How to maximise the usefulness of behaviour change conversations with patients during routine dental consultations.

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Abstract: Clinicians can use behaviour change techniques effectively in routine consultations in healthcare settings, including dentistry. Professional guidelines support their use for preventing and managing a range of dental diseases. Theory and evidence from behavioural science can inform effective behaviour change interventions. This paper examines the relevance of these techniques to the whole dental team and how they can be implemented within routine dental consultations.

CPD/Clinical Relevance: We offer guidance for dental professionals on how to support their patients in changing behaviours to promote oral (and general) health. It will help them to understand the clinical relevance of the science behind behaviour change in dentistry, and offers practice recommendations.

The reader should gain an understanding of how to have useful behaviour change conversations with patients in routine consultations.

Background

Health behaviour change plays an increasingly important role in preventative dental care. Psychological theories are important in understanding health behaviours and in developing effective interventions to support health behaviour change. Public Health England recommend that dentists introduce the topic of behaviour change with their patients and this approach is supported in multiple NHS policies and initiatives. For example, the NHS '*Making Every Contact Count* initiative (1) recommends that every opportunity to have behaviour change related conversations with patients should be capitalised on. 'Delivering better oral health: an evidence based toolkit for prevention (2) contains guidance for dental teams from Public Health England and the UK Department of Health and Social Care. This publication describes the importance of behaviour change interventions within dental practices and identifies those behaviours which should be targets for change.

Making Every Contact Count:

- "You should aim to take every appropriate opportunity to encourage and support patients and colleagues to improve their health and wellbeing" (Section 4b of the NHS constitution)
- "*Making every contact count* is an opportunity to improve patient care, treatment & outcomes and help people live well for longer" (Delivering better oral health: an evidence based toolkit for prevention; 3rd ed, Public Health England)

Why behaviour change in dentistry is important

Routine dental check-ups in the NHS offer important opportunities for ongoing intervention, potentially occurring routinely throughout patients' lifespan. Our research (Joseph *et al.*, in press) found that behaviour change conversations are acceptable to dental professionals and patients, particularly if they are linked directly to oral and dental health outcomes.

Health behaviours associated with oral and dental health include:

- Oral hygiene practices (brushing, fluoride use etc.)
- Tobacco use
- Alcohol and drug use
- Diet and sugar consumption
- Attendance at routine appointments

Successful interventions addressing these behaviours can also impact on several other conditions such as diabetes, heart conditions and mental health as they share common risk factors (4).

The evidence for supporting behaviour change in dentistry

Interventions delivered within primary dental care have the opportunity to capitalise on the regular 'teachable moments' that occur in routinely in clinical practice. Teachable moments are planned or opportunistic events in a person's life that coincide with an openness to new ideas or change, such as a child attending their first dental appointment, a diagnosis of a health condition or a referral to an endodontist (5). Importantly, many behaviour change interventions are brief and can be incorporated within routine dental consultations. For example, a study of an intervention based on implementation planning (making plans to overcome barriers to change) which was effective in reducing dietary acid intake was additionally found to be acceptable and easy to implement: the clinician and the patient could quickly identify which behaviour to target, discuss obstacles and make tailored plans within a typical dental consultation (6).

- **What does not work?**

Healthcare practitioners often hold common misconceptions around what works when encouraging patients to change health behaviours (7). These common mistakes are not only

unlikely to be ineffective but may even lead to the patient disengaging with the content of the message (8).

Shock tactics

A common misconception is that people need to be sufficiently scared of the damaging effects of their behaviour on their health in order to motivate themselves to change. This might seem reasonable – if only people understood what damage they were doing then they would stop it. Over the years this type of reasoning has led to many healthcare professionals (and public health campaigns) putting out fear inducing message such as 'smoking kills'. These have largely been ineffective because, unfortunately, people do not always behave this rationally and can disengage with the health message behind the scare tactic. In fact increasing people's fear can actually increase the unhealthy behaviour through comfort-seeking (9,10) .

Providing education or information alone

Another related misconception is that, if only patients knew more about a condition or illness then they would change their behaviour to avoid making things worse. However a lot of people already know that activities like smoking, drinking and leading a sedentary lifestyle can cause health conditions or make them worse and, for a number of complex reasons, do not change their behaviours. In this case, simply giving people more information doesn't make them more able or motivated to make changes.

