The inequalities in oral health and care services have been identified through national oral health surveys of children and adolescents in Ireland during 2002 and 2003 (3), reporting a 30% increase in untreated dental decay in children with disabilities (3). The treatment of special care patients (SCP) presents general dental practitioners (GDPs) with various challenges which may ultimately become a barrier to the provision of care at its highest standard. In the United Kingdom a policy document was developed to aid practitioners in addressing these barriers, most notably regarding legal issues and physical interventions (4).

In Northern Ireland a comprehensive study of both people with learning disabilities and service providers (5) identified a higher level of oral disease with a concurrent low level of treatment provision and more extractions, than their peers in the general population. It also recognised the need for further training of dental practitioners and their staff, particularly at an undergraduate level (5). The need to improve training in both medical and dental disciplines has been recognised as a means to improve oral health services for these patients (6). This is evident with the formation of organisations such as the American Academy of Developmental Medicine and Dentistry (AADMD) (6).

Research looking at the provision of services from a patient’s perspective has noted that experience of dental services was related to the attitude and skill of the dental health professionals, stigma, relatives’ expectations of dentists, their oral health beliefs, information and support received, and knowledge and priorities. Relatives
expressed their desire for information provision in the general health setting (7).

This study aims to ascertain the provision and range of oral health services for SCP by GDPs in Ireland. It is also intended to establish any barriers that may exist to care in this country. As training has been identified as an essential adjunct to the improvement of care services (5,6,8), the background and type of additional education or training required will be evaluated.

**METHODS**

The study was approved by the Trinity College Dublin Faculty of Health Sciences Research Ethics Committee. The questionnaire was designed to include both quantitative and qualitative data. To develop the survey instrument, twenty clinical supervisors and house officers agreed to partake in a pilot study. Subsequent to this the responses were analysed for further development of the questionnaire. Study participants were selected from the Irish Dental Register 2007 and every third member with an address in Ireland was sent a self-completed questionnaire and given the option of an on-line alternative. In total 782 finalised questionnaires were posted and participants were asked to return them by the end of November 2007. One month following postage a reminder was published in the Irish Dental Association newsletter to encourage participation.

The questionnaire topics primarily assessed demographic factors (age and gender) and practice-related demographics (field of dental practice, dental school, practice location and distance from nearest dental hospital). Participants were then asked to define SCP, and history and opinions of training in SCD were assessed. Experience of the treatment of SCP, concerns, satisfactions and their opinion as to whether additional fees are required were then determined. The provision of oral health instruction for carers, knowledge of the Disability Act and accessibility to a trained dental nurse, hygienist and physical access to the practice were also evaluated. Further suggestions were welcomed at the conclusion of the survey.

The collected data were then entered into a Microsoft Excel document. An analysis of the data was performed using Statistical Programme for Social Science software.

**RESULTS**

Of the 782 dental practitioners who received the survey, 272 returned the paper-based survey and 2 responded via the on-line version; yielding a response rate of 35%. A total of 267 were analysed (34% of total) after exclusion of 7 questionnaires (retired/no longer at given address).

Respondents were predominantly GDPs (57%) and males over the age of 51 (21%). The reported proportion with previous training in SCP was 42% and of this; undergraduate training comprised 18%, postgraduate 12% and both undergraduate and postgraduate 12% of respondents. Of those surveyed, 12% reported having had hands on experience during training, a further 36% believed that hands-on experience is required in training and 62% expressed a willingness to train.

It was found that 65% of those surveyed are currently treating SCP (see Fig. 1). Treatments provided include: 70% emergency service, 67% extractions, 67% restorative treatments, 57% dental screening, 54% periodontal, 45% dentures, 12% sedation, 7% outreach screening programmes. Oral hygiene instruction (OHI) for the carers of SCP was provided by 49% of respondents and 26% of those surveyed claimed an awareness of Disability Act. Access to the practice was reported as inadequate in 44% of the study group.

