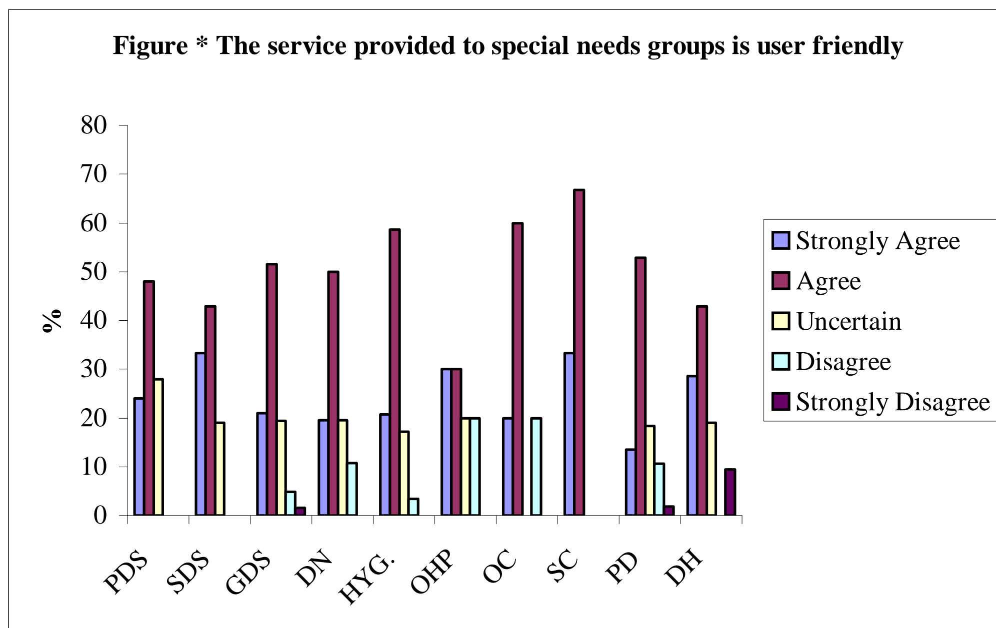
HYG = Hygienist
OHP = Oral Health Promoter
OC = Orthodontic Consultant
SC = Specialist Consultant
PD = Private Dentist
DHP = Dental Hospital Personnel

Service providers noted the following structures that could be put in place to improve the co-ordination and continuity of the dental services for special needs groups:

- Education and training of staff
- Appointment of posts to deal with special needs
- Access to General Anaesthetics facilities
- Improved communication and greater access to information, e.g. A computer database/ register concerning special needs groups
- Increased funding
- Improved physical environments and transport
- Re-structure of the services with an effective strategy with accountability for goal attainment in the both short and long term.

The majority of service providers reported, on a scale of very poor to very good, that their working environment was user friendly and welcoming. Most thought their building had at least average accessibility but 10% of oral hygienists and oral health promoters reported that the user-friendliness of the environment was poor. Willingness to work with people with special needs was either very good or good and when asked to agree/disagree with the statement that "*the dental service in which I (the service providers) work provides a user-friendly service to special needs groups*" the majority of respondents either strongly agreed or agreed, as can be seen in figure *.

Figure * The service provided to special needs groups is user friendly



PDS = Principal Dental Surgeon
SDS = Senior Dental Surgeon

GDS = General Dental Surgeon
HYG = Hygienist
OC = Orthodontic Consultant
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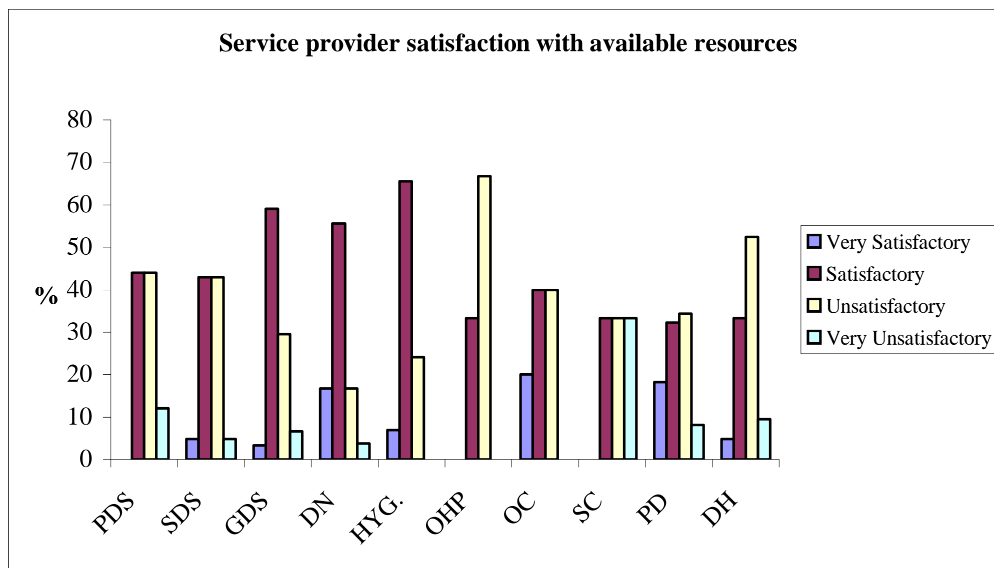
DHP = Dental Hospital Personnel

From figure * below it can be seen that the level of satisfaction with resources amongst service providers is variable. For example, amongst the Principal Dental Surgeons and Senior Dental Surgeons there are equal amounts of responders satisfied and unsatisfied with the available resources, where as the majority of General Dental Surgeons, Dental Nurses and Hygienists are satisfied. The majority of Oral Health Promoters reported that the resources available were unsatisfactory. When asked about satisfaction with the effort the service has made in dealing with the needs of individuals with special needs, the majority of respondents reported that it was satisfactory.



