

Dental attendance in 1998 and implications for the future

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The 1998 survey of Adult Dental Health in the UK was carried out under the auspices of the Office of National Statistics together with the Universities of Birmingham, Dundee, Newcastle-upon-Tyne and Wales. A key behavioural indicator in these decennial surveys is whether people say they go to a dentist for a regular dental check-up, an occasional dental check-up or only when they have trouble with their teeth. The proportion of dentate adults in the UK who report attending for regular dental check-ups has risen from 43% in 1978 to 59% in 1998. Older adults (over 55 years old) in 1998 were the most likely to say they attend for regular dental check-ups. Many younger adults (16–24) in 1998 said they went to a dentist less often than 5 years previously, they were also the least likely to say they attend for regular dental check-ups. Dental anxiety remains a problem for many dental patients but another factor of importance to many is their want to be involved in the treatment process and especially to be given an estimate of treatment costs.

In brief

- The proportion of dentate adults in the UK who report attending for regular dental check-ups has risen from 43% in 1978 to 59% in 1998.
- Dentate adults over 55 in 1998 were the most likely to say they attend for regular check-ups, the proportion of them reporting this has more than doubled over the last 20 years.
- Almost a half (48%) of 16–24 years old in 1998 said they went to a dentist less frequently than they used to, they were also the least likely to say they attend for regular dental check-ups.
- A half of dentate adults said they would like to be given an estimate of treatment costs without commitment.
- The most frequent reason given for not attending for check-ups among those who only go when they have trouble with their teeth is that they do not see the point in visiting unless they have to.

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The national surveys of Adult Dental Health have given a 10-yearly summary of the clinical condition of adults in the United Kingdom on three previous occasions. The fourth report in the series was published in March of 2000. For the 1998 survey 4,984 addresses were identified at which all adults over 16 in residence were asked to take part in the survey; 21% of households refused and no contact was made at 5% of them. In total, 6,204 adults

were interviewed following which those with some teeth were asked to undergo a dental examination; 3,817 (72%) of those eligible agreed. A weighting system based on some of the interview responses of those who consented to be dentally examined and those who were interviewed but not dentally examined was used to reduce bias from non-response.¹ The survey was carried out under the auspices of the Office of National Statistics together with the Universities of

Percentage of age group who say they attend regular dental check-ups (%)

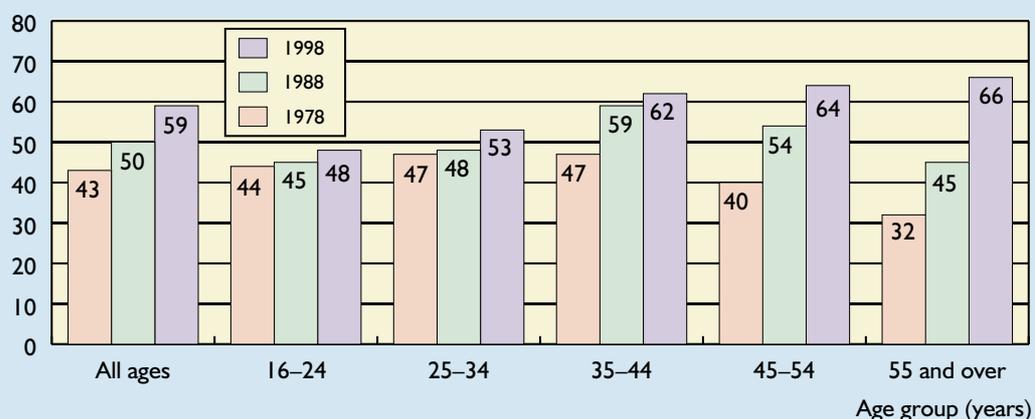


Fig. 1 Dentate adults who say their usual reason for attending a dentist is for regular dental check-ups in the UK and by age group 1978–1998

Birmingham, Dundee, Newcastle-upon-Tyne and Wales.

