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An analysis of the attitudes of dental patients attending general dental practice in Galway

Précis

The aim of this paper is to describe the patterns of dental attendance and attitudes towards tooth loss of general dental practice patients in Galway.

Abstract

Aim: To describe the patterns of dental attendance and attitudes towards tooth loss of general dental practice patients in Galway.

Objectives: 1. To determine the pattern of adult dental attendance in general practices in Galway; and, 2. To examine the oral health attitudes of these patients.

Method: Questionnaires were distributed to 311 consecutive adult patients in the waiting rooms of ten general dental practices in Galway, which were randomly selected from the telephone directory.

Results: A total of 254 of the 311 questionnaires distributed were fully completed, returned and included in the results, giving a response rate of 81.7%. A total of 59% of dentate participants attended their dentist for annual or biannual examinations compared to 23% of edentate patients. Some 10.5% of medical card holders and 0.5% of non-medical card holders were edentulous.

Conclusions: The data from the survey indicated that medical card holders in Galway were more likely to be edentulous than non-medical card holders. Edentate patients were less likely to be regular dental attenders than dentate patients.

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Introduction

The first national survey of adult oral health in the Republic of Ireland was conducted in 1979 and consisted of a telephone survey designed to ascertain the level of edentulousness in the Irish population and also to determine the dental knowledge, attitudes and behaviour of Irish adults.[1] Ten years later the second national survey of the oral health of Irish adults was conducted.[2] This influenced the development and publication of the strategy document 'Shaping a Healthier Future' in 1994, and the subsequent Dental Health Action Plan.[3] The Dental Health Action Plan pointed out the inequality in dental treatment available to medical card holders and the remainder of the population. As a result, the Dental Treatment Services Scheme (DTSS) was established in 1994. The most recent National Survey of Adult Oral Health was conducted in Ireland in 2000-2002 and was

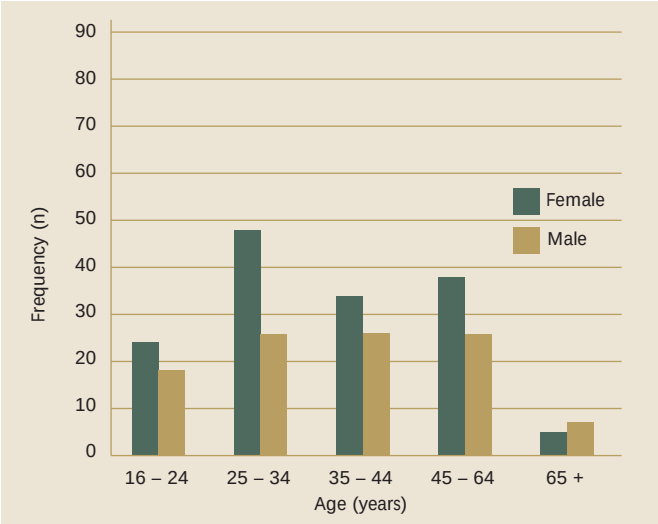


FIGURE 1: Age and gender distribution of respondents.

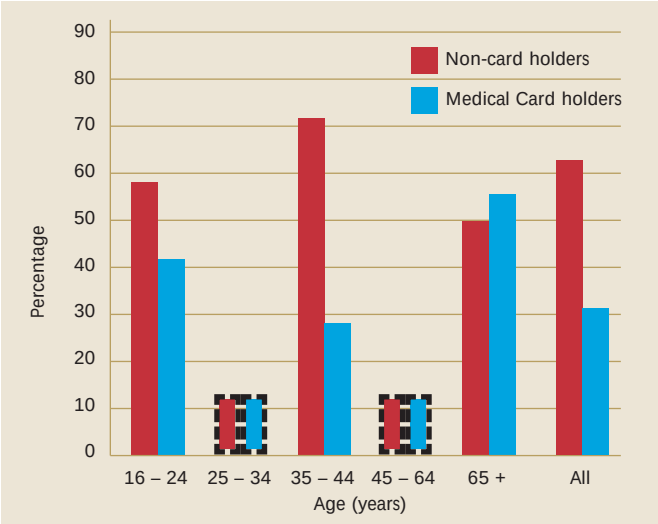


FIGURE 2: Medical card status of respondents.

published in 2007.[4] This report concluded that the goals set out for the year 2000, as set by the Dental Health Action Plan in 1994, had been reached at the national level for all adult age groups. In the decade since the last national survey, a number of significant changes have been made to the provision of dental services in Ireland. In view of economic difficulties, the HSE sought to reduce the amount spent on the DTSS from an estimated €88m in 2010 down to the 2008 level of expenditure of €63m. This was implemented by suspending certain items of treatment and setting limitations on "non-emergency" items of treatment such as fillings. The Social Welfare Dental Benefit Scheme was also amended so that from January 1, 2010, the Dental Benefit Scheme would provide cover for an annual examination only.

It was against the above background that it was decided to conduct this survey in the west of Ireland. The aims of this research were to determine the patterns of attendance and oral health attitudes of adult patients in ten general dental practices in Galway.