PDS = Principal Dental Surgeon
GDS = General Dental Surgeon
HYG = Hygienist
OC = Orthodontic Consultant
PD = Private Dentist
SDS = Senior Dental Surgeon
DN = Dental Nurse
OHP = Oral Health Promoter
SC = Specialist Consultant
DHP = Dental Hospital Personnel

There were a number of sensitive issues raised by service providers in terms of provision of treatment to special needs groups. Some stated that it was difficult to give these groups the special care they require without highlighting the fact that they are different. Whilst respondents noted that all special needs clients should be treated with the same respect and confidentiality as the general population, one issue which emerged very strongly was that of prejudice and racism. Current attitudes, beliefs and attitudes of Health Board staff need to be explored and any prejudices dealt with through training in intercultural issues. Similarly, the attitudes of other clients were of concern, when if in a waiting room full of homeless and refugees, private clients may decide to go elsewhere. It was felt important not to stigmatise or to label people as this may result in them not reporting their condition. Treatments and

interventions should be explained and people should participate in decision-making as far as possible regarding their own dental health. It was highlighted that the services were only used in an emergency situation as there were other needs with higher priorities, for example staff in day hospitals and homes only contact the dental department when a resident requires urgent dental treatment. Behavioural management was reported as another issue, requiring lots of time and energy, especially when dealing with people with physical / intellectual disability, and children with special needs. Difficulty in transferring patients from wheelchairs to the examination chair also emerged as a sensitive area. this may cause upset amongst both the dentist and the patient. The feelings of the service providers towards the different special needs groups were varied. In general the feelings towards people with physical and intellectual disabilities, children with special needs and elderly in residential care were positive, whereas those towards refugees, travelers, and the homeless were more mixed with some neutral and negative feelings (Appendices 56-62). The majority of all service providers reported that staff were 'somewhat' anxious about dealing with special needs groups, however the most respondents reported that they were satisfied in dealing with these special needs groups, as can be seen in table *. It was noted that increased training in dealing with these groups was required in an effort to increase understanding of their needs.

Table *: Self-reported satisfaction of service providers in working with special needs groups

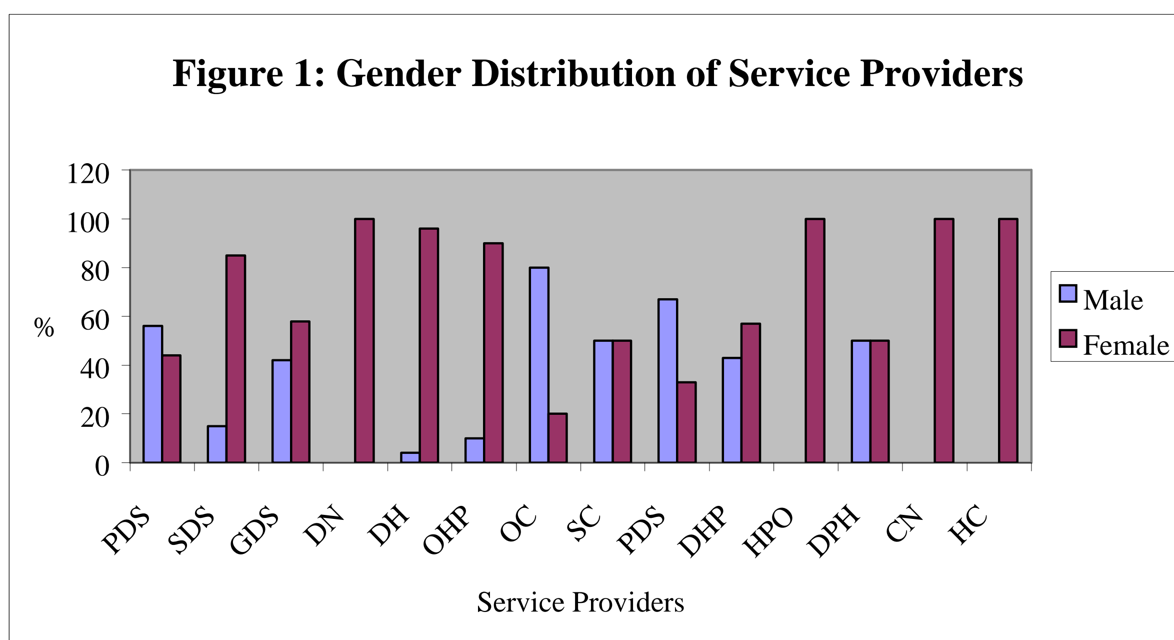
	PDS N=24	SDS N=20	GDS N=61	DN N=56	HYG N=29	OHP N=10	OC N=5	SC N=3	PD N=102	DHP N=21
	%	%	%	%	%	%	%	%	%	%
Very Satisfied	29	30	12	32	31	40	20	33	11	29
Satisfied	21	40	52	41	52	30	40	67	35	48
Neither	50	25	23	23	17	30	40	0	46	14
Dissatisfied	0	5	12	4	0	0	0	0	7	10
Very Dissatisfied	0	0	2	0	0	0	0	0	1	0