- **What does work?**

A growing body of research has explored the usefulness of behavioural science in understanding oral hygiene-related behaviours. A Cochrane review (11) concluded that the Capability, Opportunity and Motivation model of behaviour change (COM-B) (12) has the strongest support of all theoretical frameworks for oral health intervention. The model proposes that for a behaviour to be performed successfully, individuals need to have

sufficient Capability (physical or psychological ability), Motivation (conscious and automatic mechanisms that activate and inhibit behaviour) and Opportunity (physical and social environment that enables the behaviour). For example, in order to perform a target behaviour of tooth brushing the patient would need to: be able to hold a toothbrush and know how to use it (capability); have a toothbrush and toothpaste and time to use them (opportunity); want to appear socially acceptable with clean teeth and fresh breath (motivation) (See fig. 1).

There are opportunities for health professionals to intervene in each of the COM areas by supporting their patients using *behaviour change techniques* (12). A behaviour change technique is a strategy that helps an individual to change their behaviour to promote better health, for example, being provided with free toothbrushes and toothpaste and planning to brush teeth before going to bed.

[INSERT FIG 1 HERE]

Researchers have identified that goal setting, action planning and monitoring are particularly effective behaviour change techniques for improving oral health behaviours in adult patients (6,11,13). These conclusions are part of a broader evidence-base, which suggests that helping individuals identify and plan for potential barriers to a health related behaviour facilitates behaviour change.

Observational work of clinical consultations across medical specialities show that patients do offer cues and opportunities to talk about lifestyle behaviours but that these are not necessarily picked up by clinicians. Behaviour change discussion is relatively rare in consultations (occurring in less than 20% of primary care consultations) and is typically initiated by patients rather than the clinician (14). Conversations with patients about behaviour change conversations are perceived by health professionals to be sensitive. Consistently the research finds that multiple barriers operate to prevent discussion of behaviour change occurring during routine practice: primary care practitioner skills and concerns of jeopardising relationships (15).

Despite this, patients expect and want clinicians to initiate discussion about health behaviours if they are: *relevant to a medical problem* (16,17) or *explicitly linked to preventing and treating oral health* (Joseph *et al.* in press).

Identifying stages of motivation is important. You might want to think about the following questions during your consultation:

- How motivated is the patient to make changes?
- Have they asked questions about changing a particular health behaviour? Or indicated they are unhappy with the current behaviours/situation?
- Have they sought relevant information or help? Establishing how motivated the patient is allows you to tailor the conversation appropriately.

The advice provided by *Delivering Better Oral Health* has been summarised and adapted to produce the strategies shown below.

[INSERT FIG2 HERE]

You can “plant the seed” for future intervention with unmotivated patients; e.g. “Sounds like you aren’t looking to [stop smoking] at this time. If you would like help with this we can talk about it again”. The next section may help you to support those patients who fall in the amber and green columns.

In order to give helpful advice to patients, dental practitioners need to have effective conversations about behaviour change with patients. *Active listening* involves not only being alert to cues patients offer about behaviour change, but also making it very explicit to patients that you are listening and want to understand their experiences. This way of listening improves behaviour change conversations.

In summary, practitioners who want to have acceptable and effective behaviour change conversarions with patients should listen for cues in the conversation, decide what level of intervenion is appropriate and then tailor their approach based on the guidance and examples given above. The figure below describes these stages chronologically.

[INSERT FIG3 HERE]

Chairside Behaviour Change Techniques

Given that goal setting, planning and monitoring are the behaviour change strategies (BCTs) that have found to be the most effective in dentistry, we will focus on these three techniques. Some further examples are included in Figure 4.

a. Goal setting

You may have identified a potential target behaviour through listening for cues e.g. the patient might have mentioned wanting to cut down on sugary snacks. Goals should relate directly to the behaviour, be specific and relevant to the patient. It is also important for the goal to be achievable. This may help to increase patients' self-confidence in making behaviour changes, and subsequent goals can be set that build on previous achievements (see *feedback and monitoring*).

b. Action Planning

Patients will often describe barriers to behaviour change during consultations e.g." I would love to stop snacking but I have a sweet tooth" however you can also work with your patient to identify one or two barriers to achieving their goal. You should encourage your patient to also identify facilitators to changing the target behaviour (e.g. "I like fruit … I could have strawberries instead of a biscuit on Tuesdays and Thursdays and keep snacks for mealtimes"). These insights can be used to develop an *IF/THEN* plan that can be used to help overcome the barrier as it occurs (see fig 4).

c. Feedback and monitoring

Dental teams have a unique opportunity for building relationships with patients who are regular attenders. Making a note of patient goals and the extent to which they have been achieved, setting new goals and reviewing and developing action plans can strengthen this relationship and allow practitioners to build on previous successes. It is worth taking a minute to note down goals and plans on patient records so you can refer to them at the next consultation. You can also use some of these chairside techniques to encourage patients to attend their next appointment.

