

Supporting Training Initiatives



the otc treatment clinic

Common conditions and their treatment options



This module has been endorsed with the NPA's Training Seal as suitable for use by medicines counter assistants as part of their ongoing learning. Complete the questions at the end to include in your self-development portfolio



Welcome to *TM's* OTC Treatment Clinic series. This handy, four-page section is specially designed so that you can detach it from the magazine and keep it for future reference.

Each month, *TM* covers a different OTC treatment area to help you keep up-to-date with the latest product developments. In this issue, we focus on oral care.

At the end of the module there are multiple choice questions for you to complete, so your progress can be monitored by your pharmacist.

You can find out more in the *Counter Intelligence Plus* training guide.

The last six topics we have covered are:

- Daily fatigue and stress
- Dry skin and eczema
- Insomnia
- Coughs
- Topical pain relief
- Eye care

You can download previous modules from www.tm-modules.co.uk

module 214 Oral care

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for this module

OBJECTIVES: After studying this module, assistants will:

- Be familiar with the structure of teeth and gums
- Be aware of the health benefits of a good oral care routine
- Be familiar with the causes of dental decay, bad breath and sensitive teeth
- Understand the symptoms of mouth ulcers and gum disease
- Be able to pass on tips that will help customers to look after their oral health.

As a nation, we're not great at looking after our teeth. According to statistics released by the British Dental Health Foundation ahead of national smile month – 18 May to 18 June – one in four adults don't brush their teeth the recommended twice a day, including a third of men. One in 10 also admit to regularly forgetting to brush their teeth.

Furthermore, around two per cent of UK residents have never visited a dentist and 27 per cent only go if they have a problem, with cost being the most commonly cited excuse for delaying a check-up. However, it's not all bad news – the number of adults in England who regularly visit their dentist has grown from 44 per cent in 1978 to 61 per cent in 2014.

Although taking care of our oral health isn't particularly difficult, many people appear naive to its significance. Aside from keeping teeth free from decay, good oral care also helps to ensure fresh breath, gum health and pain-free check-ups. And

poor oral hygiene doesn't just affect the mouth. A dazzling smile contributes to an individual's self confidence and was rated the most attractive physical feature in a recent survey. Poor oral health, on the other hand, has been linked to a number of serious health concerns, including diabetes, heart disease, strokes, pneumonia and premature labour.

This month's *OTC Treatment Clinic* focuses on helping customers to improve their oral health. This includes preventing and treating conditions such as tooth decay, gum disease and bad breath.

Teeth and gums

Babies do not usually have any visible teeth until around four to six months of age, when teeth begin to push through the gums. Infants go on to develop 20 primary teeth, also known as milk or baby teeth. These are later replaced by 32

reflective exercise

Sally, 62, says her teeth feel very sensitive, particularly when she eats or drinks anything cold. She currently uses an ordinary toothpaste, but is interested in trying one specially formulated for sensitive teeth.

What would you recommend?

Before recommending a product, ask Sally when she last had a dental check-up as she may be suffering from a loose filling, receding gums, gingivitis or tooth decay. Otherwise, sensitive teeth are increasingly common with age and a sensitive toothpaste alongside good oral hygiene is likely to be effective.

What if:

After visiting the dentist, Sally returns to the pharmacy. She has been told she has gingivitis and needs to floss daily. However, Sally is worried that this may make her gums bleed.

Flossing teeth every day is an effective way to manage gingivitis and can help prevent the development of periodontal disease. Show Sally your range of floss and interdental brushes. Ask which she would prefer to use. Advise Sally to be gentle when she flosses her teeth and check whether her dentist demonstrated the correct flossing technique. Reiterate the importance of brushing teeth twice daily with a soft toothbrush.

As brushing cannot reach all of the teeth's surfaces, a mouthwash containing chlorhexidine may also be necessary. Not only do these have an antiseptic action, but they also help to rinse out any food debris lodged between teeth. Regular use of chlorhexidine mouthwash can stain teeth, but this is usually temporary. Advise Sally to brush her teeth before using the mouthwash to reduce staining. She should then rinse her mouth well with water as

chlorhexidine can be deactivated by certain toothpaste ingredients. The mouthwash should be used twice daily, rinsing 10ml for one minute or according to the manufacturer's instructions.

What if:

Sally's dentist told her she has signs of decay and needs a filling. Sally is surprised that she needs a filling at the age of 62.