PDS = Principal Dental Surgeon
SDS = Senior Dental Surgeon
GDS = General Dental Surgeon
DN = Dental Nurse
HYG = Hygienist
OHP = Oral Health Promoter
OC = Orthodontic Consultant
SC = Specialist Consultant
PD = Private Dentist
DHP = Dental Hospital Personnel

Sociodemographic details of respondents to both the oral health promotion and dental service providers postal surveys (Section 1 and 2)

Oral health service providers were sent a self-administered questionnaire comprising two sections. Section 1 related to the services provided to people with special needs and Section 2 related to their involvement in oral health education/promotion. Simultaneous to this survey, other health professionals thought to be involved in or responsible for oral health promotion/education were also sent the questionnaire but only Section 2. Both surveys recorded the sociodemographic and working practices of respondents. These general details are described below and the particular response profiles to each section of the questionnaire are at the beginning of the relevant sections.

The majority of personnel who participated in this survey were female with only two groups with a higher percentage of males; the principal dental surgeons in the public service, and private dentists as can be seen in figure 1. Two groups of respondents were exclusively female, community nutritionists and representatives from health care companies.



PDS = Principal Dental Surgeon	SDS = Senior Dental Surgeon
GDS = General Dental Surgeon	DN = Dental Nurse
DH = Hygienist	OHP = Oral Health Promoter
OC = Orthodontic Consultant	SC = Specialist Consultant
PD = Private Dentist	DHP = Dental Hospital Personnel
HPO = Health Promotion Officer	DPH = Director of Public Health
CN = Community Nutritionist	HC = Healthcare Companies

In each of the personnel groupings more than 50% of respondents were between 31-50 years, with the exception of the principal and general dental surgeons. One private dentist reported being over 70 years of age as can be seen in table 1.

Table 1: Age distribution of Service Providers

	20-30 yrs N (%)	31-40 yrs N (%)	41-50 yrs N (%)	51-60 yrs N (%)	61-70 yrs N (%)	70+ yrs N (%)
PDS (N=24)	1(4.2)	6(25)	12(50)	4(16.7)	1(4.2)	0(0)
SDS (N=21)	3(14.3)	12(57.1)	2(9.5)	1(4.8)	3(14.30	0(0)
GDS (N=60)	13(21.7)	17(28.3)	18(30)	8(13.3)	4(6.7)	0(0)
DN (N=56)	15(26.8)	21(37.5)	14(25)	5(8.9)	1(1.8)	0(0)
DH (N=29)	8(27.6)	21(72.4)	0(0)	0(0)	0(0)	0(0)
OHP (N=10)	1(10)	6(60)	3(30)	0(0)	0(0)	0(0)
OC (N=4)	0(0)	3(75)	0(0)	0(0)	1(25)	0(0)
SC (N=2)	0(0)	0(0)	2(100)	0(0)	0(0)	0(0)
PD (N=102)	20(19.6)	37(36.3)	24(23.5)	13(12.7)	7(6.9)	1(1)
DHP (N=20)	6(30)	8(40)	2(10)	4(20)	0(0)	0(0)
HPO (N=2)	0(0)	0(0)	2(100)	0(0)	0(0)	0(0)
DPH (N=4)	0(0)	1(25)	3(75)	0(0)	0(0)	0(0)
CN (N=7)	2(28.6)	2(28.6)	2(28.6)	1(14.3)	0(0)	0(0)
HC (N=1)	0(0)	1(100)	0(0)	0(0)	0(0)	0(0)

The majority of respondents reported working within a health board (Table 2), with the exception of private dentists, the majority of whom (89%) reported working in a general practice, and specialist consultants (100%) who reported working in academia. Sixty one percent of dental hospital personnel reported working in academia.

Table 2: Type of Organisation For Which Service Providers Work

	Health Board N (%)	Health Industry N (%)	Academia N (%)	General Practice N (%)	Other N (%)
PDS (N=23)	23(100)	0(0)	0(0)	0(0)	1(4.3)
SDS (N=20)	20(100)	0(0)	0(0)	0(0)	0(0)
GDS (N=59)	58(98.3)	0(0)	0(0)	1(1.7)	1(1.7)
DN (N=53)	53(100)	0(0)	0(0)	3(5.7)	0(0)
DH (N=29)	29(100)	1(3.4)	1(3.4)	1(3.4)	0(0)
OHP (N=10)	10(100)	0(0)	1(10)	0(0)	1(10)
OC (N=4)	3(75)	0(0)	1(25)	0(0)	0(0)
SC (N=2)	0(0)	0(0)	2(100)	0(0)	0(0)
PD (N=95)	9(9.5)	0(0)	3(3.2)	85(89.5)	2(2.1)
DHP (N=18)	2(22.2)	1(5.6)	11(61.1)	1(5.6)	2(2.1)
HPO (N=2)	2(100)	0(0)	0(0)	0(0)	0(0)
DPH (N=4)	4(100)	0(0)	0(0)	0(0)	0(0)
CN (N=7)	7(100)	0(0)	0(0)	0(0)	0(0)
HC (N=2)	0(0)	2(100)	0(0)	0(0)	0(0)

**Percentages may not add up to the total number (N) for each grouping as responses are not mutually exclusive.

Overall, the majority of respondents reported being in their present job for between 0 and 5 years. A higher percentage of dental nurses, general dental surgeons and private dentists reported longer length of time spent in present job compared to the other groups, especially private dentists, with 25% reporting over 20 years in present job. Details of length of time in job for each type of service personnel are presented in Appendix 2.