A key behavioural indicator that has been used since the first survey of adult dental health of England and Wales in 1968 is whether people say they go to a dentist for a regular dental check-up, an occasional dental check-up or only when they have trouble with their teeth. Self-assessed dental attendance has been shown to have clear associations with dental health. The 1998 survey shows that those who say they attend only when they have some trouble with their teeth had one less tooth on average than those who attend for regular check-ups.¹ In addition the condition of these teeth was less satisfactory on the whole; those who only attend when they have some trouble with their teeth were, in 1998, twice as likely to have some active decay and six times more likely to have some unrestorable caries than those who say they go for regular dental check-ups.¹

This article looks at the reported dental attendance behaviour of the dentate United Kingdom population and what the 1998 Adult Dental Health survey reveals about the reasons why people who have some natural teeth visit a dentist, what they mean when they say they for regular dental check-ups and what puts people off going to a dentist.

Did more dentate adults in the UK in 1998 say they go for regular dental check-ups than in the past?

The proportion of the UK population who say they usually attend for regular dental check-ups has risen from 43% in 1978 to 59% in 1998 (Fig. 1). This growth in attending for regular dental check-ups has been largely among people aged 35 and over. Among those aged 16–24 there has only been a 4% growth in the uptake of regular dental check-ups, with a similar level (6%) among 25–34 year olds over 20 years. Furthermore 15% more of those aged between 35–44 and 24% more of those aged over 45–54 in 1998 said they usually went for regular check-ups in comparison with 1978. The most marked change in seeking dental check-ups was among dentate adults aged 55 and over which has more than doubled over

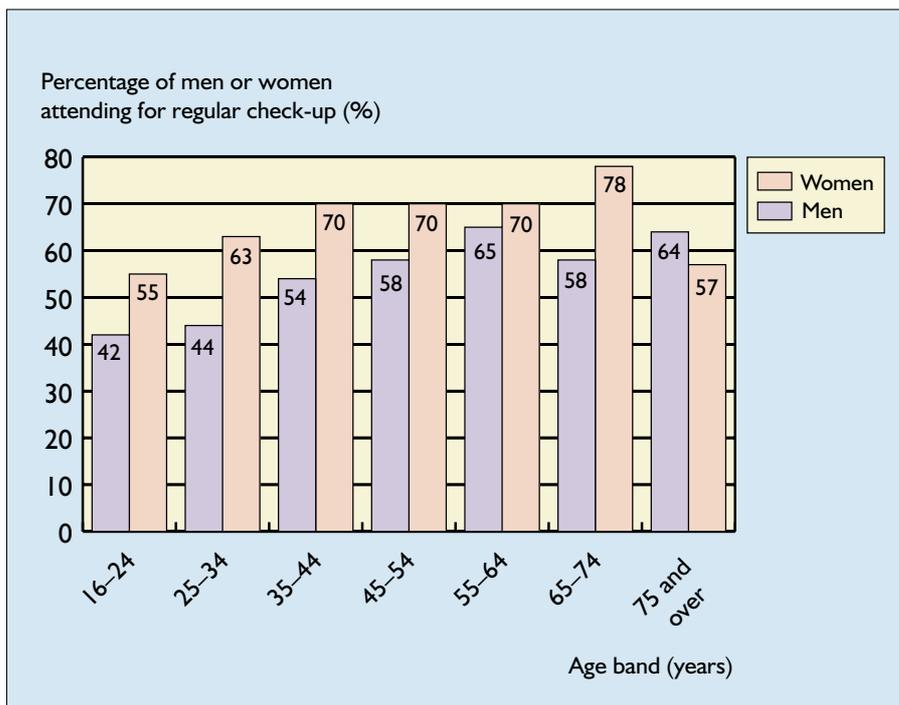


Fig. 2 The percentage of men or women who say they usually attend for regular dental check-ups by age group

