



Dental Nurse Network

Professional growth for dental nurses

Fluoride Varnish Application

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Aims: Week 3

By the end of this webinar you should:

1. have a good understanding of the contents of Delivering Better Oral Health, be aware of your role as a dental nurse in oral health promotion and providing a patient-centred approach to care
2. be able to explain to a patient the current Department of Health recommendations for topical fluoride application appropriate for the individual based on age / caries rate / influencing factors
3. be able to demonstrate during a fluoride application appointment that you are able to give supportive oral health advice regarding diet / oral hygiene regime appropriate to the patient you are treating **(this will be assessed through your record of experience)**



GDC Scope of Practice

- Guidance sets out skills and abilities of registrant group
- Trained, Competent, Indemnified
- Fluoride: 'Additional Skills carried out on prescription from, or under the direction of another registrant'

DENTAL NURSES DO NOT DIAGNOSE DISEASE OR TREATMENT PLAN



Dental Nurse: Indemnity

The GDC state:

‘As long as your indemnity or insurance would enable a patient to claim compensation if this were ever necessary, it is up to you to decide which type of cover would be the most appropriate to suit your needs.’

CHECK YOU ARE COVERED

<http://www.gdc-uk.org/Dentalprofessionals/Standards/Documents/Guidance%20on%20indemnity.pdf>



Dental Nurse: Indemnity

**CHECK YOU ARE
COVERED**

The following types of indemnity or insurance are recognised by the GDC:

- Dental defence organisation membership – either your own membership or as part of your employer's membership;
- Professional indemnity insurance held by you or your employer (including indemnity insurance provided by your professional association);
- NHS indemnity.

<http://www.gdc-uk.org/Dentalprofessionals/Standards/Documents/Guidance%20on%20indemnity.pdf>



Dental Nurse: Oral Health Promotion

- Patients have a right to all options, including preventative treatment and advice
- Promote good oral health to limit/prevent oral diseases
- Oral health linked with General Health....we can help patients holistically
- NICE Guidance, Oral Health Promotion: General Dental Practice (2015)
- Dental nurses important part of Patient Centred Approach

<https://www.nice.org.uk/guidance/ng30/chapter/Recommendations#oral-health-advice-given-by-dentists-and-dental-care-professionals>



Dental Nurse: Oral Health Promotion

- Just applying fluoride varnish?

'The diet modification approach should be used in conjunction with actions to increase fluoride availability' .

Opportunity to:

- Look at dietary habits
- Discuss lifestyle such as smoking / drinking
- Discuss oral hygiene regimes at home including appropriate fluoride use



Dental Nurse: Oral Health Promotion

Diet:

- Hopewood House Study (1948 – 1963)
- Natural diet excluding any refined carbohydrates / sugars
- 53% children caries free at age 13 years at end of study
- Confirms importance of diet type in role of caries formation



Dental Nurse: Oral Health Promotion

Instructions on completing a diet diary

- Write down everything you/your child eats and drinks and the time during the day when consumed.
- Include any medications taken and the times taken.
- Use one week day and 2 weekend days

What are you looking for in particular?



Dental Nurse: Oral Health Promotion

Smoking



Dental Nurse: Oral Health Promotion

Alcohol



Topical / Systemic

Systemic:

- Swallowed / ingested
- Benefits teeth before and after they erupt in the mouth
- Can be tablets, drops, water supply or other food / drink

Topical:

- Applied directly to the teeth
- Benefits teeth already erupted into the mouth
- Varnishes, toothpastes, mouthwashes



Application: Supporting Evidence for Topical Application

Delivering Better Oral Health Toolkit states:

“A number of systematic reviews conclude that applications two or more times a year produce a mean reduction in caries increment of 37% in the primary dentition and 43% in the permanent. The evidence supports the view that varnish application can also arrest existing carious lesions on the smooth surfaces of primary teeth and roots of permanent teeth.”



Fluoride Varnish

- Many different manufacturers but....