It is a common misconception that dental decay and fillings only affect children. Some adults need fillings because an old filling has broken and needs replacing. If an old filling cracks, bacteria can enter and cause further decay. Remind Sally of the need for good oral hygiene and the importance of replacing her toothbrush every three months. A healthy lifestyle is also important. Sugary snacks and drinks are best avoided between meals as this can contribute to the build up of plaque and increase the risk of tooth decay.

Ask if Sally is a smoker. If she is, direct her to your range of NRT therapies and offer advice to help her quit.

What if:

Sally has a grandson, Harry, aged six months. He is teething and a tooth has appeared in his lower gum. Sally wants to know when his mum should start brushing his teeth.

A baby's teeth should be brushed as soon as the first milk tooth appears. Harry's teeth should be brushed twice daily with a fluoride toothpaste. A low strength fluoride toothpaste should be used. All children should be supervised while brushing their teeth up to the age of seven years to ensure they are using the correct technique and to minimise the risk of choking.

permanent teeth that should last for the rest of our lives.

Teeth are similar to trees – there is the visible part above the surface of the gumline (the 'crown') and there is the important root system that extends into the gums and down into the jawbone.

Teeth have a number of layers. The outer layer is an extremely hard material called enamel that contains the dentine layer, which

is a softer tissue. At the centre of the tooth is the pulp, which contains blood vessels and nerves.

Our teeth are surrounded by our gums (gingiva). The gums lie over the bones of the jaw and fit snugly around the neck of the teeth. Beneath the surface of the gums is a system of ligaments that anchor the teeth into sockets in the jawbone.

In order to have good oral health, teeth

must be kept clean and free from decay. Gums also need to be healthy. There are a number of different conditions that may affect a person's teeth and gums. These include:

● Tooth decay

When you mention dental problems, most people probably think of having a cavity that needs to be filled by a dentist. While some assume that this is only an issue for children, tooth decay is in fact one of the most widespread health problems in the UK today, affecting 31 per cent of adults.

Overall, tooth decay has improved among children, with two in three children aged 12 being decay-free, compared to less than one in 10 in 1973. However, it remains a concern.

Tooth decay is caused by a substance called plaque, which forms due to the bacteria that naturally live in the mouth. These bacteria thrive on sugary food to form a sticky film (plaque) over the surface of the teeth and gums. Plaque is one of the main reasons why it is important to brush teeth regularly.

When we eat or drink foods that contain sugars or starches, the bacteria in the plaque produce acids which attack enamel. Over time, this acid can destroy the enamel on the surface of the tooth, which creates cavities. Left untreated, dental cavities, or caries, can destroy a tooth. The only way to prevent this damage from worsening is to have the cavity filled by a dentist.

In older people, tooth decay can develop in teeth that have already been filled. This is due to fillings weakening and fracturing around the edges over time. Bacteria can accumulate in these tiny cracks, producing acids that lead to further decay.

Preventing tooth decay

The good news is that tooth decay can be avoided by preventing plaque from accumulating. In order to do this, teeth should be brushed twice daily with a fluoride toothpaste and the spaces between the teeth should be flossed every day.

Rinsing with a mouthwash that contains fluoride (e.g. Listerine, Colgate Plax) can also help to remove bacteria from hard-to-reach areas, as well as from the tongue, gums and roof of the mouth. Children aged six and over should use a mouthwash formulated for their age (e.g. Aquafresh Big Teeth Mouth Wash, Listerine Smart Rinse).

Tooth decay can also be reduced by limiting the number of snacks eaten between meals, particularly sweet food; having regular dental check-ups to help identify problems before they progress; and chewing sugar-free gum after eating to stimulate saliva – one of the body's natural defences against the acid produced by the bacteria in plaque.



Teeth should be brushed as soon as the first milk tooth appears

● **Gum disease**

Gum disease, or gingivitis, is a very common oral health condition and is particularly prevalent in the UK. According to NHS Choices, gum disease affects more than half the adult population to some degree, and most people have experienced it at least once in their life.

Gum disease is caused by a build-up of plaque on the teeth. The bacteria in the plaque irritate the gums, causing inflammation and swelling. These swollen and irritated gums bleed more easily when the teeth are brushed. In fact, spitting blood into the sink may be the only sign that a person is suffering from gum disease. Other signs can include bad breath or a foul taste in the mouth.

Gum disease is most likely to occur if an individual has poor oral hygiene, but it is also more common in smokers, people with diabetes and anyone with a weakened immune system, such as AIDS patients or those receiving chemotherapy.

