Oral hygiene compliance: facilitating behaviour change

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Aim:

To explore some of the barriers to patient compliance with oral hygiene instruction and suggest simple strategies for facilitating behaviour change.

Objectives:

- List some of the wider impacts that periodontal disease can have on patients' overall health
- Highlight the responsibility of the patient with regard to the S3 guidelines
- Discuss some of the basic principles that may influence habit formation and motivation
- Explain the COM-B behaviour change model
- Understand how this may be used to structure conversations with patients in daily practice

Periodontal disease affects around half of the UK adult population[i] and continues to be a global burden[ii].

Not only does it lead to tooth loss, but we now have extensive evidence proving a bi-directional link between periodontitis and type 2 diabetes (T2D)[iii], also links with cardiovascular diseases[iv]. Periodontal disease may have an impact on pregnancy[v], chronic kidney disease[vi] and dementia[vii], as well as respiratory diseases including pneumonia and COPD[viii].

As well as contributing to systemic diseases, periodontal disease can have a negative impact on patients' self-esteem and quality of life[ix].

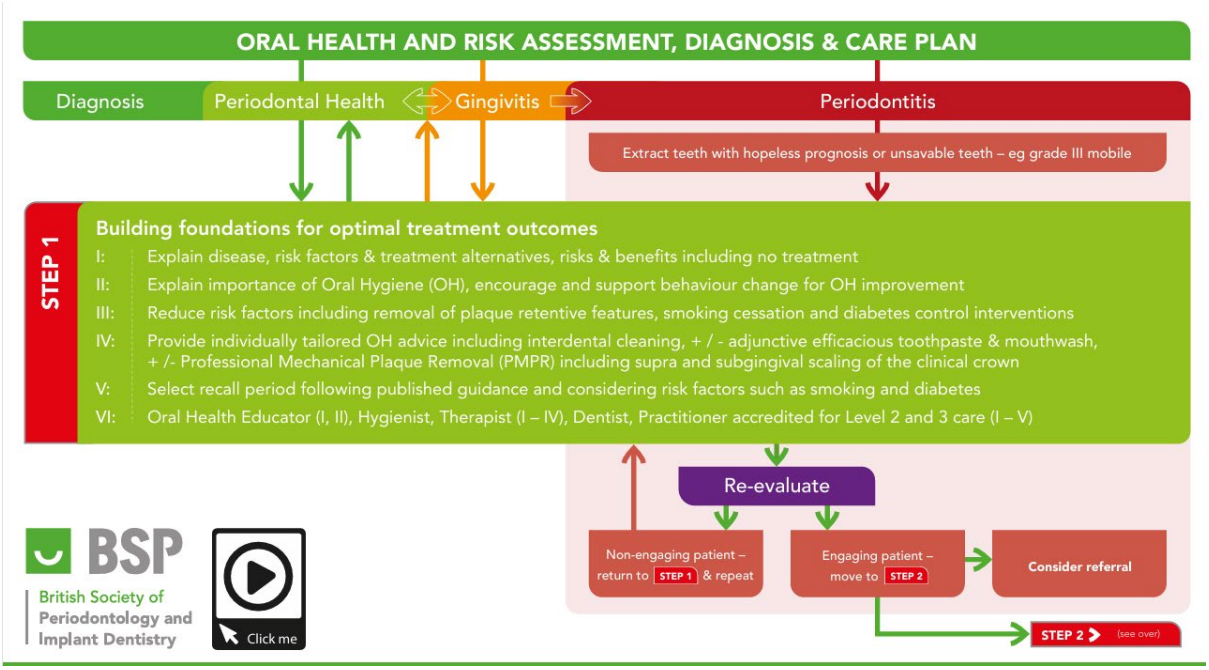
As clinicians, we strive to help our patients stabilise their disease, helping them to avoid tooth loss and other potential associated risks but, as with many non-communicable diseases, managing periodontal disease depends largely on patients changing their behaviour and incorporating new habits into their lifestyle.

The role of self-care

Management of risk factors, such as smoking and T2D, and daily effective plaque removal are essential both in the prevention of gingivitis, and the management of periodontitis[x], and it's widely accepted that ineffective biofilm removal negatively impacts periodontal treatment outcomes.

We educate our patients, assess and treat disease daily and make every effort to do so to a high standard. However, it's not us, but our patients who are solely responsible for the most influential part of the plan.

