Behaviour change: Failed, failing or fulfilled?

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Stubborn. 'Having or showing dogged determination not to change one's attitude or position on something, especially in spite of good reasons to do so.'

It's a word and a meaning we're all aware of, and to varying degrees it's a character trait you see in most people. Yet for dental professionals, it's a word that starts a discussion about the very nature of the profession we are in. You may think I'm referring to those bleedin' patients – and you are correct – but when was the last time we took a look at the other side of that relationship?

It's widely acknowledged by scholars across the globe that bringing about behaviour change is difficult. It is perhaps the most difficult thing one can do. There are so many reasons for this, and I'd soon run out of space – not to mention bore you – were I to begin to list them all. Multiple reasons aside, there is only one thing realistically in the way of changing behaviour; the individual. You can only begin to change behaviour once the individual is ready to change.

There is a recognised need to deliver oral health information to people during clinical encounters to enable them to develop personal skills in managing their own oral health in ways and means they will retain and implement. 'Traditional approaches' to individual oral health education have been shown to be largely ineffective – a discussion and a bit of a telling off don't quite cut it, particularly with a generation who have an inflated sense of entitlement. New approaches are required to address personal motivations for preventive behaviour, but have we swum too far upstream in order to properly encourage behaviour change, and if so is that by desire or default?

The river of intervention

If I ask 10 dental professionals where they believe our profession lies on the upstream/downstream model (fig 1), no doubt I will get 10 different answers with 10 different reasons. There are a number of possible objections to attempting to construct behaviour change and link to the best method of intervention. The most obvious criticism is that the area is too complex and that there is no 'best practice' and therefore too ill-defined to be able to establish a useful, scientifically-based framework. After all, it's a method and concept every practitioner regardless of job title works to.

Another is that no framework can address the level of detail required to determine what will or will not be an effective intervention. So does that mean downstream activity is abandoned in favour of upstream activity?

As Richard Watt wrote in 2007, '*The dominant preventive approach in dentistry, i.e. narrowly focusing on changing the behaviours of high-risk individuals, has failed to effectively reduce oral health inequalities, and may indeed have increased the oral health equity gap*'.[1]

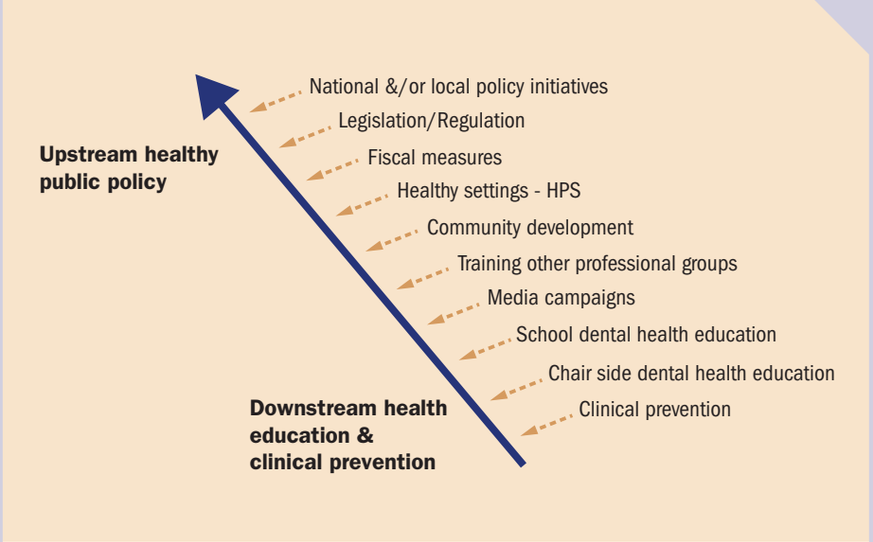

Figure 1: Upstream/downstream[1]

'Does knowledge through a 'tell' alone empower me to change my behaviour? Sometimes it can, but only when the environment allows.'