Untreated gum disease can become more severe and develop into a condition called periodontitis or peridontal disease. If the bacterial plaque spreads below the gumline, the inflammation affects not only the gums, but also the jawbone and the ligaments that hold the teeth in place. If this is allowed to progress further, periodontitis can cause teeth to loosen or even fall out. Signs of periodontitis include:

- Bad breath
- A foul taste in the mouth
- Receding gums
- Sensitive teeth

- Pus or painful abscesses
- Teeth becoming loose or falling out.

Preventing gum disease

To prevent gum disease and periodontitis, it is important that customers are aware of how to minimise the amount of plaque that builds up on their teeth. The best way to do this is to always practise good oral hygiene – brush teeth twice daily with a fluoride toothpaste, use a fluoride-based mouthwash, floss daily and visit the dentist as often as recommended (usually every six to 12 months).

Antiseptic products such as those containing chlorhexidine (e.g. Corsodyl mouthwash) may also be recommended to help treat gingivitis. If symptom-free, these should only be used on the recommendation of a dentist or doctor, as they can stain teeth.

● **Toothache**

Toothache or dental pain can be caused by anything from a cracked tooth to a filling falling out, a gum infection, an abscess or even a wisdom tooth coming through.

The most common cause, however, is dental decay. Often, the pain starts as increased sensitivity when eating certain foods, such as something sweet, very cold or very hot. This is a sign that the pulp inside the tooth, where the nerves are, has become irritated.

If the decay is not corrected, this can progress to pain that is felt even when not eating.

Over-the-counter oral analgesics can help

to relieve pain until the individual visits a dentist. Rinsing with warm salty water can also be effective, as can applying a topical OTC pain-relieving product containing a local anaesthetic, such as benzocaine (e.g. Orajel Dental Gel).

● **Teething**

When young babies start teething, it is not uncommon for a placid, sunny infant to become irritable and 'out of sorts'. The child's cheeks may appear red and they may dribble or drool more than usual. They may also temporarily lose their appetite. In teenagers and young adults, mouth pain and discomfort can be associated with wisdom teeth erupting.

Again, suitable oral analgesics can be effective, but remember that aspirin is not suitable for children under the age of 16. OTC gels can also be recommended to help relieve the discomfort of teething. These products usually contain a local anaesthetic such as lidocaine to help numb the area and relieve pain (e.g. Anbesol Teething Gel, Bonjela

self-care tips

- Practise good oral hygiene – brush teeth twice daily with a fluoride toothpaste, use a fluoride mouthwash and floss every day
- Get regular dental check-ups (how often depends on a dentist's recommendation)
- Limit snacking, particularly sugary foods and drinks
- Quit smoking
- Eat a healthy, balanced diet with plenty of fruit and vegetables
- Chew sugar-free gum after eating to stimulate saliva production
- Allow an hour after eating or drinking anything acidic before brushing teeth
- Avoid hard-bristled toothbrushes
- Change toothbrushes/brush heads every three months
- Dentures and braces should fit well, be checked regularly and cleaned thoroughly
- If suffering from a mouth ulcer, avoid foods that may damage or irritate the mouth. These include hard food (e.g. crisps, crusty bread), acidic food (e.g. citrus fruits) and spicy dishes. Allow hot food and drinks to cool slightly before consuming them. Drink cold drinks through a straw to bypass ulcers at the front of the mouth
- Consider fluoride mouth rinses for children at risk of dental decay.

Teething Gel, Calgel Teething Gel, Dentinox Teething Gel).

Occasionally, discomfort associated with illnesses such as an ear or sinus infection may be felt as dental pain. In these cases, the pain may be accompanied by other symptoms, such as headache or fever.

● Bad breath

Certain foods, such as garlic and raw onion, release an odour in the breath once they have been digested. This is only temporary and will resolve quickly with the aid of mints or chewing gum.

In other cases, bad breath (halitosis) can be an indicator of something more sinister occurring in the mouth, for instance rotting food stuck between teeth. When teeth are not cleaned properly, the bacteria that grow in the mouth can cause gum disease and that, in turn, can lead to bad breath. Bad breath can also be a sign of health problems occurring elsewhere in the body, such as diabetes, sinus or chronic lung infections, and liver or kidney disease.

Maintaining a good oral hygiene routine is usually enough to prevent and treat bad breath. Specialist mouthwashes (e.g. CB12, ultraDEX) can be used as part of this routine to prevent and neutralise the formation of gases that cause bad breath.