Table 3 details the status and tenure of positions held by service providers. There was a high percentage of service providers reporting temporary status within the public dental service sector ranging from 17% of dental hygienists to 30% of general dental surgeons. Ten percent of the private dentists failed to complete the section on employment status.

Table 3: Tenure and Status of Position Held By Service Providers

	TENURE			STATUS	
	Full-Time	Part-Time	Job Share	Permanent	Temporary
	N (%)	N (%)	N (%)	N (%)	N (%)
PDS (N=24)	24(100)	0(0)	0(0)	23(95.8)	1(4.2)
SDS (N=21)	20(95.2)	0(0)	1(4.8)	16(76.2)	5(23.8)
GDS N=60)	41(68.3)	11(18.3)	8(13.3)	41(69.5)	18(30.5)
DN (N=56)	36(64.3)	9(16.1)	11(19.6)	43(78.2)	12(21.8)
DH (N=29)	26(89.7)	2(6.9)	1(3.4)	24(82.8)	5(17.2)
OHP N=10)	9(90)	1(10)	0(0)	10(100)	0(0)
OC (N=4)	4(100)	0(0)	0(0)	4(100)	0(0)
SC (N=2)	2(50)	2(50)	0(00	2(100)	0(0)
PD (N=101)	86(85.1)	14(13.9)	1(1)	87(95.6)	4(4.4)
DHP(N=21)	15(71.4)	4(19)	2(9.5)	14(70)	6(30)
HPO (N=2)	2(100)	0(0)	0(0)	1(50)	1(50)
DPH (N=4)	4(100)	0(0)	0(0)	4(100)	0(0)
CN (N=6)	7(100)	0(0)	0(0)	7(100)	0(0)
HC (N=1)	1(100)	0(0)	0(0)	1(100)	0(0)

From Table 4 it can be seen that most Principal Dental Surgeons were qualified for 21-30 years as compared to 11-20 years for Senior Dental Surgeons, General Dental Surgeons and Private Dentists, and 0-10 years for Dental Nurses, Dental Hygienists and Dental Hospital Personnel. This may reflect the seniority of the PDS position. Thirty one percent of Dental Nurses failed to answer this section.

Table 4: Length of Time Qualified

	0-10 yrs N (%)	11-20 yrs N (%)	21-30 yrs N (%)	31-40 yrs N (%)	40+ yrs N (%)
PDS (N=24)	1(4.2)	9(37.5)	11(45.8)	2(8.3)	1(4.2)
SDS (N=21)	7(33.3)	9(42.9)	2(9.5)	3(14.3)	0(0)
GDS (N=60)	19(31.7)	19(31.7)	14(23.3)	7(11.7)	1(1.7)
DN (N=40)	26(65)	8(20)	5(12.5)	0(0)	0(0)
DH (N=29)	28(96.6)	1(3.4)	0(0)	0(0)	0(0)
OHP (N=8)	4(50)	3(37.5)	1(12.5)	0(0)	0(0)
OC (N=4)	0(0)	3(75)	0(0)	0(0)	0(0)

SC (N=2)	1(50)	0(0)	1(50)	0(0)	0(0)
PD (N=98)	30(30.6)	38(38.8)	18(18.4)	11(11.2)	1(1)
DHP (N=20)	11(55)	5(25)	2(10)	2(10)	0(0)
HPO (N=1)	0(0)	1(100)	0(0)	0(0)	0(0)
DPH (N=4)	0(0)	2(50)	2(50)	0(0)	0(0)
CN (N=7)	4(57.1)	0(0)	3(42.9)	0(0)	0(0)
HC (N=1)	0(0)	1(100)	0(0)	0(0)	0(0)

Table 5 shows that an overall majority of respondents reported working in the Eastern Regional Health Authority, the largest health board area within the country. In relation to the Senior Dental Surgeons, 85% reported working within two health boards, EHRA and SHB whilst, three of the health boards are not represented by this group.