[INSERT FIGURE 4 HERE]

Behaviour change resources

The following links lead to more behaviour change resources. 1 links to the Toothpicks training for dentists designed by researchers at the University of Manchester. 2 and 3 link to further training in using the behaviour change taxonomy and COM-B model.

1) http://www.tentpegs.info/toothpicks.html
2) https://www.bct-taxonomy.com/about
3) http://www.behaviourchangewheel.com/about-wheel

Conclusion

Behaviour change techniques and the COM-B model can be used to support dental practitioners' useful behaviour change conversations with patients in routine dental consultations. This approach makes these conversations easier to initaite and are more likely to result in patients engaging in behaviour change conversations and ultimately changing health behaviours in ways that could lead to improvements in a number of oral and general health conditions and illnesses. Moreover, our research has shown that this approach to behaviour change is aceptable to patients.

There is also scope to tailor CPD, training and patient facing behaviour change conversations to focus on specific areas of dentistry that may be particularly problematic, such as intervention with parent/ child dyads, oral cancer prevention and discharge from surgical settings to equip the workfore with a the skills to take a multi-faceted approach to supporting patients' behaviour change.

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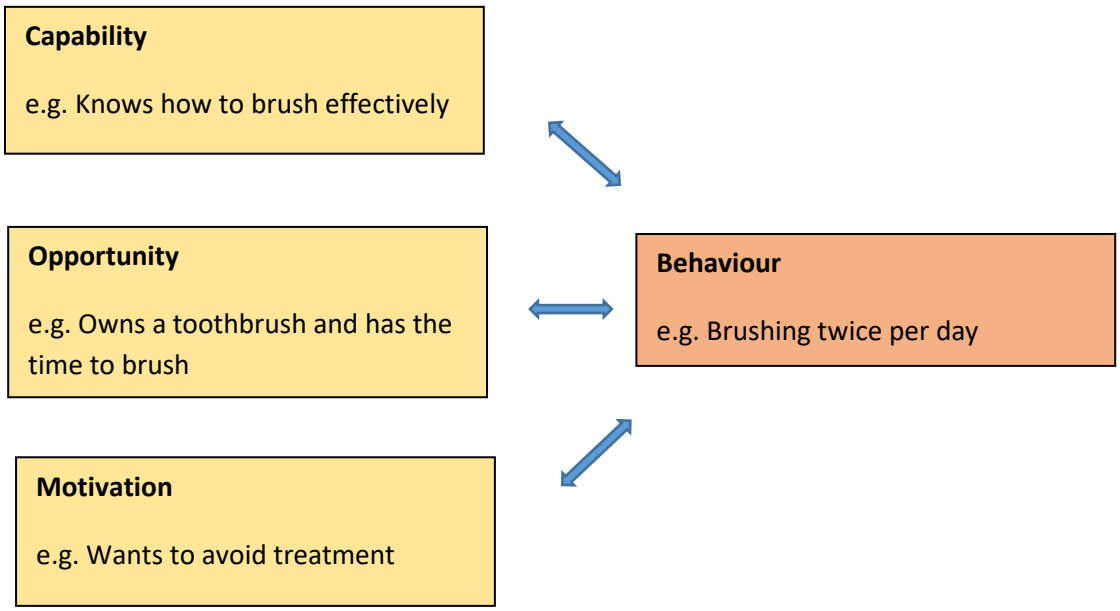

Figure 1. The COM-B model of behaviour change (adapted from Michie et al., 2011)