● Sensitive teeth

If a spoonful of ice cream or a sip of hot tea makes a person wince, it is likely that they are suffering from sensitive teeth.

Teeth are not normally sensitive, but when enamel is worn away or gums recede, the underlying layer of dentine can become exposed. When stimuli such as hot or cold food and drink comes into contact with the exposed

nerve endings within teeth, the result is sharp, sudden pain.

Common causes of sensitive teeth include:

- Tooth decay
- A cracked, chipped or worn tooth
- Worn or cracked fillings
- Exposed tooth roots due to receding gums or gum disease.

Frequent consumption of acidic drinks, incorrect brushing technique and brushing with a very abrasive toothpaste or brush can lead to enamel loss.

Sensitive teeth are treatable – decayed teeth can be filled, and worn or cracked fillings can be replaced. Sufferers can also opt to use a toothpaste specifically designed for sensitive teeth (e.g. Sensodyne, Colgate Sensitive). Using a mouthwash for sensitive teeth (e.g. Listerine Advanced Defence Sensitive, Oral-B Sensitive Mouthrinse, Sensodyne Gentle Mouthrinse) may also be effective.

● Mouth ulcers

Mouth ulcers are painful round sores that typically affect the gums, tongue, roof of the mouth and insides of the cheeks. They may occur alone or in a group, and may be a one-off or recur.

Mouth ulcers appear like a shallow crater with a white or yellowish interior surrounded by a halo of red, inflamed tissue. Typically, they occur following a trauma – a knock to the mouth while brushing teeth or biting the inside of the cheek while eating. Mouth ulcers are not caused by an infection and are therefore not contagious, so cannot be caught by kissing or sharing personal items.

The main symptom of mouth ulcers is discomfort or pain, particularly while eating or drinking. In severe cases, the sufferer may feel feverish, suffer a general feeling of malaise and

when to refer

Refer to the pharmacist anyone who presents with the following symptoms:

- Toothache that persists for longer than two days
- Pain when eating certain foods
- Swelling in the mouth
- Pus or a foul-tasting discharge in the mouth
- Fever
- Difficulty breathing or swallowing
- Persistent bad breath that does not improve with good oral hygiene measures
- Recurring mouth ulcers or symptoms that last for longer than three weeks.

experience pain while talking.

Pain may occur for seven to 10 days. However, ulcers usually heal completely within one to three weeks. For reasons that are not fully understood, some people seem particularly prone to this condition. A number of factors have been linked to recurrent mouth ulcers, including poor diet, stress, hormonal changes, sensitivity to certain foods and smoking.

OTC products can help to relieve the discomfort of mouth ulcers. Similar to teething products, these tend to include a local anaesthetic ingredient (e.g. Orajel Mouth Gel, Anbesol, Bonjela).

More information

- British Dental Health Foundation – www.dentalhealth.org

assessment questions: oral care

For each question, select **one correct answer**. Discuss your answers with your pharmacist.

1) Which of the following statements is TRUE?

- a) Milk teeth are replaced by 32 permanent teeth that should last for the rest of our lives
- b) The centre of the tooth is called the dentine layer, which contains blood vessels and nerves
- c) Pulp makes up the outer layer of teeth
- d) The root system of teeth is called gingiva

2) Which of the following statements is FALSE?

- a) Tooth decay is caused by a substance called plaque, which forms due to bacteria in the mouth
- b) Bacteria in plaque produce acids that attack enamel, leading to cavities
- c) Tooth decay can lead to serious health conditions, e.g. heart disease
- d) Teeth that have been filled are resistant to decay

3) Signs of gum disease can include:

- a) Bleeding gums
- b) Bad breath
- c) A foul taste in the mouth
- d) All of the above

4) Which of the following statements about mouth ulcers is FALSE?

- a) They typically occur after a trauma to the mouth, e.g. knocking the mouth while brushing teeth
- b) They usually heal completely within one to three weeks
- c) They may be linked to poor diet, stress, smoking or hormonal changes
- d) They can be contagious

5) Which of the following is NOT a recognised cause of bad breath?

- a) Poor oral hygiene
- b) Eating certain food, e.g. garlic
- c) Fluoride toothpaste
- d) An underlying health condition, e.g. diabetes

6) Which of the following symptoms does NOT need referring to the pharmacist?

- a) Toothache lasting two or three hours
- b) Pus in the mouth
- c) Persistent bad breath despite good oral hygiene
- d) Recurring mouth ulcers that last for longer than three weeks