Method

An anonymous questionnaire was distributed to consecutive adult patients in ten general dental practices in Galway over a one-week period. The questionnaire consisted of ten questions taken from the National Survey of Adult Oral Health 2002. The data collected was then analysed according to age group, gender and medical card status. Ethical approval was granted by the Clinical Research Ethics Committee of the Cork Teaching Hospitals.

Results

A total of 311 questionnaires were distributed; of these, 254 were completed and returned for inclusion in the results. **Figure 1** shows the age and gender distribution of respondents to this survey. A total of 103 (40.6%) respondents were male and 151 (59.4%) were female. A total of 31.7% of participants were medical card holders and 68.3% were non-medical card holders (**Figure 2**)**.** The proportion of males between the ages of 16 and 24 who were in possession of a medical card was high, at 41.8%. Of the medical card holders who completed the questionnaire, 10.5% were edentulous. This was a much higher proportion than among non-medical card holders, which was only 0.5%. A higher proportion of males (4.9%) were edentulous than females (1.3%). Only 3.7% of the overall sample was edentulous.

Reasons given for dental attendance

As shown in **Figure 3**, 59% of dentate participants reported attending their dentist for annual or biannual examinations compared to 23% of edentate participants. Some 77% of edentulous patients said that they only see their general dental practitioner when they have a pain or feel that they require dental treatment, compared to 41% of dentate patients. It is important to highlight, however, that the number of edentulous individuals in the sample population was very low, and their views and attitudes may not reflect the Galway population as a whole. Dentate adults aged over 65 years were more likely to attend the dentist regularly than younger age groups, with 54.5% reporting that they attend for a check-up at least once a year, and a further 9.1% going for a check-up at least once every two years. Comparatively, 38.2% of 16- to 24-year-olds and 47.8% of 35- to 44-year-olds reported attending their dental practitioner for annual examination.

Some 64.5% of all patients surveyed indicated that they had last been to the dentist within the past 12 months. When this was further divided according to medical card status, it was shown that 50.5% of medical card holders had been to their dentist within the past year compared to 80.7% of non-medical card holders. Medical card holders were more likely to be very irregular dental attenders than non-medical card holders, with 22% of medical card holders reporting that it had been over three years since they had seen their dentist compared to 5% of non-medical card holders.

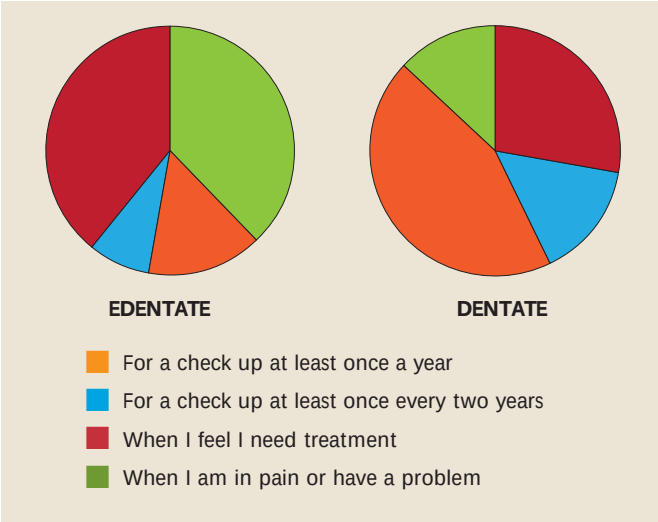


FIGURE 3: Reasons given for dental attendance.

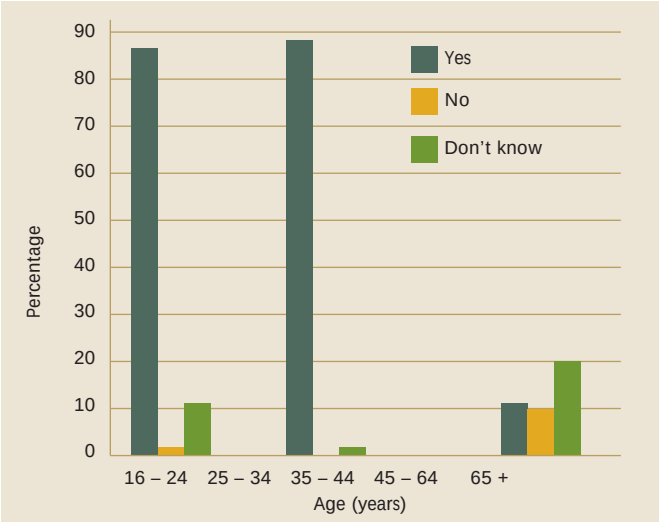


FIGURE 4: Responses given by patients when asked if they think they will always have some of their natural teeth.