Not all licenced in UK for CARIES prevention

- Recommended dose of fluoride in varnish form is 2.26% (22,600ppm)



Fluoride Varnish



Medicines and Healthcare Products Regulatory Agency

UK marketing authorisation licence number format 'PL 12345/0001'

- **MRHA Licenced for Caries Prevention:**

- Colgate Duraphat Varnish



Application: Recommended Frequency Caries Prevention

Age Group	Recommendations, low risk / concern	Recommendation, high risk / concern
3-6 years	Twice a year (every 6 months)	
0-6 years		Twice a year OR MORE
7 years – Young Adults	Twice a year (every 6 months)	Twice a year OR MORE
Adults		Twice a year (every 6 months)



Application: Recommended Frequency Caries Prevention

Professional interventions:

- Dietary Investigations
- Sugar -free Medications
- Reductions recall Interval
- Fissure Sealants
- Daily Fluoride mouth rinses
- Prescription of high-fluoride toothpaste



Application: Recommended Frequency Dentine Sensitivity

Always check the manufacturer advice as different fluoride varnishes may recommend different application frequencies



Application: Recommended Doses Caries Prevention

Doses: as recommended by Duraphat within the document Summary of Product Characteristics (available via mhra)

- Primary Dentition: up to 0.25 ml = 5.65mg Fluoride
- Mixed Dentition: up to 0.40ml = 9.04mg Fluoride
- Permanent Dentition: up to 0.75ml = 16.95mg Fluoride

This is for a single application and the duraphat is applied in a THIN layer to the most susceptible areas of the dentition.



Application: Recommended Doses Caries Prevention

Doses: as recommended by Bifluorid 12R (active ingredients are sodium fluoride and calcium fluoride) within the document Summary of Product Characteristics (available via mhra)

- Primary dentition: approx. 0.5 ml = 30mg sodium fluoride
30 mg calcium fluoride
- Permanent dentition: approx. 0.5 ml-1.0 ml = 30-60 mg sodium fluoride
30 – 60mg calcium fluoride

This is for a single application to the WHOLE dentition, this particular product is more of a liquid / suspension when dispensed and needs to be applied thinly to the dentition



Application: Recommended Doses Sensitivity Prevention

- Doses as for Caries Prevention
- Care if being applied to single teeth as dose/quantity of varnish will be less!



Application: Who is at higher risk?

Age Group

0-6 years

7 years – Young Adults

Adults

Risk Factors/Concerns

Those likely to develop caries, those with special needs

Those giving concern to their dentist i.e. those with obvious current active caries, those with ortho appliances, other predisposing factors, those with special needs

Those giving concern to their dentist i.e. with obvious current active caries, dry mouth, other predisposing factors, those with special needs



Application: At Home

Advice to be given:

All groups should be advised brush twice a day, at night and one other time

Not considered 'at risk':

- 0-3 years (as soon as teeth erupt) Toothpaste no less than 1000ppm Fluoride
- 3-6 years Toothpaste more than 1000ppm Fluoride
- 7-young adult Toothpaste 1350 – 1500ppm Fluoride
- Adults Toothpaste at least 1350ppm Fluoride



Application: At Home

Advice to be given:

All groups should be advised brush twice a day, at night and one other time

Considered 'at risk':

- 0-6 years Toothpaste 1350 - 1500ppm Fluoride
- 7-young adult Toothpaste 1350 - 1500ppm Fluoride
- Adults Toothpaste at least 1350ppm Fluoride

Age groups 7- young adults and adults should also be advised to use a fluoride mouth-rinse daily (0.05% NaF-) at a different time to brushing, this should be discussed with/by the dentist but you need to be aware of this



Summary

- Need to ensure have correct indemnity for ANY extended duties you undertake, dental nurses are important part in oral health promotion
- Oral health promotion can lead to improvements in oral and general health of patient
- Ensure you know what products you are using and check you are following manufacturers recommendations for doses and application frequencies
- Regularly check with the Delivering Better Oral Health Toolkit for any changes and new advice for patients.
- Remember... Fluoride Application Referral / Appointment gives a chance to give further oral hygiene advice



Application: Case Study To Reflect Upon

14 year old female, you have been asked to provide full mouth fluoride varnish application to help prevent caries.

Medical history (mh): clear

Social history (sh): Non-smoker, lives with mother, is a keen dancer

Dental history (dh): Had caries in primary dentition due to snacking on fruit throughout the day

Diet: Still snacks throughout the day on fruit and also drinks fizzy water and fruit juice

Oral hygiene routine (ohr): Brushes once or twice a day with a low fluoride toothpaste and uses floss, does not always brush last thing at night

