the programmes in support of the work done by individual District Dental Officers, by answering queries and giving guidance. Encouragement, as well as gathering and analysing feedback, will constitute the group’s most important role. The data they gather will be the main way of solving problems and bringing about the future development and improvement of both programmes. This sharing of experience, and planning for the future, will encourage support and involvement.

Publishing the programme
Much of the data gathered by regional co-ordinators will play a part in updating the existing materials. These are now being published by a commercial publishing company (Drake Educational Associates Ltd., Cardiff). The Study members have been ambivalent about publication in the past, as research has indicated the need for continued support and adaptation of materials once they have become widely available—in other words, publication should not be seen as an end, but as a point in a much longer process of dissemination (3).

To promote this, publication needs to be linked to the continuing development of the materials by the national group of local trainers, which will become more confident as it sees its experiences being used to update the materials. The publishers have agreed to produce a new edition at least every five years. Another important feature within the publication agreement allows teachers to make up to 30 copies for their own use.

Fostering co-operation
Many health problems are recognised as having many contributory factors to their onset and progress, often involving social, environmental, and personal issues. This suggests that these problems should be tackled at different levels by personnel from different disciplines; however, achieving this in a co-operative fashion may be difficult, and one result may be that less emphasis is placed on activity in the education sector. One of the emerging strengths of our programmes has been the realisation that they provide a good example of the co-operation between disciplines necessary to combat dental disease. This may be for several reasons:

1. Both programmes not only originate from District Dental Authorities, but also fit into their existing organisation and facilities for in-service education and training.

2. District Dental Officers have dental health education as part of their job description. However, for Natural Nashers and The Good Teeth Programme, they have been encouraged to adopt an organisational and managerial role, leaving schools with an attractive set of materials and classroom support through field-workers.

3. Local co-ordinators and classroom field-workers have been urged to allow teachers to handle the programme, although they might be tempted to intervene if they found the accuracy of the information suffering. Many field-workers have, however, been accustomed to giving talks in schools, and some have been unhappy to take a back seat.

There are undoubtedly competing demands between the content and process of education. Whilst dental professionals may be concerned to get the content right by giving, for example, advice on the correct method of toothbrushing, teachers will be concerned to meet the needs of individual classes by using specific approaches, and to ensure the integration of the programme into the curriculum. In other words, content may be of secondary importance to the teacher. These competing pressures have been assimilated into the dissemination structure of the programmes developed by the Study.

References


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‘Natural Nashers’: teaching the teachers
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A local and regional co-ordinator for Natural Nashers and The Good Teeth Programme describes his experiences with ‘teaching the teachers’. He points out that imparting new knowledge to staff members is a task calling for the same degree of flexibility, tenacity, and tact that the teachers themselves need to take back into the classroom.

Dental health education may appear to be straightforward, but it is not. As with most health education initiatives, the process involves the initial provision of information, followed by the need to ensure that this information has been understood, and finally the generation of sufficient motivation to promote a change of habit or lifestyle, whether this affects smoking, consumption of fat, or care of teeth.

At each of these stages, dental health education runs into difficulties. The giving of information is beset with conflicting ‘facts’ and a lack of scientific clarity, while the route to understanding is blocked by long-held and often erroneous beliefs. Finally, motivation is confused by a plethora of social, economic, and psychological obstacles. In an attempt to try to clarify the way forward for dental health education, the Health Education Council published a policy statement entitled The scientific basis of dental health education. Hammered out after considerable debate and discussion by the country’s experts in dental health, it covered many aspects of dental care and the scientific reasons for embarking upon particular courses of prevention. It basically promoted the prevention of dental caries (decay) by alterations in the diet to reduce the frequency of sugar intake, whilst the prevention of gum disease was advocated by instituting correct plaque removal, most usually by toothbrushing.

On the surface, these seem perfectly reasonable statements. However, ‘conventional wisdom’ makes little acknowledgment of them. Ask people what causes tooth decay, and they will answer ‘sugar’: ask them how to prevent it, and they will reply ‘by toothbrushing’. Fortunately for the dental world, the HEC set up and funded the Dental Health Study at Cambridge in the late 1970s. The Study’s brief was to study ways of bringing the logically-developed, scientifically-sound messages mentioned above into practical effect.

The programmes
The Dental Health Study has produced many benefits, but the main tangible results have been Natural Nashers, the programme for 13-14 year olds, and The Good Teeth Programme, for preschool children and their parents. Natural Nashers has been the subject of a previous article (Education and Health, November 1984), and I therefore do not propose...
Some facts about toothbrushing and dental care

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There is plenty of advice available on how long, how often, and with what toothpaste the teeth should be brushed. However, the part played by toothbrushing in promoting oral hygiene, and the best way of using a toothbrush to make this part most effective, is less evident. This article on 'the art of toothbrushing' is unusually prescriptive by the standards of Education and Health, but the author suggests that such prescription is appropriate if the general level of oral hygiene is to be raised.

Toothbrushing is a simple and efficient way of keeping the teeth clean, and although effective anti-bacterial mouthrinses are becoming available, the toothbrush is likely to be around for a long time. Studies have shown that people who brush their teeth twice a day or more have cleaner mouths than those who brush only once a day or less. Results of analyses of the Version 10 Health Related Behaviour Questionnaire and of a recent Government survey of the dental health of children (1) have shown that, amongst 14-15 year olds, over one-third clean their teeth once a day or less frequently. The same is true of adults who have their own teeth, so it can be presumed that the brushing patterns adopted at school-age are continued into adult life. However, people are becoming more dentoally conscious, and are brushing their teeth more often than they have in the past. Twenty years ago almost half the adult population with natural teeth brushed them only once a day.

What effect does good toothbrushing have on dental health? Toothbrushing removes harmful bacterial plaque, which forms at the neck of the tooth in a matter of hours. These bacteria cause inflammation of the gum (gingivitis); in some cases this progresses to periodontitis, which is characterised by pockets forming between the gum and the teeth and resorption of the jawbone which supports the tooth in its socket. Minor inflammation of the gums is very common, although only in a comparatively small number of cases does this lead to severe periodontitis. These periodontal diseases can largely be prevented by oral hygiene measures. We know that people who brush their teeth frequently have less periodontal disease than those who brush less frequently or only occasionally.

Dental caries, on the other hand, is principally caused by harmful patterns of sugar consumption. Even the best toothbrushing can reduce caries only slightly (2). The value of toothbrushing in this case is the regular application of fluoride toothpaste, as fluoride prevents caries. But still the most important preventative measure against dental caries is reduction in the frequency of sugar intake.