To date, many health promotion programmes have made grossly inaccurate assumptions that health education will automatically translate to behaviour change. It's the same flawed logic that being told to do at least 30 minutes of moderate-to-vigorous physical activity each day will help. Does knowledge through a 'tell' alone empower me to change my behaviour? Sometimes it can, but only when the environment allows. Can you prevent a child from getting dental decay when a single parent living off the minimum wage is trying to raise and support four other children and they don't have the budget to eat healthily? Unlikely. So we look at the environment.

And this begs an interesting question; is there a strategic plan or the requisite co-ordination between services to promote oral hygiene improvement in communities where cost is a major determinant of their decision-making process?

One blog I read was particularly scathing, and although from Australia, perhaps reflects a growing sense of public ambivalence towards the NHS:

> 'Behaviours that affect health result from the interplay of many economic, social, and cultural factors, making the understanding of complex behaviours difficult.'

'Public servants in air-conditioned offices write hygiene promotion strategies that fail to address the functional state of housing infrastructure and the unique environmental conditions of remote communities. Obesity and micronutrient deficiency in remote communities is a direct result of food insecurity caused by low incomes and the high price of fresh, nutritious food. This is unlikely to ever be overcome as long as local stores (often the sole providers of food in remote communities) continue to be viewed as a small business, rather than an essential service such as health or education. The past and continuing erosion of Indigenous culture and language serves only to perpetuate the vicious cycle of poverty and poor health.

'Government departments are often only as far apart as a different floor in the same building, yet the level of communication and collaboration between departments would suggest there is in fact a chasm between them. Multisector collaboration and high-level engagement and partnership with Indigenous peoples are the only hope we have to close the gap.'[2]

Sounds relatable, doesn't it?

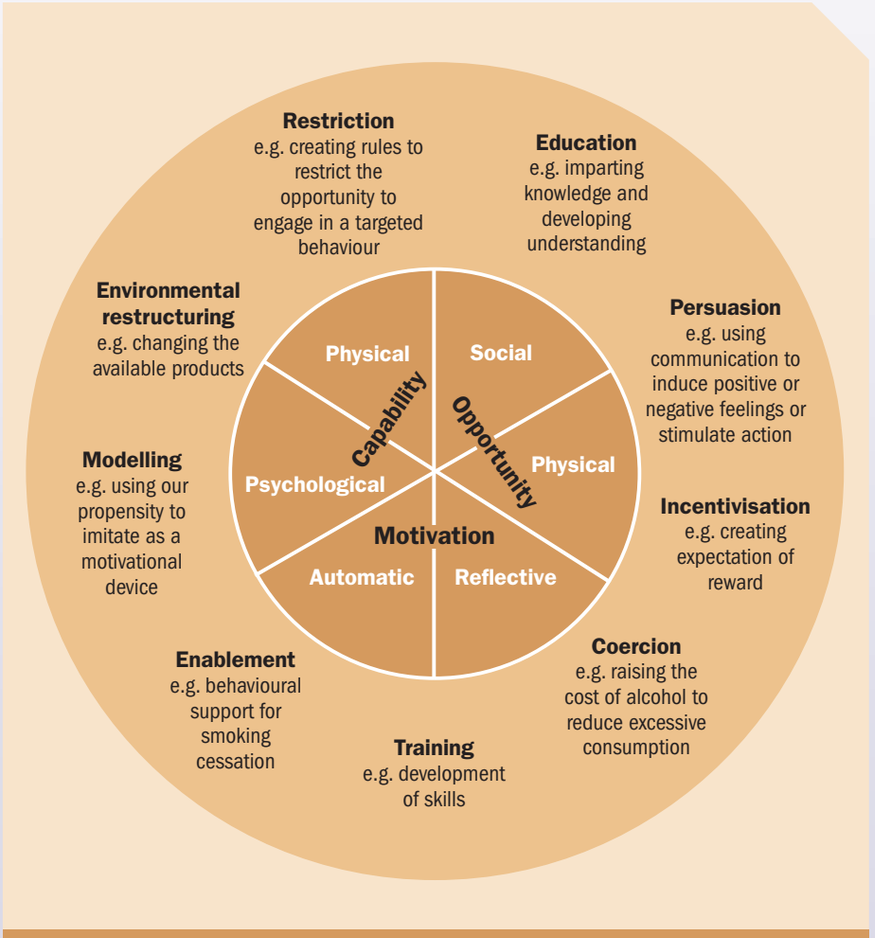

Figure 2: The Behaviour Change Wheel[3]