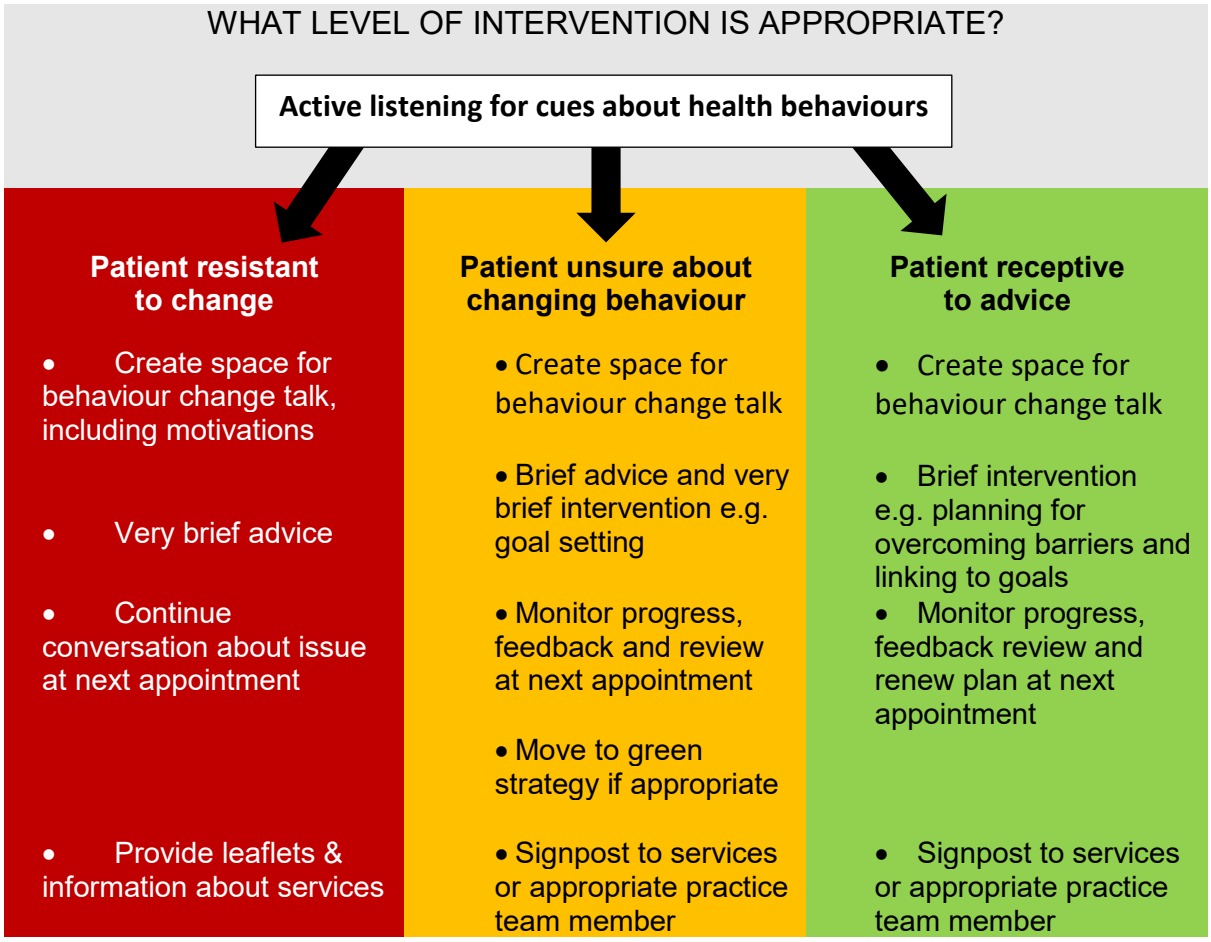

Figure 2: Strategies for planning behaviour change conversations (Adapted from Munday, 2008)

Listen out for …	Examples
Target behaviours: behaviours that the patients wants or needs to change	Giving up smoking, cutting down on drinking alcohol or eating a better diet
Cues: Things that patients say that offer an opportunistic segue into behaviour change conversations.	“I know I eat too many sweets” “My children want me to stop smoking”
Identifying barriers and facilitators: what does the patient say about their capability, opportunity and motivation to compete the target behaviour?	“I’m stuck in a rut” “I’m not sure how” “I don’t have time”

Figure 3. Active listening for behaviour change talk

BCT	How to use	Example
Goal setting (behaviour)	Through active listening, you will have identified a target behaviour. E.g. Your patient might want to reduce the amount of sugar they consume. You can help the patient to set a goal to help them to achieve their aim. This should be specific, relevant to the individual, clear and easy for them to achieve.	Goal: To have a biscuit once per day, after my lunch only.
Action planning	During conversation, you may have worked with your patient to identify some barriers (e.g. "I work from home and I'm always snacking sweets and biscuits") and facilitators to changing the target behaviour (e.g. I feel annoyed at myself when I do this). These insights can be used to develop an *IF/THEN* plan that can be used to help overcome the barrier as it occurs.	*If* I want to snack outside lunchtime *Then* I will remind myself how annoyed I will be if I do this
Feedback and Monitoring	Dental pratitioners can capitalise on opportunities provided by regular attending patients by reviewing goals and actions plans, giving praise and feedback e.g where there is improvement in oral health and building on past successes through setting new goals and making revised action plans.	"I can see that you have reached your goal to brush twice a day, you don't need any further treatment. Well done. How do you feel about making a new plan to cut down on cigarettes? "

Figure 4. How to use behaviour change techniques (for a more in-depth tutorial please visit http://www.tentpegs.info/toothpicks.html)