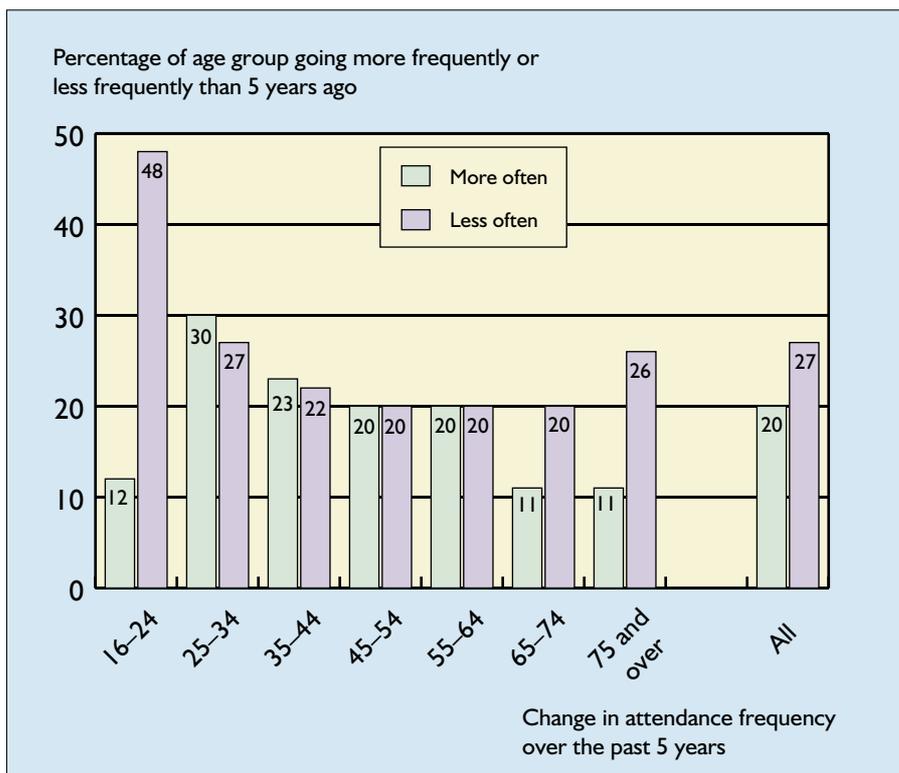


Fig. 3 Change in attendance frequency over 5 years by age group

the past 20 years, and who in 1998 were the age-group who were the most likely to say they sought regular dental check-ups

What are the characteristics of dentate adults who say they go for regular check-ups?

Dental attendance behaviour is markedly related to age and gender. Men of all ages were less likely to go for dental check-ups than women, except among those aged over 75 (Fig. 2). Those least likely to go for regular dental check-ups were young men; fewer than a half of men aged below 34 said they went for regular dental check-ups. So why should older people be more likely to seek regular dental check-ups than the young? One factor may be that older people change their behaviour, perhaps in response to greater perceived need or through having more disposable income in general than the young. However a competing explanation is not that people change their behaviour as they get older but that the least dentally healthy progressively drop out of the dentate population by losing all their teeth leaving mainly those with 'good' dental habits in older age groups. This latter possibility may be a partial explanation but the rate of loss of people through edentulousness² is lower than the rate of increase in uptake of regular check-ups, which suggests that some of the improvement is also occurring because of people changing their attendance behaviour, as they get older.

Do people say they go to a dentist more or less often than they used to?

Although more people now say they go for regular check-ups than in the past, more people also reported that they went less often to a dentist than they did 5 years previously (Fig. 3). Only in one age group (25–34 year olds) did more people say they went more often than less often in comparison with 5 years before. The most marked drop-off was among the young; almost a half (48%) of 16–24 year olds said they attended a dentist less often by 1998 than they did 5 years previously. Overall, 7% of the population said they went to a dentist less often in 1998 in comparison with 5 years previously.