Table 5: Health Board Area within Which Post is Held By Service Providers

	ERHA N (%)	SEHB N (%)	SHB N (%)	MWHB N (%)	WHB N (%)	NWHB N (%)	NEHB N (%)	MHB N (%)
PDS (N=24)	8 (33.3)	3 (12.5)	3 (12.5)	2 (8.3)	2(8.3)	1(4.2)	3(12.5)	2(8.3)
SDS (N=20)	12 (60)	0 (0)	5 (25)	1(5)	1(5)	0(0)	1(5)	0(0)
GDS (N=55)	13 (23.6)	11 (20)	10 (18.2)	5(9.1)	7(12.7)	2(3.6)	4(7.3)	3(5.5)
DN (N=51)	13 (25.5)	9 (17.6)	9 (17.6)	4(7.8)	0(0)	0(0)	7(13.7)	9(17.6)
DH (N=24)	5 (20.8)	3 (12.5)	5 (20.8)	2(8.3)	2(8.3)	0(0)	2(8.3)	5(20.8)
OHP (N=10)	4 (40)	2 (20)	2 (20)	0(0)	1(10)	0(0)	0(0)	1(10)
OC (N=3)	2(66.7)	0(0)	0(0)	0(0)	0(0)	1(33.3)	0(0)	0(0)
SC (N=2)	2(100)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
PD (N=81)	23(28.4)	12(14.8)	13(16)	6(7.4)	7(8.6)	3(3.7)	5(6.2)	12(14.8)
DHP (N=19)	14(73.7)	0(0)	5(26.3)	0(0)	0(0)	0(0)	0(0)	0(0)
HPO (N=2)	0(0)	0(0)	1(50)	0(0)	0(0)	1(50)	0(0)	0(0)
DPH (N=4)	0(0)	1(25)	1(25)	1(25)	1(25)	0(0)	0(0)	0(0)
CN (N=7)	1(14.3)	1(14.3)	1(14.3)	0(0)	1(14.3)	0(0)	1(14.3)	2(28.6)
HC (N=1)	1(100)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

When asked to estimate the number of public dental clinics in their community care area, the majority of respondents thought there were between 6-10 but there was also a high number of 'Don't Knows' to this question (appendix 3). In relation to the private clinics, The majority of respondents estimated the number to be either less than 20 or between 20-40. Relatively high percentages reported 'Don't Know' to this question; three quarters of OC's were not able to estimate the number of private surgeries in their area (appendix 4).

CHAPTER 5: DISCUSSION

The comprehensive overall assessment of oral health in Ireland, commissioned and funded by the Department of Health and Children, will clearly identify the highlights and lowlights of the political, social and individual situation with regards to oral health. Specifically, findings from the review of oral health education/promotion in Ireland and oral health of special needs groups have been presented in this report. In concurrence with the two fold aims of this research the data will be discussed initially in relation to the review of oral health promotion and education activities with reference to structures, process and outcomes and latterly in relation to the identification of the attitudes, knowledge and behaviours of people in specific special needs groups in relation to oral health and perceptions of dental health services. Perception of service provision to special needs groups by responsible dental personnel is also discussed.

In 1994, the Dental Health Action Plan highlighted the need to develop oral health promotion and prevention programmes (Department of Health, 1994). The Plan placed significant emphasis on the importance of oral disease prevention and positive oral health promotion. It also recognised the need for service development and aimed to expand primary care services for children and provide a full range of services for people with disabilities and living in institutions. The provision of structured services for medical card holders and their dependants was envisaged as was an expansion of Health Board orthodontic and oral surgery services. Subsequently the Health Promotion Strategy (Department of Health and Children, 2000-5) was explicit in its reference to oral health. These national strategic policy documents form the framework within which the provision of dental services are developing and one in which the orientation of service provision would appear to be changing from dental treatment services to prevention of oral ill health and oral health promotion. While this would appear to be the case at a national level the data reported is less supportive of this re-orientation at a regional or local level. Results from both strands of research suggest that oral health services in Ireland remain treatment focussed and that these services were inadequately providing for the diversity of people with disabilities and

living in institutions. Oral health in Ireland is influenced by many factors and affects different population groups in a variety of ways. National coordinated policy and legislation is currently lacking and needs to be developed. Regional oral health services are treatment focussed but do not adequately meet the needs of all population groups. Oral health education is ad hoc and has no strategic plan of action.

ORAL HEALTH PROMOTION

Generally it was perceived by key personnel that there had been a lack of priority given to oral health promotion, relating to the perception that oral health promotion was and still is not a high priority at national or health board level. In the past, few relevant players recognised the role of the Dental Health Action Plan and National Health Promotion Strategy as national policy documents relating specifically to oral health and oral health promotion. The key informant interviews identified the development of oral health promotion at health board level as ad hoc although planning was perceived to be gradually becoming more coherent as a result of national policy documents providing a framework for regional development. It was still considered however that there are no formal structures for oral health promotion at health board level. Subsequently no regional co-ordination had taken place around oral health promotion and that the focus remained on treatment rather than preventive services. This understanding was echoed in the postal survey where service providers appeared generally unaware of any strategic oral health promotion initiatives at health board level.

A specific national oral health promotion policy to focus action on oral health promotion was considered necessary by the key personnel. Similarly, the integration of oral health promotion within future policies such as nutrition, policies on the manufacture, labeling and advertising of certain foods/drinks especially targeted at children, breastfeeding, school and workplace would also encourage good oral health. It is likely that service re-orientation is hampered by a lack of policy initiatives to provide coherence to developments at regional level. It remains that there is no strategic guidance in place regionally for dedicated oral health promotion.

Specific actions, such as the introduction of water fluoridation were seen as helping to create a supportive environment for oral health promotion. More generally the development of oral health promotion dedicated structures nationally, within the Department of Health and Children and the Dental Health Foundation, Ireland and regionally at health board level with the creation of dedicated oral health promotion posts, are positive moves towards an environment which encourages and supports oral health promotion. Support for multidisciplinary working and development of skills necessary for oral health promotion has increased but it remains uncoordinated and ad hoc. Emphasis must be placed on oral health promotion at national level, with the development of clear strategies and guidelines, and resources for initiatives set within an evaluative framework that would be sustained. Lessons may be learnt from the development of the generic health promotion service at national and health board level to ensure the development of a comprehensive, coordinated, integrated oral health service.