Perpetual motion

In the United States an estimated 50% of annual deaths can be attributed to lifestyles and behaviours such as the use of tobacco, alcohol, and other substances, diet, and inadequate physical activity. Even with one in two deaths, this has not led to success in changing those behaviours. Behaviours that affect health result from the interplay of many economic, social, and cultural factors, making the understanding of complex behaviours difficult. Change does not come easily even when the individual is aware of the effects of certain behaviours on his or her own health.

In 2011 Susan Michie, Maartje van Stralen and Robert West identified there were a plethora of frameworks for behaviour change interventions. Seven years later, dentistry still has a tendency to work in silos and do their own thing – an approach that has advantages and disadvantages – but one thing still defines an approach practitioners can take; the Behaviour Change Wheel (fig 2).

So where are we on the wheel? Ben Atkins, owner of Revive Dental Care and Trustee of the Oral Health Foundation, believes behaviour change will be stuck in a perpetual cycle until we truly shift the focus.

'NICE has said dentists are not doing prevention well enough, that our approach to date had been ineffectual. And while that is not an easy thing to say – nor an easy message for all practitioners to take on board – when you peel the layers away, there's a degree of truth about it.

'Quite simply, I believe dentistry has too many messages, and conflicting messages with overall healthcare. How is a patient supposed to understand, learn and digest? When it comes to oral hygiene, for me, it doesn't matter to too many patients. There is an entire generation that relied on sugar to live on, and there's no shame in saying it would be foolish

to say to those who lived through wartime that sugar is going to ruin their teeth. They had bigger things to worry about.

'If you consider the current generation's addiction to social media, a high-profile beauty blogger would not want to be seen on their channel with missing teeth. They are far more likely to realise the cause and effect.'

Rebecca Harris, Dean of the Institute of Population Health Sciences at Liverpool University, suggested a change in attitude amongst the current generation may play a part in driving current behaviour patterns.

'The difference in approach is quite stark', Rebecca said. 'Access to information has never been more readily available, and what it means is patients do their research prior to a visit.

'As Ben suggests, social media is certainly changing the demands of the patient. It is increasingly challenging to have the kind of two-way discussions that will have the desired effect for everyone concerned. Patients are more cosmetic-driven in what they want than ever before, and often to the detriment of their oral health. While there is little doubt that at a population level oral health is improving, there is still a significant amount of work to do in the sub-sectors; look at the number of children still having teeth taken out under general anaesthetic. Look at the gap between those at the top end of the socio-economic scale and those towards the bottom. The messages simply are not getting through.'

Hand-in-hand

The World Health Organisation (WHO) Commission on Social Determinants of Health issued the 2008 report *'Closing the gap within a generation – health equity through action on the social determinants of health'* in response to the widening gaps, within and between countries, in income levels, opportunities, life expectancy, health status, and access to health care.

In 2010, WHO published another important report on '*Equity, Social Determinants and Public Health Programmes*', with the aim of translating knowledge into concrete, workable actions. Poor oral health was flagged as a severe public health problem. Oral disease and illness remain global problems and widening inequities in oral health status exist among different social groupings between and within countries.

A report prepared by the World Economic Forum and the Harvard School of Public Health, in advance of the 2011 UN Summit, identified five key points around the financial burden of the major non-communicable diseases (NCD):

- Cardiovascular disease
- Chronic respiratory disease
- Cancer
- Diabetes
- Mental illness.

These five NCDs could contribute a cumulative output loss of $47 trillion in the two decades from 2011, representing a loss of 75% of global GDP in 2010.