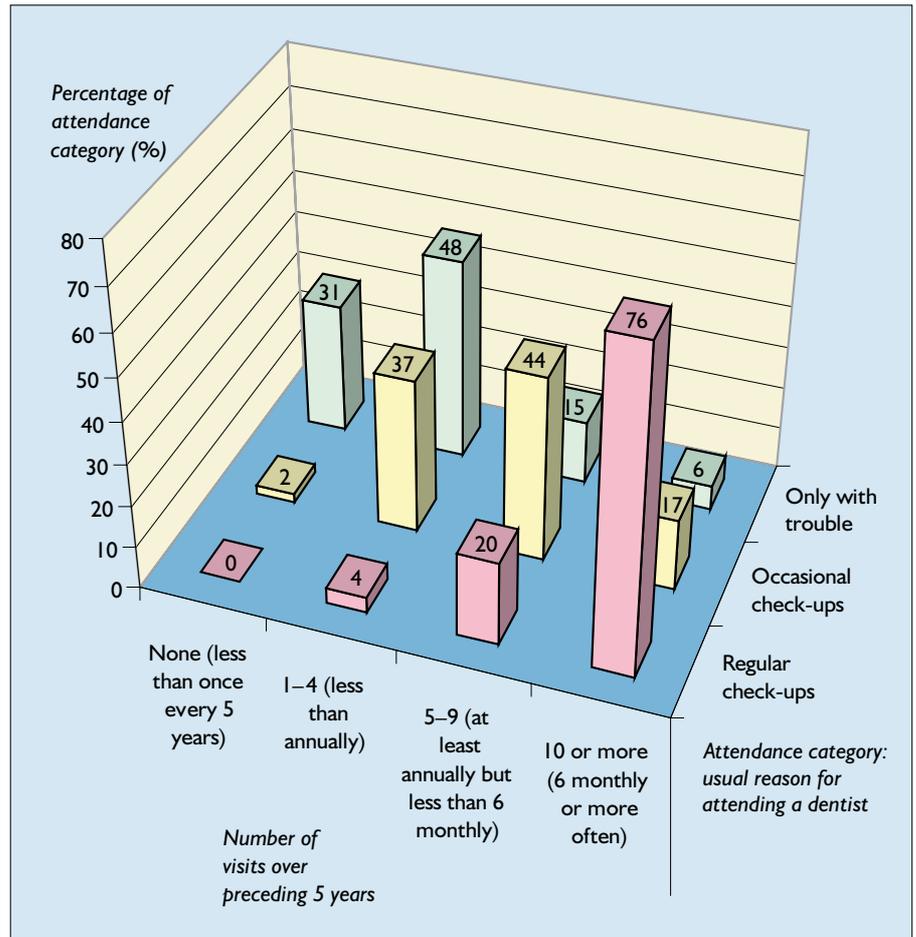


Fig. 4 Self-reported frequency of dental attendance compared with usual reason for attending

These results seem to be giving conflicting indications about what is happening to dental attendance. More dentate adults say they are going for regular dental check-ups yet more also say they now visit a dentist less often than they did 5 years ago. A large part of the apparent contradiction stems from the amount of change occurring among those aged 16 to 24. Many of these adults will be comparing their current attendance with that when they were under 18 and reflect the change that occurs as people enter adulthood. Potential reasons may include the cost of dental treatment but the 1998 survey has shown that people in the 16 to 24-year-old age group were actually the age-group who were least likely to say they find NHS dental treatment expensive¹ (although this may reflect the lack of experience of NHS dental costs as a

result of having last attended when they were aged 18 or under and therefore exempt from contributing to costs). A revealing finding from the survey was that 53% of those who in the past used to go for regular check-ups, but no longer do so, said that they had no choice about going for regular check-ups in the past, which suggests that coercion is not a particularly effective way of building a habit of regular attendance.¹

What is a regular dental attender?

