

exist in the prevalence of dental caries almost certainly arise because the rules are better understood and more widely followed in affluent communities.

Attempts to improve further the dental health of children must take account of these socially determined differences. Water fluoridation must remain the cornerstone of policy because it benefits all consumers regardless of social constraints on health behaviour.

The past decade has been important in the history of water fluoridation in Britain. In 1978 an individual citizen applied for an interdict to restrain the Strathclyde Regional Council from fluoridating its water supplies. There followed the longest case in British legal history, after which the judge, Lord Jauncey, fully endorsed the effectiveness and safety of water fluoridation but questioned its legality. This prompted the government to introduce a bill, and after extensive parliamentary debate the Water (Fluoridation) Act was passed in 1985.

This act requires health authorities to consult widely before

requesting their water suppliers to fluoridate. In some parts of the country—notably, the Trent, North Western, and Mersey regions—this consultation process is complete or well under way. Extensive support for fluoridation has come from the dental, medical, and allied professions, and the prospects are good for implementing several new major fluoridation schemes that will further improve the dental health of children, particularly among the groups in which it is still unacceptably poor.

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## Attracting patients to dentists

### *Dentists will have to attract reluctant patients*

Dental disease is pandemic in Britain despite a reduction in caries in recent years.<sup>1</sup> Dental disease produces chronic pain, and possibly “a third of the employed population cannot function at work for limited periods because of dental problems.”<sup>2</sup> People need to be attracted to dentists, and once there they need to be encouraged to return. Although there has been some debate about how often people should seek dental care<sup>3</sup> and about what care they should be given,<sup>4</sup> most people need to have teeth repaired and gums treated.

Unfortunately only 43% of adults report that they attend for regular frequent dental check ups.<sup>1</sup> In Scotland similar numbers have made that claim, but dental records confirmed that only 16% attended at least once a year.<sup>5</sup> Reports of attendance from respondents themselves probably therefore overestimate the numbers who seek dental checks frequently.<sup>5</sup> Throughout the Western world there are many people who seek dental care only when in trouble—“the irregular attenders.”<sup>6</sup>

Because there have been many unfavourable reports about dentistry in the popular press it is not surprising that many people in Britain are irregular attenders. In Britain and overseas, however, many surveys (but not all) have found that fear of dental treatment is the most important deterrent to attendance.<sup>6-11</sup> Several other influences have been noted: the attendance of parents; the desire to keep natural teeth<sup>10</sup>; the cost of treatment<sup>9,12</sup>; guilt about poor oral health<sup>13</sup>; accessibility of dental services<sup>9</sup>; what is considered by peers to be normal use of dental services<sup>14</sup>; appraisal of one's own dental health<sup>9</sup>; and belief in the efficacy of treatment for dental health and appearance.<sup>9</sup>

The cost to patients of treatment has provoked much concern among dentists,<sup>15</sup> especially now with the introduction of charges for dental inspections in Britain. Nevertheless, charges have had only a small effect on attendance.<sup>9,16</sup> Charges have, however, increased rapidly in Britain in the 1980s, and this research needs to be updated.

Unfortunately even multivariate studies predict irregular attenders with only a wide degree of error,<sup>6</sup> and almost all studies have relied only on respondents' reports of

attendance. Future research should include records of actual attendance.

Opportunities to test hypotheses and to increase attendance have been provided by advertising campaigns in The Netherlands and Britain<sup>17</sup> (British Dental Foundation and Yorkshire Television, unpublished pilot advertising project, 1987, and Glasgow Local Dental Committee, unpublished report, 1986), but it is not clear if these tackled deterrents such as fear of treatment. The results from The Netherlands are not encouraging,<sup>17</sup> and details of the British campaigns remain unpublished. Dentists probably differ widely in their ability to help patients to overcome their reservations about dentistry,<sup>9,18</sup> and hence optimistic advertisements for the profession as a whole could be misleading. Among other approaches one controlled investigation has shown that personalised reminders increase the return of child patients.<sup>19</sup> Behaviour therapies for adults too nervous to visit the dentist enable them to attend,<sup>20</sup> but these studies have relied only on patients' reports of attendance.<sup>20</sup>

Fear of treatment is highly persistent and has changed little with pain free dentistry.<sup>21</sup> This fear is highly correlated with expectations of pain,<sup>8,21</sup> which unfortunately does occasionally occur with the failure of local anaesthetics.<sup>22</sup> Nevertheless, many studies have shown what dentists could do to reduce patients' fears and discomfort.<sup>23-26</sup> Such studies of communication between dentists and their patients can make only general recommendations, and dentists should confirm with each patient what his or her main concerns and preferences are. It is hoped that better communication will increase attendance, but the only study to test this hypothesis presented no data.<sup>27</sup>

Several years ago it was recommended in Britain that communication skills should be taught in the undergraduate dental curriculum,<sup>28</sup> but it is not clear how well this has been implemented. The General Dental Council is now to examine the teaching of behaviour sciences in dental schools, and a multidisciplinary organisation, the Behaviour Sciences in Dentistry Group, has been formed to encourage their dissemination and implementation.

Conditions of practice may have to change to help allow these developments. The National Health Service pays dentists for how much dental treatment they give and not for the time spent practising communication skills. Different ways of charging patients for dental services may have to be considered. Such changes, which are already being organised by some dentists, and others that will include dentists' advertising their services should be welcomed as opportunities to modify public attitudes to dentistry, attract and retain reluctant patients, and thus improve dental health.

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## Wanted: reader friendly posters

### *As much show business as science*

At conferences these days doctors frequently have to absorb more information from the posters than from the podium. Too often poster makers have little imagination, although the tools available have improved greatly.

Most conference previews are submitted with oral presentation in mind,<sup>1</sup> and the suggestion that one has been accepted as a poster may come as a shock, possibly a disagreeable one if a poster presentation is regarded as less prestigious than an oral one. But disappointment could be avoided if conference organisers clearly stated their acceptance criteria for posters; these could include non-controversial presentations with clear cut results or technical descriptions demanding individual discussion. Subjects that require group discussion or many slides should then be accepted for oral presentation.

Many poster makers think that observers can read 107 complete scientific articles during the coffee breaks. Conference organisers seem to have the same idea—for example, one recent set of instructions reads: "Organisation of the poster along the guidelines for the abstract is encouraged—that is, title, purpose of the study, methods, results, discussion." What the reader really wants is the message, some evidence, a helpful title, no abbreviations or unexplained terms, large properly spaced lettering, and the data in pictorial form, not complicated tables. The test of a good poster is whether the material can be absorbed within two minutes. Other tempting aspects include a pleasing and colourful layout; an obvious sequence to follow; matt photographs rather than light reflecting glossy ones; a handout for references and technical details; and perhaps an imaginative

touch, such as extra lighting, a working model, or something in relief.

Thus poster makers should think as much about show business as science. Usually they have to be their own designers, but good advice is to be found in the book by Reynolds and Simmonds<sup>2</sup> and today computer graphics with different fonts and type sizes and a laser printer make things easier. In addition, portability calls for small sections that can be put together (perhaps in relief), often on a background that can be rolled up in a plastic carrying tube. The conference organisers should help by stating not only the height and width of the poster boards but also the background colour, the background material, and how the poster is to be fixed, for which they should provide the material.

Finally, one member of the scientific committee should be in charge of all aspects of the poster display, being prepared to pass constructive criticism to the authors of the posters that fail to deliver their message. On a vote by the conference there could be a prize for the worst poster as well as commendation for the best—with reasons stated for both awards.

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