Barriers to care include behaviour and communication difficulties (22%), the treatment of SCP outside of practitioners remit/capabilities (18%), concern regarding medical history of SCP (18%), concerns with finance and time (16%), inadequate sedation/GA referral facilities (11%), physical access problems (8%), consent (6%), carer lack of knowledge (5%), treatment relapse (4%) and staffing issues (1%).

When asked to define SCD, 25% alluded to mental or physical disabilities only with 10% providing a more comprehensive answer. Practitioners were asked for their opinion regarding the requirement for additional fees in the treatment of SCP and interestingly almost half of those practitioners treating and not treating SCP agreed to additional fees are required (see Fig. 1).

<table>
<thead>
<tr>
<th>Percentage of dentists who: i) do treat / do not treat SCP</th>
<th>ii) feel additional fees are required and not required for this patient group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fig. 1.</strong></td>
<td>A postal questionnaire and an option of an online reply was given to sent to every third member of the Dental Register in Ireland. The figure compares the number of respondents who currently treat and do not treat SCP and also those who feel additional fees are required (navy) and those who do not feel additional fees are required for the treatment (light blue).</td>
</tr>
</tbody>
</table>

**DISCUSSION AND CONCLUSION**

This study reports the findings of a quantitative and qualitative survey of Irish dental practitioners and the provision of services for SCP. The results show a low level of previous training in SCD, yet a high level of interest to partake in further education in this field. A significant number of practitioners felt that hands-on experience was essential in the training process. This is encouraging as similar research has highlighted training and education as a means to improve service provision for this patient group (5,6,8).
The treatment of SCP was reported by approximately two-thirds of participants. Disappointingly the most commonly reported treatments included emergency services, extractions and restorative care, with the low level of OHI provision highlighted. At the heart of public health provision is prevention and never is this more relevant than with SCP where the high prevalence of poor oral health and the significant challenges that exist in the provision of treatment merit a strong focus on preventative strategies.

Interestingly a higher percentage of those with previous training in SCD report treatment of SCP and those who currently treat SCP do not feel that additional fees are required. A low level of knowledge regarding the law as it relates to provision of treatment for disabled persons emphasises the need of increase awareness of the Disability Act of 2005, thus increasing both provider and consumer knowledge of their rights and access to care. It must be noted however that due to the relatively low response rate these results are likely to be biased in favour of those with an interest in SCD.

A similar study targeting in particular Irish Health Board Dental Surgeons treating those with special needs was conducted in 2001 in order to assess the current dental health services for those categorised as special needs by the Department of Health and Children (DoHC). The study made a number of recommendations for the development of the service in Ireland, namely the development of explicit policies for the provision of care for special needs groups, the introduction of a Specialist Register and the establishment of training programs. It was advised that planning more appropriate preventive dental health programmes was necessary with expansion of those services where dental hygienists and oral health promoters, specifically for SCP are available. It was recognised that there is a need for the expansion of existing services for the treatment of SCP under general anaesthetic (9).

Based on the findings from the study the authors wish to make a number of their own recommendations. There is a need for enhanced training at an undergraduate level with an emphasis on clinical experience in a supervised environment. The level of interest in further training would suggest the requirement for dedicated special care dentistry postgraduate courses, in addition to modules in SCD within Continued Professional Development programmes. The impact and legalities of the Disability Act introduced in Ireland in 2005 should be promoted among the profession. Education programmes for the carers of SCP ought to be established, with the importance of the active practice of preventative dentistry highlighted. The active involvement of all members of the patients’ medical team, i.e. the medical practitioners or specialists and the GDPs, allows for the provision of a multi-strategic, holistic approach addressing all aspects of health.

ACKNOWLEDGMENTS

The authors would like to acknowledge with thanks Dr Niall O’Connor (Metropolitan Branch of the Irish Dental Association) for his support, Professor June Nunn and Dr Jacinta McLoughlin for their guidance and patience. The authors would also like to thank those who took part in the pilot study and those who responded to the final questionnaire.

REFERENCES