The term regular attender has slipped from the Adult Dental Health surveys into the dental lexicon without much challenge despite its meaning being far from clear in terms of whether it refers to regularity or frequency of attendance (eg 6 monthly) or the underlying motivation for attendance

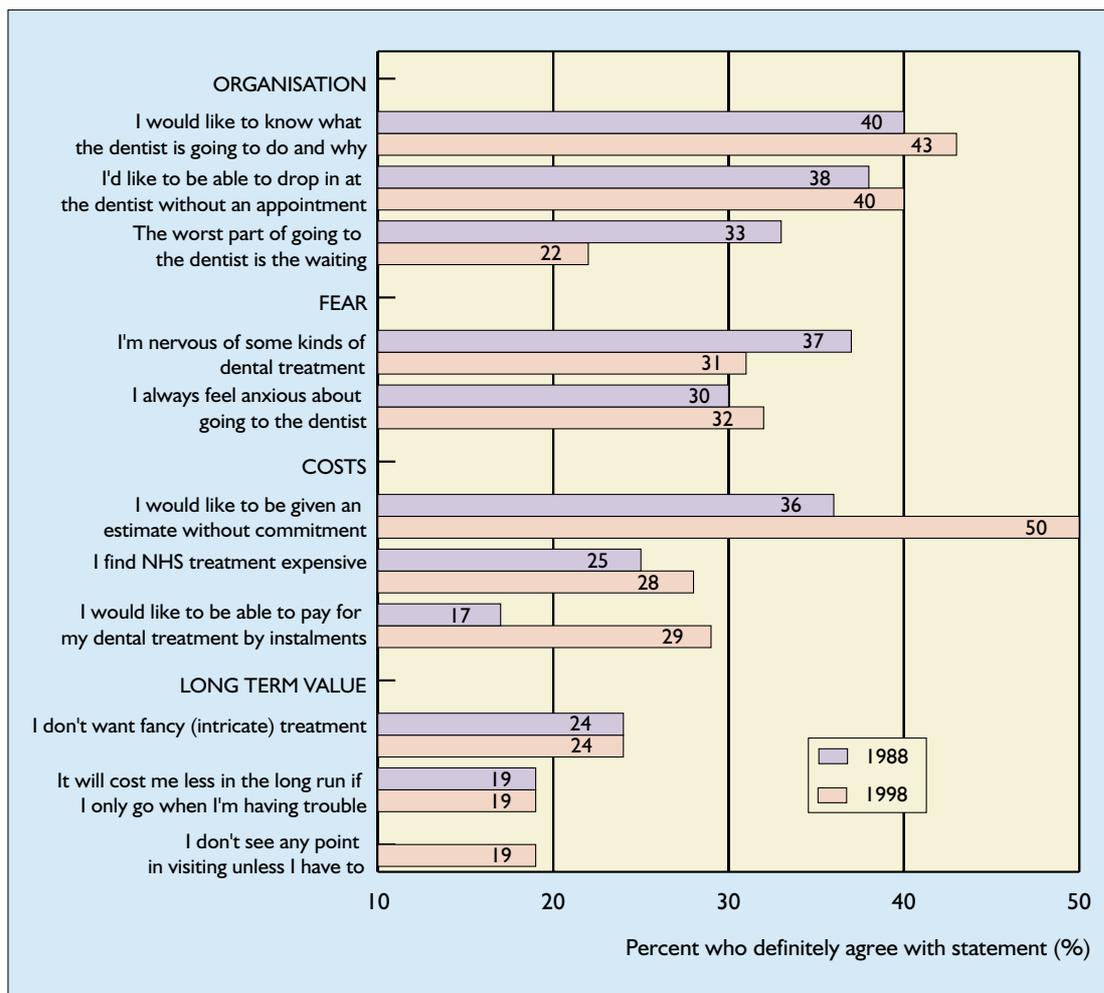


Fig. 5 Feelings about going to the dentist, 1988–1998

(usually visiting without symptoms to check everything is alright).