The issue of industry and its control and impact on health, raised in the interviews with key personnel, is one not particular to oral health but is clearly visible in the area of diet and teeth. Wider issues on legislation, product development and marketing are ones which can only be dealt with in a multisectoral manner involving the Department of Health and Children, the Food Safety Authority of Ireland and the Advertising Standards Authority for Ireland to name a few.

The needs of the populations served by the oral health services are not yet driving the development of the services. Given the curative nature and structure of the services thus far, very little scope for community participation has existed. Meager changes have occurred over recent years but substantially more reorientation of the oral health services has been identified as necessary to facilitate service user representation, with mechanisms needed to facilitate a multi-agency, joint planning approach. Service providers identified barriers to the implementation of oral health education / promotion programmes. These barriers can be considered at a number of levels. Organisational, such as resistance to change within the system, inter-organisational, such as the need for co-operation between departments and intra-organisational, with the identification by individuals of a lack of training in oral health education /

promotion. A range of skills is needed by personnel involved in oral health promotion to ensure a holistic approach. Historically there has been no culture of oral health promotion prevailing across each level of the health service and is a tremendous challenge to encourage attitudinal changes in well established functions. A number of survey respondents had undergone some level of training in health promotion or oral health promotion specifically but was not always supported by their employer. Planned, on-going assessment of the needs at health board level will help ensure the skills base necessary for effective health promotion. Establishing stronger partnerships between health board departments and between educational institutions especially dental schools and university health promotion departments will aide in the necessary professional development. There are clearly resource implications for the necessary restructuring and sustained delivery of oral health promotion nationally and regionally. Dedicated non-trivial resources must be provided for oral health promotion practice to ensure its place in a predominantly treatment oriented service. The highlighted barriers further support the need for coherent strategic policy at health board level to facilitate the development of a supportive environment for the re-orientation of dental services to focus on prevention and oral health promotion, but at the same time recognising that treatment will always be part of the dental health services.

A range of health professionals, both dental and non-dental, responded to the postal survey on oral health education/promotion practice in Ireland. These data do attest to oral health education / promotion being undertaken at health board level, notably led by those in oral health promotion posts. Whilst other dental health personal report involvement in health education / promotion activities primarily at one-to-one consultations, comprising the provision of general advice and information, it was not a priority within their work. Use of health education materials is reported, although these are considered inappropriate by some, while others produce their own suggesting a perceived lack of provision. It is interesting to note data from the special needs groups in relation to health education materials. Confusion about dental service entitlements in the special needs groups suggests that this is an area where written support material may be of benefit. Information has been identified as one of the keys to greater independence and choice for people with disabilities (British Society for

Disability and Oral Health, 2000) and therefore the strategic targeting of relevant information may serve to empower people to access the service. Lack of information about oral health and services was also highlighted by other special needs groups. However, it is important to recognise that travelers particularly identified the inappropriate use of written material due to low levels of literacy. They also, along with refugees stated that while they expected information and advice often did not get it , yet did not feel able to ask for it. Highlighting the importance of communication skills for service providers.

Collaboration and liaison with other sectors was instigated mainly by oral health promoters, and partnerships were particularly with the regional health promotion departments and the community nutritionists. There is a range of oral health promotion/education initiatives on-going across a number of settings and population groups in the Republic of Ireland. A variety of target outcomes were set, ranging from improvements in attitudes and knowledge of oral health to improved communication between sectors and development of partnerships. Some initiatives have undergone reported evaluations based on sound scientific criteria however, there is a volume of activity which is being undertaken without any apparent strategic direction or planned outcomes or evaluation.

The Health Promotion Wales 1999 Report (REF) summarises concisely the requirements for effective oral health promotion. Educational interventions should be reinforced by parallel community wide interventions involving community participation, local media coverage, simple direct oral information displays at the point of purchases and in clinics, dental practices and schools and lobbying and/or education of the “gatekeepers”(e.g. the water and food industries, local government purchases). Other non-dental professionals and lay people should be involved in assessing and addressing community needs. Information should be consistent and appropriate. Oral health education in schools should be curriculum based and included throughout the school years. Interventions must be based on an understanding of children and adolescents’ beliefs and understandings of oral health care and its consequences. School based interventions should allow plenty of scope for whole family involvement, personalisation and links with the wider community. Clinic based

one to one interventions may benefit from use of behavioural strategies such as joint goal setting, self-monitoring and positive reinforcement. It is essential that such interventions are based on a thorough needs assessment, are individually tailored and administered in a way that the patient can clearly understand and relate to.

