

## RESEARCH SUMMARY

# Advising on fluoride toothpaste

General dental practitioner advice regarding the use of fluoride toothpaste in two areas with a school-based milk fluoridation programme and one without such a programme

R. V. Harris, Y. M. Dailey and R. S. Ireland *Br Dent J* 2002; 193: 529–533

## Objective

To describe the knowledge and practice of general dental practitioners (GDPs) working in Liverpool (where there is no milk fluoridation programme) and St Helens and Knowsley, and the Wirral (where children have fluoridated milk in schools and pre-schools) relating to the advice given for child patients regarding the use of fluoridated toothpaste.

## Design

Data were collected via a postal questionnaire sent to all 329 GDPs working within the three areas. GDPs working in more than one of the areas and those working in specialist orthodontic or oral surgery practices were excluded.

## Results

Two hundred and thirty-four (71%) questionnaires were completed and returned. Only 3% of dentists said that no-one in their practice gave advice on the concentration of fluoride toothpaste to be used. For caries free children under 7 years of age only 64% of GDPs gave advice concerning the concentration of toothpaste which coincided with the available clinical guidelines. Twenty eight per cent of GDPs also contradicted the guidelines by advising children under 7 with high caries to use a low fluoride toothpaste. Although 59% of GDPs in the fluoridated milk areas asked the child whether they had fluoridated milk at school, they did not appear to alter the advice given regarding the use of fluoridated toothpaste.

## Conclusion

The study showed that a significant number of GDPs did not adhere to clinical guidelines relating to the use of fluoride toothpaste when giving advice to their child patients. For evidence-based dentistry to become a reality in this area, ways must be found to disseminate the available guidelines more fully and increase their acceptance and use by practitioners.

## IN BRIEF

- Guidelines are available concerning fluoride toothpaste use for children.
- There is a need for GDPs to be aware of the caries risk of child patients when advising on fluoride toothpaste use.
- Many GDPs do not give advice concerning the concentration of toothpaste that coincides with the available guidelines.
- There is a need to disseminate the available guidelines more fully and increase their acceptance and use by practitioners.

## COMMENT

Much of the research in the area of compliance has focused upon the patients' ability to comply with health education advice, drug regimes etc. However little work has been conducted to investigate the working practices of health professionals and their ability to comply with clinical guidelines with regard to providing preventive advice for their patients. The need to examine professional dimensions of compliance has become increasingly important as health professionals are expected to provide evidence-based treatment for the patients under their care. This is the reason why this paper written by Rebecca Harris and her colleagues at Liverpool is so exciting as it examines the ability of dentists to provide 'evidence-based dentistry' and 'ensure that their practices are in line with the accepted recommendations'.

Sampling general dental practitioners working in the Merseyside region, the authors investigated the advice given to child patients with regard to fluoridated toothpaste and the dentists' knowledge of the existence of milk fluoridation schemes in their practice areas. Six clinical scenarios involving child patients who were either caries-free or had a high decay experience, were used as a vehicle to discover the advice dentists gave with regard to the concentration of fluoride toothpaste to be used, the amount of toothpaste to be used and any other advice relating to toothpaste usage (eg parental supervision, spitting after brushing etc.).

The responses to the scenarios were related to the dentists' knowledge of milk fluoridation schemes in their area of practice. The results showed that 16% of dentists gave no advice with regard to fluoride toothpaste concentration and for those that did, over 25% did not advise the use of low fluoride toothpaste for caries-free children whereas a further 25% advised that children with a high caries experience should use low fluoride toothpaste.

Although the majority of practitioners gave clear recommendations, it became clear that many did not comply with the national clinical guidelines published by the Royal College of Surgeons with regard to fluoride toothpaste advice. These findings suggest that their inability to comply with national recommendations may be related to their lack of knowledge and awareness. This implies the need for continuing professional education to improve knowledge and compliance with clinical guidelines so that all general dental practitioners can provide evidence-based dentistry for patients in their care.

Ruth Freeman, Professor of Dental Public Health  
Queen's University, Belfast.