For the 1998 Adult Dental Health survey we felt that some attempt should be made to determine what people actually meant when they replied to the question which asked 'In general do you attend for a regular check-up, an occasional check-up or only when you have some trouble with your teeth'. So the people who took part were asked how often they had attended over the past 5 years in order to get an indication of how often they went to a dentist. This was particularly revealing; three-quarters of those who said they went for regular dental check-ups said they had gone to a dentist 10 or more times over the preceding 5 years (usually the exact figure of 10 times in 5 years was mentioned), which is equivalent to a 6-monthly interval (Fig. 4).

The '6-monthly dental visit' is a popular concept of what constitutes the most appropriate

interval to leave between dental visits and still seems to hold sway among patients, at least as that which constitutes the frequency that is appropriate for 'regular dental check-ups'. Yet the evidence base for the recommendation has been called into doubt. A committee of dentists looked into the scientific basis of dental health education³ and concluded that: 'there is little evidence to support a specific interval or to quantify its benefit' despite going on to suggest the maximum period between oral examinations for everyone, irrespective of age or dental condition, should be 1 year. The experience in Scotland of a longitudinally monitored sample of dentate adults suggests that going to a dentist every 6 months, without lapse or delay over a 5-year period is actually extremely rare even if a 3-month leeway is allowed for difficulties in scheduling.⁴ Even consistent

annual dental visits are less than usual.⁵ If anything dental attendance often seems more likely to go in 'bursts' of visits over a period followed by a longer than usual lapse.⁵ It may be that people say they attend every 6 months because this is congruent with their description of themselves as 'regular dental attenders' and some may even be unaware that their actual behaviour is often less consistent or less frequent.

The data in Figure 4 show there is a clear difference in reported attendance frequency between those who say they attend for regular check-ups and those who wait until they have some trouble with their teeth. Three-quarters of 'regular attenders' (76%) said they visited a dentist once every 6 months over the preceding 5 years and about the same proportion (79%) of those who only went when they had some trouble with their teeth said they went less

