

Royal College of Surgeons e-learning module: Children's oral health advice

KESHTGAR, A, HUNT, NP (Eastman Dental Institute)

Introduction: Improving children's oral health has great overall health and wellbeing benefits alongside financial benefits.

Aim: To create an easy to use education tool for the general public and early years health workers on children's oral health.

Design and setting: The Eastman Dental Institute, e-Learning for Healthcare and Royal College of Surgeons of England released an evidence-based health advice module targeting children's oral health advice. All content was approved by Public Health England.

Methods: A digital platform was used to showcase topics including diet, fluoride use, toothbrushing and erosion to enhance oral health. Improved public knowledge on appropriate preventative oral health strategies and management of dental trauma will help improve oral health.

Results: The e-learning module is accessible via search engines and websites including: Royal College of Surgeons, e-Learning for Healthcare and UCL. The module takes 20-30 minutes to complete and incorporates existing preventative strategies to improve users' awareness. A printable pdf summary is available.

Conclusion: Since the launch in January 2019, this freely available module has been serving as a beneficial tool in promoting oral health to parents and students across primary schools in the UK. Simple terminology has been used to improve accessibility.



Figure 1: Children's oral health advice homepage.

Introduction

An emphasis on the health and wellbeing of children is placed in the NHS long term plan¹ as children and young people represent a third of our country, therefore will determine our future. Oral health promotion plays a key role in preventative healthcare as data from NHS Digital² reveals that tooth decay still remains the most common reason for hospital admissions of 5-9 year olds in England. 25,702 children aged 5-9 years were admitted to hospital in 2018-2019, this is more than double those for acute tonsillitis, which is the second highest reason for hospital admissions in this age group. There is a high need for effective preventative strategies to be employed as dental decay is almost entirely preventable.

The digital age influences the future of healthcare; the Department of Health & Social Care 2018 policy paper³ highlights the great potential for cutting edge technology to support predictive, preventative and personalised care. As part of integration of a digital platform and dental education, an evidence-based e-learning module on ‘Children’s oral health advice’⁴ was created in 2019 to promote preventative oral health advice for parents, early year workers and the general public.

Materials and methods

Existing preventative strategies were included in the online learning module as part of knowledge translation and promotion of these key prevention tools. The British Society of Paediatric Dentistry Dental Check by One (DCby1) campaign⁵ encourages children to be taken for a dental check-up before their first birthday, Baby buddy⁶ is a free healthcare app providing parents and parents-to-be with general and dental health advice for themselves and their baby whilst Brush DJ⁷ encourages users to brush their teeth for two minutes while listening to music from their devices. Pictorial aids from the change4life⁸ campaign aid in supporting the information on the e-learning slides. Inclusion of these existing preventative tools has enhanced the general public’s familiarity with these health messages. Evidenced based guidelines including the including the Delivering Better Oral Health Toolkit⁹, Dental Trauma guide¹⁰ and Dental Trauma UK¹¹ were also used to provide advice on diet, fluoride use, toothbrushing, erosion and appropriate management of dental trauma to help improve children’s oral health and the prognosis of traumatised teeth. Furthermore, advice on thumb/finger sucking provided supports the advice given by the British Orthodontic Society.¹²

Photographs and simple terminology used throughout the module allows improved accessibility, whilst the questions and answer slides promote the interactive nature of the e-learning module and test users’ knowledge.

Complete the statements below in regard to tooth erosion.

Drag the labels on the right to the corresponding statements on the left, then submit.

A good way to reduce the risk of teeth erosion is by:

Drinks such as the following cause tooth erosion:

Teeth should not be brushed after vomiting, reflux, eating or drinking acidic food or drinks as:

Reducing acidic food and drink intake

The teeth become soft and brushing can cause teeth to wear away more quickly.

Milk and water

Energy drinks, fizzy drinks and fruit juices

Submit

Figure 2: Slide showing drag and drop questions relating to tooth erosion.

Did you know - A sucking habit after the age of 7 years can cause permanent change in the position of permanent (adult) teeth.

To stop a thumb or finger sucking habit, it can help to:

- Use positive encouragement, such as a reward system
- Use physical barriers such as a plaster, bandage, sock, cotton glove or a bitter tasting nail varnish
- Speak to your dentist or orthodontist for more information. A 'habit-breaker' dental appliance may be recommended, which can make thumb sucking more difficult [2]



Figure 3: Slide on thumb/ finger sucking.

Results

The e-learning module is accessible via search engines and websites including: Royal College of Surgeons, e-Learning for Healthcare and UCL. The module takes 20-30 minutes to complete and incorporates existing preventative strategies to improve users' awareness. A pdf summary is available to print at the end of the module which allows schools, early year workers and parents to have the information available in an easy to read format whilst dental practices could use this as a free information booklet for patients and parents.

Discussion

The e-learning module ‘Children’s oral health advice’⁴ demonstrates collaboration with a wide range of dental organisations and preventative initiatives in order to provide a holistic bite size education tool. Evidence based dentistry has been used to provide consistent oral health advice.

The use of digital technology plays an important role in the future of healthcare and is a viable and easily accessible mode of information transfer for our patients and general public.

Conclusion

Since the launch of the ‘Children’s oral health advice’⁴ e-learning module in January 2019, this freely available module has been serving as a beneficial tool in promoting oral health to teachers, parents and students across primary schools in the UK. Other early year workers and the general public have also benefited from the information and have provided positive feedback on both the module and the printable pdf summary at the end of the module.

Declaration of interests

The authors of this paper have been involved in the creation of the dental content of the ‘Children’s Oral Health Advice’ e-learning module.

We do ask that you declare any possible conflicts of interest in your paper. This can include any of the following:

- *Funding from an organisation or company directly for the research*
- *Funding you have received for any work you have been involved in from an organisation or company that could be linked to the research*
- *Consultation of advisory positions you may hold in an organisation or company involved in the research/similar research*

Acknowledgements

We would like to thank all those involved in helping create and support the ‘Children’s Oral Health Advice’ learning tool.

When thanking people, we do ask that permission and approval of the wording is obtained

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