The introduction of the BSP S3 guidelines in 2020 further reinforces the role of the patient with the stepped approach to periodontal disease management[xi].



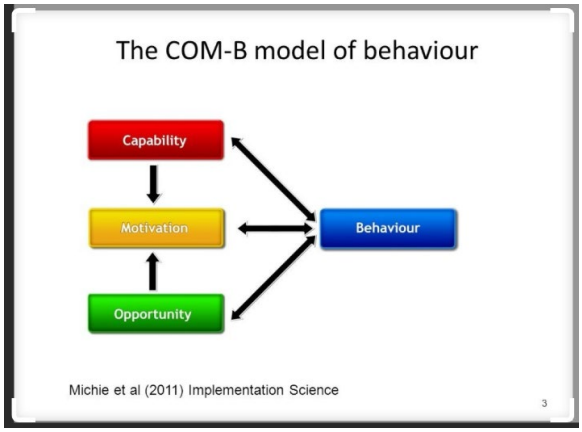
These guidelines advise against moving patients on to step 2 (treatment phase) until they are fully engaged with daily, effective plaque removal. Patients who fail to comply with oral hygiene instruction remain at step 1 as we continue to try to encourage them to change their behaviour.

Many patients, given an explanation and the opportunity to ask questions, will understand their diagnosis and the associated consequences. They'll engage with oral hygiene advice quickly and make efforts to carry out the recommended home care. But there are inevitably some who don't engage despite our best efforts. Many of us will experience patients who attend regularly, appear to listen and take onboard our advice but return repeatedly with high levels of plaque and bleeding, preventing them from moving on to any treatment. This can prove challenging for both clinician and patient and has the potential to lead to frustration on both sides.

Guiding our patients in behaviour change

The ultimate goal is for our patients to develop a daily habit and be motivated to perform it regularly. Developing a new habit is a complex process and is influenced by many factors including how easy the task is, how time consuming it is and how important the outcome is perceived to be. Some habits are formed in as little as 18 days, with other actions taking up to 254 days to become habit (with the average being 66 days). It is also thought that some individuals may be more "habit resistant" than others[xii]. Every patient is unique in this sense, and we should be prepared to adapt our approach depending on the individual needs of each patient. Good communication, observations and honest conversations about why the patient is not engaging can reveal various issues.

The COM-B model gives a simple structured approach to understanding and facilitating behaviour change and can be a useful reference when trying to guide our patients to change their behaviour[xiii].



It shows that to successfully change their behaviour, the individual, in this case the patient, requires the capability, opportunity and motivation to carry out the task in question. These three areas are very much interrelated, but considering factors for each can help us to structure meaningful conversations with patients and potentially facilitate a change in their behaviour.

Capability

How do we know our patients have the physical and psychological capability to carry out the task? (in this case, oral hygiene instruction). Observing patients even before they reach the dental chair can give us clues to their physical abilities and may highlight potential issues. Taking notice of how easily a patient fastens their coat can give an indicator of manual dexterity. Mobility problems may influence a patient's ability to stand at the sink for periods of time or even get to the bathroom. These things can present a significant barrier to home care. A detailed medical history can also reveal issues that may influence a patient's physical or psychological capability to carry out the given instructions.

Selecting appropriate oral hygiene aids to suit the patient's needs also gives them the capability to carry out the task. A vast range of oral hygiene aids are available, all with their own individual features. Familiarising ourselves with a wide range of products and brands is of great value when attempting to match the most appropriate cleaning aid with the patient. For example, an interdental brush with a stronger wire could aid a patient who is finding that they are bending. Others may be more likely to cause trauma with a stronger wire and be "put off". Some patients may prefer a larger handle or a brush head at a different angle, whilst others may be keen to use only sustainable products. Many of us will have a small range of products that we recommend regularly and that work well for most of our patients, but becoming accustomed to using only these products can be a disadvantage. Awareness of products we may not recommend every day is advantageous as there is no "one size fits all" with oral hygiene aids. There are inevitably some patients who will struggle despite our tailored product selection, and it is important that we are able to listen sympathetically and communicate effectively to discover the reasons for their struggle. It may be as simple as not using a mirror, wearing their glasses or having adequate light in the bathroom. Some patients may simply have large hands which make fine manoeuvres in a mouth difficult, or there may occasionally be more complex psychological or medical issues that prevent patients from complying. Through careful questioning and demonstration (demonstrating to the patient but also asking patients to demonstrate how they

use things), it often becomes clear why the patient is finding the task difficult. Alternative techniques or products can then be suggested, or possible solutions discussed.