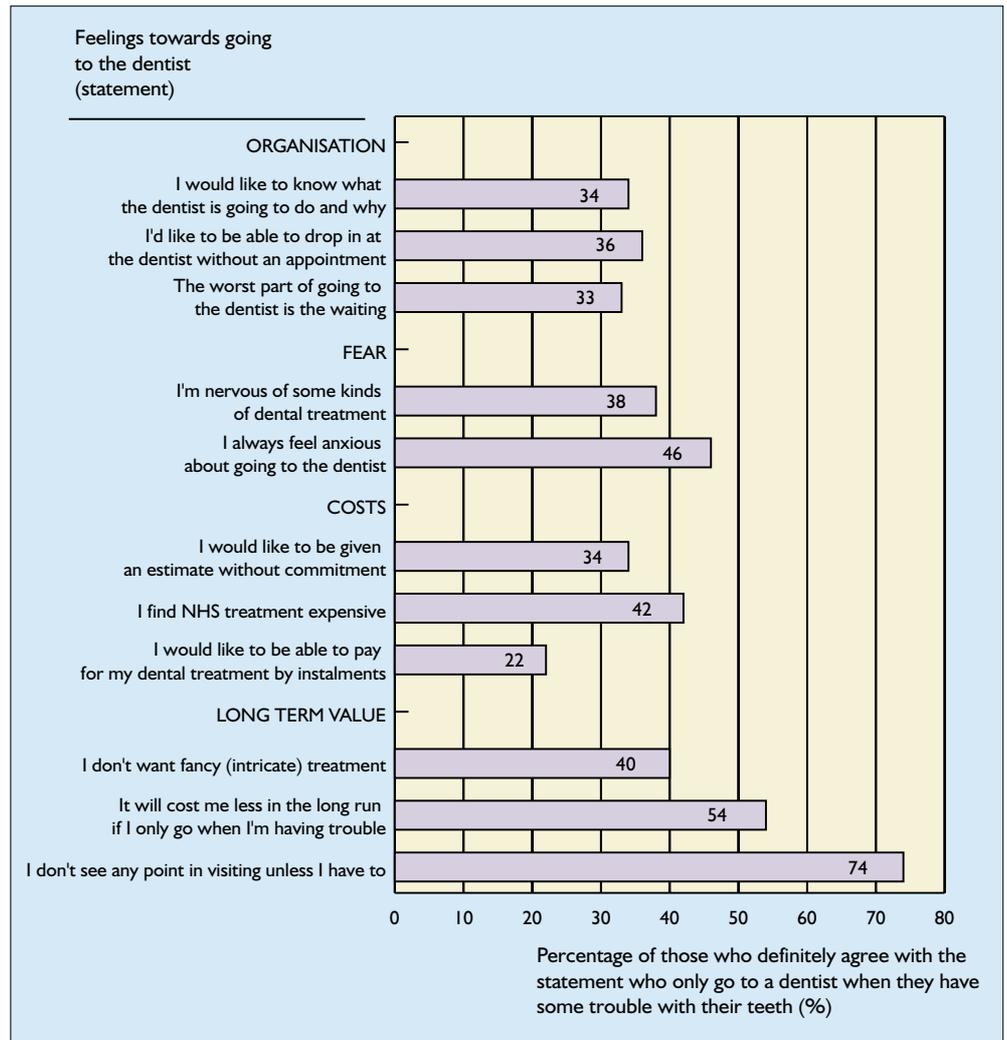


Fig. 6 Those who say they only attend when they have some trouble with their teeth against feelings towards going to the dentist

than once a year. However, what people mean when they use the terms is still not entirely clear as 30% of those who said they only go when they have some trouble with their teeth said their previous visit was for a dental check-up.¹

What puts off those who avoid going to the dentist?

Fear and anxiety is the most usual reaction that is popularly referred to when the topic of dentists or dental visits are brought up. The reasons why people avoid going to a dentist was the subject of research in the 1980s in which people were interviewed to find out what put them off going to a dentist.⁶ The issues people mentioned led to the development of a set of questions that were included in the

1988 and 1998 surveys. Principal components factor analysis was used to examine the relationships between the responses to each statement.¹ This confirmed that the statements related to different aspects of going to the dentist and identified four factors which could be used to group the statements: fear; cost; the value of dental treatment and going to the dentist; and the organisational aspects of going to the dentist.

What people seemed most concerned about were issues to do with the cost of dental treatment (Fig. 5); 50% said they would like to be given an estimate of the cost of dental treatment without commitment. In many cases this seems to be a different concern from the expensiveness of treatment as such, because many fewer dentate adults (28%) said they found NHS dental treat-

ment expensive or would like to pay for their care by instalments (29%). This may suggest that many people feel they would like to be more involved in the planning of their treatment. This might also be implicit in the next most frequent response where 43% said they definitely felt they would like 'to know what the dentist is doing and why'. Furthermore when people were asked to rank the statements they had identified as agreeing with most strongly 'knowing what the dentist is doing' came top of the list.¹ The statement probably applies more to operative procedures rather than treatment planning, nevertheless taken together the responses suggest that many people feel uninvolved in the process of their dental treatment. People want to know 'how much?' and 'what's going on'.

When the new General Dental Services contract was introduced in 1990 there was a requirement that patients should be provided with estimates for dental treatment planned. The regulations were relaxed after a couple of years but are still largely in place for certain circumstances and still require that a patient who asks for an estimate be given one.⁷ It seems very likely that many patients do not know about this entitlement at present and yet would clearly welcome the opportunity if they knew it existed. Furthermore, we must also not lose sight that 'without commitment' ought to mean allowing a person to go away and consider a treatment proposal. Both of these findings give an unsettling indication that many patients currently feel they are not in control of what happens to them in dental surgeries.

The issue of access to healthcare is high on the political agenda at the moment with Government statements about the provision of walk-in dental clinics and the intention to encourage late opening medical and dental surgeries. It is certainly an aspect that the people who took part in the survey were interested in; 40% said they would like to be able to drop in at the dentist without an appointment.