Key Points

- Oral health promotion strategy
- Co-ordinated planned oral health promotion with structures in place
- Development of skills necessary through dedicated oral health promotion courses and integrated in dental training
- Multisectoral partnerships involving service users

SPECIAL NEEDS GROUPS

Information and knowledge alone has long been shown to be a poor predictor of health behaviours and therefore in the promotion of oral health consideration needs to be given to peoples attitudes, beliefs as well as knowledge levels to inform service development. From the findings of the study of special needs groups, there appears to be a clear awareness of the association of oral hygiene practices to oral health since all groups perceived it as one of the main factors in promoting good oral health and conversely, in causing poor oral health. Similarly there appeared to be a strong association between dietary factors and oral health. However, while diet was identified as an influence on oral health with the role of dietary sugar consumption referred to, frequency of sugar consumption was not highlighted suggesting that groups have general but not specific knowledge of factors influencing oral health. Recurring throughout most groups was the issue of medication and its impact on oral health. Chronic usage of sugar loaded medication is common to a number of the special needs groups and raises the issue of manufacturing and prescriptive practice to be sensitive to its oral health impact. Visiting a dentist was also referred to in relation to positively influencing oral health, which would suggest that people recognize the contribution of dental services to prevention of oral ill health. However many groups, notably homeless people and refugees did not attend dental services unless they had a problem, such as pain, so that this acknowledgement did not translate into action. The use of the dental services for acute treatment, often of pain, serves to reinforce

people's association of dentistry with negativity (Chen and Hunter, 1996) which acts as a barrier to service re orientation. Interestingly, smoking as a risk factor for oral ill health was only identified by groups on prompting and may be that people do not associate smoking with increased risk of periodontal disease. A common risk factor approach to oral health as espoused by the Dental Health Foundation, Ireland would facilitate the integration of dental health services with other health services and ensure consistent messages are disseminated. However, it is important that any risk factor approach does not become victim blaming. The Dental Health Action Plan (1994) emphasized the importance of oral disease prevention primarily through the expansion of the national fluoridation programme. In relation to the special needs groups the contribution of fluoride to oral health was only referred to on prompting and a high level of uncertainty about its efficacy was noted which may be a reflection of the current public debate.

Quite different usage and perceptions of the dental system were reported depending on the population grouping. The various groups reported a range of experiences, both positive and negative. In relation to accessibility of dental services, factors facilitating access as well as barriers to access where identified. Many facilitating factors referred to by groups were in relation to organizational aspects. For example travelers identified that where traveler lead primary health care projects were in operation dental service access was facilitated as opposed to areas where this was not the case. Similarly in elderly residential units where there was a formal arrangement for dental service provision within the unit access was facilitated. This contrasts with units where this was not the case and service access for older people appeared to be dependent on the determination of carers. This suggests that a more integrated approach of dental services with other health service provision would enable access. This is supported by the data from carers and parents of people with disability who identified the need for a more holistic approach to the care needs of those in their care. Extensive reference was made by people in special needs groups to barriers to access and use of dental services. People generally were aware of the basic information with regard to oral health however lacked detailed specific knowledge. This was also the case in relation to services provided, in that people knew generally about service provision but not in any detail. Entitlement to oral health services was an area of some

confusion and lack of knowledge. This suggests a deficit of targeted accessible information available to people. The importance of specific targeting of information taking account the particular requirements of the different special needs groups is highlighted by the identification of literacy levels as a barrier by travelers.

The Federation Dentaire International (1988? 98), in consideration of the barriers to access to dental health services in general, developed three categories of barrier relating to the individual, the dental professional and societal. The first category of barriers identified related to individuals and included fear and anxiety lack of perceived need, cost and lack of access. Lack of perceived need constitutes the most frequently reported barrier to accessing dental health services for older people with tooth loss being expected and accepted as part of the aging process (Steele et al., 1996, Knabe et al., 1997). Lack of perceived need has also been identified as a barrier to oral health services in studies with people who are homeless (Blackmore et al., 1995, O'Neill 2000) as well as with the Traveling community (Edward & Watts, 1997). In concurrence with these studies, these data support the lack of perceived need by elders and homeless people for access to dental services. However travelers in this instance recognized the need and accessed services. The perceived relevance of oral care and oral health may in certain situations be considered to be relative as demonstrated by the groups in relation to people with disabilities. When care giving needs are extensive oral health appears to assume a lesser priority. A study by Lo et al., (1991) found that many parents and carers of children with disabilities can be overwhelmed by their child's competing needs and that this, coupled with low expectations of dentistry, can result in accessing the dental health services for emergency treatment only. Transport to dental health facilities has been cited, in relation to people with disabilities and older people, as a barrier to service access (Griffiths & Trimlett 1996) and was reported in this study to act as a barrier. Cost was identified in a study of homeless men as a barrier to dental care (O'Neill 2000). However, in Ireland many homeless people would be entitled to a medical card and therefore limited but free dental treatment. A large proportion of this homeless sample did not have a medical card although likely to be entitled to one. This is not unusual as a study by Feeney et al., (2000), found that 39% of the Irish homeless population did not possess a medical card thus restricting access to many health services not just

dental health. Connelly & Schweiger (2000) report on the inevitable problems faced by many asylum seekers when they arrive in the UK. Health care may be free in many countries but access is limited by several factors for many special needs groups including language barriers and literacy levels, lack of understanding or information of service provision (O'Neill 2000, Watt 1997, Land 2000, Sanderson, 2000). In this instance many of the refugee participants had not accessed the Irish dental service as they did not perceive a need or did not believe in the efficacy of the interventions offered whether preventive or treatment orientated.