Wherever possible we should begin with teaching gold standard (e.g. interdental brushes for interproximal cleaning) but be willing to adapt the approach depending on the patient's level of success.

It's important that the patient understands why we are asking them to use a particular product (i.e. it's the most effective way to clean that space) but we should be mindful not to rule out their preferences or the possibility of changing to a different cleaning aid.

Being aware of the availability of products we recommend, and the patient's ability to access them is important. Getting to the shops or using the internet may present significant barriers for some patients, and cost is also a consideration. Although not always possible, stocking products in the practice not only helps to ensure the patient purchases the correct product but can often provide better value for money.

Ultimately, patients maintaining a good standard of plaque control is essential and matching the right product with the right patient helps to give them the capability and therefore increases their chances of success.

Opportunity

Do they have the opportunity to carry out the task? This section prompts us to think about our patient's environment. Getting to know our patient's social situation can be helpful here. Factors such as parenting young children, or the patient's occupation may influence their opportunity to carry out our oral hygiene instructions. Getting to know our patients takes time, and we spend much of our appointment time discussing disease, risk factors and treatment options. Anything else can seem like small talk that we don't have time for, but a few minutes spent taking an interest in our patients as people not only helps to build trust and rapport but can give us valuable insight into our patients' daily lives and home environment. We can then offer assistance with identifying when or where is best for them to carry out their home care.

When developing a new habit, people rely on cues. A cue may be environmental or visual and reminds the patient to perform the action[xiv]. Encouraging patients to leave their interdental brushes by their toothbrush provides a visual cue, reminding the patient to carry out the task. Being in the bathroom would be an obvious environmental cue, but a specific time of day may also serve as a cue to carry out the associated action. Helping patients to identify their cues can aid the habit-forming process and involving them in decision making has also been shown to increase their chances of success[xv].

Motivation

Motivation is what drives our patient to engage with the task or behaviour. Motivation is influenced many factors, including how important the individual perceives the task, or the outcome, to be[xvi]. Finding out patients' reasons for attending our appointment, or what they hope to achieve, can give insight into their drivers. For many patients, the threat of future tooth loss is enough to provide the necessary motivation, but some seem to be less encouraged by that. One strategy here is to make it important by making it appear more relevant to the patient.

There is research linking periodontitis with many systemic conditions and even reduced performance in sport[xvii]. Conversations around such evidence can make their diagnosis more relevant to them and may help to turn the task from something they NEED to do, into something they WANT to do.

When trying to encourage interdental cleaning in the non-engaging patient, it can be useful to suggest starting with a small area (e.g. lower 3-3) to be cleaned daily. This area can then be gradually extended over time. The quicker or easier the task, the easier it is to form the habit and if the patient can comply with a smaller and faster task, they may notice for themselves less bleeding/reduction of inflammation in that area. This can be a good motivator to continue. We may also consider a shorter recall for these patients.

Sometimes demotivation of even the most compliant patients can occur, particularly where the patient feels they have made increased efforts and there is little or slow progress in stabilising their disease. Positive reinforcement and recognising the patient's efforts and achievements (no matter how small) can be helpful. We as clinicians are acutely aware of the level of oral hygiene required to stabilise periodontal disease, the patients often less so, and it is important not to dismiss the good in our pursuit of perfection. After all, progress is rarely a linear journey. Failure, self-reflection and adaptation are all valuable parts of the behaviour change cycle[xviii].

Summary

No matter how good our intentions, we cannot help every patient, unfortunately there will be a small number who remain non-engaging and we should not view this as a personal failure. Having done everything we can to ensure our patients are equipped with the necessary skills and knowledge to change their behaviour, there is a shared responsibility for them to do their part. However, revisiting these conversations and reinforcing the advice in a sensitive manner may prove to be beneficial in the long term. Some patients take longer to take on board our advice or process their diagnosis, and taking a few minutes to ask questions, listen and carefully consider responses, may be the difference between patients staying at step 1, or progressing along the path to better health. Seeing improvement for our efforts is motivation for both clinician and patient, leading to increased job satisfaction and helping to reduce frustration, stress and risk of burnout.

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