Significantly fewer people in 1998 felt that the worst part of going to the dentist was the waiting in comparison with 1988. This is intriguing as it might mean waiting for dental care is less common now than in 1988 or that other aspects of dental visits have taken over as being the 'worst' thing about going to the dentist.

Fear and anxiety is clearly a problem for many but was mentioned by fewer people than information issues. About a third of dentate adults definitely agreed that they always feel anxious about going to the dentist. However, we must be clear that this does not tell us anything about the relative impact of fear and anxiety that probably has more intensity and more impact as a feeling than has wanting information.

The factors which were mentioned least often as affecting people in general were those classified as concerning the long-term value of attending for dental care; 24% definitely agreed that 'I don't want fancy (intri-

cate) treatment', 19% agreed that 'it will cost me more in the long run if I only go when I'm having some trouble with my teeth' in both the 1988 and the 1998 surveys. A similar proportion (19%) agreed with a new statement introduced into the 1998 survey that "I don't see the point in visiting unless I have to".

However, although fewest people overall agreed with these statements about long-term value they were nevertheless the statements that most strongly differentiated between regular and in trouble attenders (Fig. 6). People who agreed they could not see the point in visiting a dentist unless they had to were far more likely only to attend when they had some trouble with their teeth (74%) than seek regular dental check-ups (20%). Furthermore many are fearful about going to a dentist and find dental treatment expensive but this does not necessarily put them off attending for check-ups; people who said they were anxious were equally as likely to say they went for regular check-ups (43%) as to say they only attend when having some trouble with their teeth (46%).

What has the 1998 Adult Dental Health survey told us about dental patients views about visiting the dentist?

The overall picture that the 1998 survey has given us about adult dental attendance behaviour is that many people abandon regular check-ups in early adulthood, often because there seems to be no clear value to them in seeking regular dental check-ups, but many then appear to begin to see some benefit to check-ups, as they get older.

Most people who describe themselves as going for regular dental check-ups also said they attended on a 6-monthly basis over the past 5 years despite recommendations that an annual visit is sufficient for most healthy adults.³

Recent pronouncements suggest that Governmental policy on the NHS is being directed at providing a modern health service that meets the expressed needs of patients. The 1998 survey tends to suggest that patients would indeed welcome some of these plans, such as the provision of drop-in clinics. Another concern among

dental patients is that they want to have more information about their dental care; such as wanting to know, without obligation, what their treatment is going to cost them and what their dentist is doing during treatment. This suggests many people feel they are not in full control of what happens to them in dental surgeries. The dental profession should give urgent consideration about how to address this, as knowing what something is going to cost and what is going to be done to them seem perfectly reasonable things for patients to be informed about.

- 1 Kelly M, Steele J, Nuttall N, Bradnock G, Morris J, Nunn J, Pine C, Pitts N, Treasure E, White D. *Adult Dental Health Survey – Oral Health in the United Kingdom 1998*. London: The Stationery Office 2000. (Table 2.2.9, Table 3.1.23, Table 6.1.9, Table 6.1.10, Table 6.2.3 & Table 6.1.8).
- 2 Steele J, Treasure E, Pitts N B, Morris J, Bradnock G. Tooth loss in the United Kingdom in 1998 and implications for the future. *Br Dent J* 2000; **189**: 598-603.
- 3 Health Education Authority, *The Scientific Basis of Dental Health Education (Fourth Edition)*. London; HEA, 1996.
- 4 Eddie S. Frequency of dental attendance in the General Dental Service in Scotland; a comparison with claimed attendance. *Br Dent J* 1984; **157**: 267-270.
- 5 Nuttall N M, Davies J A. The frequency of dental attendance of Scottish dentate adults between 1978 and 1988. *Br Dent J* 1991; **171**: 161-165.
- 6 Finch H, Keegan J, Ward K, Senyal Sen B S. *Barriers to the receipt of dental care*. London: Social & Community Planning Research, 1988.
- 7 Management Executive Letter. General Dental Services. Relaxation of the requirement to issue treatment plans. *NHS Management Executive*, January 1992.

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