The second category of barriers are those related to the dental profession and include the uneven geographical distribution of resources and inappropriate manpower resources and training that is inappropriate to changing needs and demands. Awareness of and sensitivity towards clients needs, such as literacy levels and behavioural difficulties, varied somewhat and was felt to impact strongly on the quality of service delivered. The special needs groups in relation to people with disabilities highlighted this aspect of the services as a barrier in that negative experiences of parents and carers of the dental services were ascribed to the dentists attitude and lack of experience in treating people with special needs. The theme of dental staff 'knowing' about special needs ran through all of the focus group interviews with parents and carers. Ferguson et al (1991) and Gallagher (1991) reported that dentists have negative attitudes towards treating people with disabilities that are often based on unfounded fears and Pool (1981) wrote that fearfulness on the part of the dentist has a great influence on the successful outcome of the treatment. That many parents and carers did not feel confident that dentists in general could deliver adequate care to their children and clients may explain repeated call for more specialised services to be put in place. This is contrary to the policy of mainstreaming services for people with disabilities (Towards an Independent Future, 1996) and despite the fact that the majority of people with disabilities can be treated successfully in primary care facilities (Holland et al 1990). In a group of homeless people Pizam et al., (1994) found that the manner of the dentist was perceived as demeaning towards them with dentists lacking empathy for homeless people's situation. However in this data those homeless people who had been in contact with dental services in the recent past reported positive experiences. The barrier was more in relation to the difficulty

for homeless people in attending in the first instance or for follow up treatment. Interestingly the majority of providers of dental health services reported never coming into contact with homeless people.

The third category concerned societal barriers and related to issues such as inadequate oral health care facilities and insufficient public support of attitudes conducive to good oral health. For people with physical disabilities the physical environment in which services are provided has been cited as a barrier with lack of access to buildings due to, for example stairs and difficulty in transferring to or sitting in the dentists chair (Griffiths & Trimlett 1996, Arnold et al., 2000). The extent that service provision is limited by poor access is reported by Dolan–Mulhall (2001) in a review of accessibility to community care facilities in Ireland where only 50% of community care dental surgeries were found to be on the ground floor with only 6% of surgeries having accessible elevators. This was of concern to people with disabilities not only in relation to getting into buildings but also to transferring to the dental chair. Physical access was not considered a barrier by many service providers.

In relation to service improvements participants identified a number of areas which would overcome barriers to services. Training and increased awareness by dental health personal was identified as an area for improvement in relation to all groups but particularly in relation to people with disabilities. Studies have found that a dentist's confidence in treating people with special needs depended on whether he or she had previously treated such patients under supervision (Freeman, 1991). Parents and carers consistently stated that dentists and allied staff should receive more education and training in the area of special needs in relation to people with a disability. This view is supported by Nunn (1996) who pointed out that in the past, very little attention has been given to the subject of dental care for people with disabilities either at post-graduate or undergraduate level. Travelers also identified the need for increased awareness by dental personal of traveler culture. Increased awareness of asylum seekers culture through education and training was identified by service providers as improving services for this group, although not directly identified by asylum seekers themselves. The need for additional training of dental personal to gain an

understanding of people in marginalized groups in society has been identified by Davies (2000).

The Dental Health Action Plan (Department of Health, 1994) recognized the importance of inter-sectorial support to improve service provision of dental services. The association of dental health with general health as highlighted earlier is important in recognizing the holistic nature of health. Homeless people and asylum seekers identified the General Practitioner as their access point to dental service provision suggesting some integration of service provision. Further integration of health service provision was supported by parents and carers of people with disabilities. The experience of carers of people with intellectual disability and their perception that their knowledge and expertise was neither used or valued suggests the need for collaboration between both health service providers generally, dental health service providers and service users in order to effect integration of services.

All levels of dental service providers were asked their opinion of the oral health needs of each special needs group, with the three most commonly cited being Regular use of dental services, Better oral health maintenance and Health education. The majority of service providers reported that the needs of the different groups were sometimes met and only a very low number felt that the dental services always met the needs of the different sub-groups. Service providers sometimes experienced difficulties in providing a service to special needs groups but felt that in general the work environment was user friendly and that the staff were willing to work with people with special needs. In general the feelings towards people with physical and intellectual disabilities, children with special needs and elderly in residential care were positive, whereas those towards refugees, travellers, and the homeless were more mixed with some neutral and negative feelings

The information identified through this process of consultation with both service users and providers can facilitate the development and re-orientation of the dental health services. In order that dental services be equitable, issues such as provider

attitudes, knowledge of client group needs and quality of service must be addressed. It was notable, that where oral health policies existed, clients reported positive experiences of services. Such strategic planning of services is needed which involves a dental team approach from health promotion through to curative service provision. While the Dental Health Action Plan was the spur to the introduction of the Dental Treatment Service Scheme, it has also been the target of some criticism: *"There was to be no systematically organised care for preschool children except in the event of an emergency. Special needs groups were mentioned for targeting of preventive care but how this was to be implemented was not specified. The proposal of the appointment of a Senior Clinical Dental Surgeon in each Health Board with specific responsibility for dental services for the handicapped as laid down in the Leydon Report failed to be addressed in this document."* (Dolan-Mulhall, 2001). Arising from both the oral health promotion survey and that of special needs groups, is the issue of training needs of oral health professionals. There is currently no formal recognition or registration of dental specialists. There is however, de facto, specialisation with post-graduate training and qualifications in various specialities such as orthodontics, endodontics , periodontics and paediatrics dentistry. In Ireland, at present, there are no postgraduate courses for dentists wishing to train in special needs dentistry although several are available in the U.K. A certificate course in Oral Health Promotion, which contains a module on special needs, is run by the National University of Ireland, Galway. Skills appropriate to different population groups are not currently developed in undergraduate and postgraduate training and must be addressed.