Desired treatment for a painful tooth

In response to the question "If you had a painful back tooth would you prefer it to be filled or taken out?" the majority of patients would choose a filling (71.9%), while 10.7% would prefer extraction of the tooth. These data are further broken down according to age category in **Table 1**. A total of 82.7% of 16- to 24-year-olds said that they would choose to have a painful back tooth filled in this survey. In contrast, fewer over 65-year-olds would opt for a filling (60.0%); approximately one-third of this group would prefer to have a painful back tooth extracted. Unsurprisingly, fewer adults would choose to have a painful front tooth extracted (4.6%), with the majority indicating that they would choose a filling (83.3%). In this survey, no one in the over-65 age group would be happy to have a painful front tooth extracted. However, 10% would choose to have it "taken out and replaced if possible". The cosmetic importance of anterior teeth to older patients is reflected in their increased reluctance to have a front tooth extracted compared to a posterior tooth.

Attitudes to wearing complete dentures

With regard to the wearing of full dentures, 88.4% of 16- to 24-year-olds indicated that they would be either upset or very upset at the thought of losing all their teeth and wearing full dentures. The corresponding percentages for 35- to 44-year-olds and the over-65 age group were 84% and 60%, respectively.

TABLE 1: Percentage of respondents who were asked "If you had a painful back tooth would you prefer it to be filled or taken out?"

	16-24	35-44	65+	All
Filled	82.7	69.1	60.0	71.9
Taken out	9.6	10.3	30.0	10.7
Don't know	3.8	11.8	0.0	7.5
Wouldn't bother me	3.8	7.4	10.0	7.8
Taken out and replaced	0.0	1.5	0.0	2.1

Expectations of retaining natural dentition

The vast majority (84%) of the dentate population thought that they would always have some of their own natural teeth. **Figure 4** shows the responses given by age category.

Discussion

The survey participants were consecutive patients attending 10 dental surgeries over a one-week period. Accordingly, the survey results are biased towards dental attenders, as non-attenders were not included. This may have favoured selection of adults with a higher awareness of oral health and, as a convenience sample, was not representative of the Galway population as a whole.

Patterns of attendance

Edentate patients are less likely to attend a general dental practitioner for routine examination than dentate individuals. The age profile of edentate patients (usually over 65 years) puts this group at an increased risk of oral cancer. Over 60% of patients who present with oral cancer show either regional or distant spread.[5] The five-year survival rates for oral cancer average at between 50 and 80%, depending on the stage of the disease, varying from 86% for stage I to 12-16% for stage IV.[6,7] A major factor in poor outcome for oral cancer is its late presentation. An annual soft tissue exam by an oral health professional gives the opportunity for early detection and improved prognosis of such lesions. The DTSS has been the main scheme for providing dental care to older people. In 2003, older people comprised 41% of the DTSS patient base.[8] From January 1, 2009, the automatic entitlement to a medical card on reaching 70

years ended. This may discourage older patients from attending their dentist for routine examinations, as it may be cost prohibitive.

Even among dentate patients, less than half routinely attended for an annual dental examination and 41% only attended when they were experiencing pain or knew that they needed treatment. It has been demonstrated that a history of spontaneous toothache is usually associated with extensive degenerative changes, which extend deep into the root canals.[9] Patients attending the dentist when already experiencing symptoms are therefore likely to require more extensive treatment and have a higher risk of tooth loss than patients who undergo routine examination when asymptomatic. It is encouraging to note the proportion of regular dental attenders in the dentate over-65 population, as this age category are at an increased risk of dental diseases such as root caries and periodontal disease. Routine examination provides the opportunity for early intervention when disease is detected, and regular reinforcement of oral hygiene advice to prevent the initiation of dental disease.

Attitudes towards tooth loss

The impact of tooth loss on quality of life (QoL) is increasingly recognised and researched. In a study conducted in England, 45% of participants stated that they had experienced difficulties in accepting total loss of their teeth.[10] Partially dentate patients have also been found to have limitation of food choice and reduction in enjoyment of food.[11] There are psychological as well as functional impacts, as partially dentate patients are also more likely to avoid laughing in public and exhibit increased reluctance to form close relationships.[11] Patients in general view tooth loss as a very negative event and, in the most part, are willing to undergo restorative treatment rather than have an extraction. This is reflected in a dramatic decline in the percentage of edentulous adults in the past 30 years in Ireland. Interestingly, 82% of participants in this survey indicated that they believed that they will always retain some of their natural dentition. In the past, many patients felt that tooth loss was inevitable and were, to a certain extent, prepared for that eventuality. Some 83.7% of adults surveyed said that they would be upset or very upset at the thought of losing all their natural teeth and wearing full dentures. As more adults retain their natural teeth into old age, the impact of conditions such as gingival recession, root caries and tooth wear will increase. The higher expectations of this population are also likely to increase demand for more sophisticated treatments, as shown by less than 5% of those surveyed choosing extraction as treatment of choice for a painful back tooth.

However, the retention of natural teeth continues to be substantially lower among medical card holders. Given the limitation on restorative work in the DTSS scheme currently, it is possible that this gap between medical card holders and non-medical card holders may widen further, with medical card holders carrying the functional and psychological burden of edentulousness.

Conclusions

In this survey, edentate patients reported attending their dentist less regularly than dentate patients and the vast majority of the dentate population surveyed expected to retain their natural dentition throughout their lives.

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