The investment required to reduce and prevent NCDs is estimated to be around $11.2 billion per year, reason enough for the WHO to develop a comprehensive global monitoring framework with voluntary global targets and indicators for NCDs. Yet, there is no mention of the largest NCD – tooth decay.

As is a frequent story, it reflects the feeling dentistry sometimes seem to exist in a different silo to healthcare in general. And this begs the question, is the upstream and downstream activity enough, and if no why not?

> 'While deep and preventable oral health inequalities persist in both child and adult populations, in the last five years the Government's spend per head on NHS dentistry has fallen'

Take the large increase in upstream activity, the latest of which is the Mayor of London's decision to announce a ban on junk food advertising across London's entire public transport network. Under the scheme, posters for food and drink high in fat, salt and sugar will vanish from the Underground, Overground, buses and bus shelters.

Add that to the Soft Drinks Industry Levy, to the calls for junk food ads to be banned on TV pre-watershed, to chucking sweets off the checkout, to calls for the sugar content in festive hot drinks and milkshakes to be banned and energy drinks to be banned for under 18s, and you soon see a pattern developing.

These are all great in theory, but according to Rebecca will only work when they go hand-in-hand with what goes on in the dental practice.

'Talking to a patient about why their six cans of Coke a day isn't good for their teeth can be difficult', she explained. 'There is no shock or increased threat level – the patient is not going to die as a direct result. That's where smoking cessation is an easier conversation because you have that threat, and ultimately patients respond.

'People grow up in systems designed for them. Their behaviour is a way of coping in the system. The individual becomes shaped by this, so for a patient struggling financially, asking them to swap the cheap, sugary drink that they have grown up with for something healthier and more expensive is a difficult sell.

'That is where the benefit of the traditional family doctor no longer applies. Not too long ago you had a patient that would see the same doctor and the same dentist, who would have treated older family members and known the social circumstances in which their decisions are shaped. The growth of the corporate market has put pay to that, and as a result we're not treating the all-round patient, we're treating what we see.'

Closer to home

Perhaps we need to look no further than our own government. The British Dental Association has recently questioned Health Secretary Matt Hancock's priorities, following the launch of his new 'prevention focused' vision for the NHS which failed to meaningfully engage on wholly preventable oral diseases like tooth decay.

While deep and preventable oral health inequalities persist in both child and adult populations, in the last five years the Government's spend per head on NHS dentistry has fallen £4.95 from £40.95 to £36, while patient charges have increased by over 23%. Tooth decay is the number one reason for hospital admissions for children aged 5-9, and paediatric extractions have cost the NHS £165 million on extractions in hospitals since 2012.

Which begs the question, are these initiatives, visions and 'investments' politically-motivated to win over voters on the fence and keep current voters sweet, or are they designed to bring about real change? The British Dental Association's Chair of General Dental Practice Henrik Overgaard-Nielsen, has previously stated that the government has shown 'no interest in getting hard to reach families to attend, when prevention could save our NHS millions', so how are patients supposed to show an interest? The *Prevention is Better than Cure* document makes one reference to improving oral health of children. The government's centrepiece *Starting Well* oral health

programme, which is targeting high needs children, continues to receive not a single penny of new investment, and is operating in parts of just 13 local authorities in England.

Ben explained: 'A lot of money is spent treating NHS patients, and in high needs areas you do not get the level of engagement that sees these patients come back with meaningful progress. Is that wasted money? That's not for me to say, but we need to have a discussion whether we can sit down with a patient and say 'unless you change your behaviour, I cannot or will not treat you'.

'It is an approach we take to a lesser extent in our practices. If a patient wants restorative or cosmetic treatment, they have to go through a process of seeing the dental nurse and hygienist before I see them. Unless we see progress and compliance, we don't do the work. It is difficult to implement, but ultimately it's a way to bring about behaviour change in a heavy-handed manner.'

According to Rebecca, the problem close to home is an all-too familiar one for dental professionals.

> 'The major drawback is they don't have the patient profile to bring about behaviour change – their job is more of a 'see problem fix problem', with little time for anything else.'

'The massive increase in litigation, no-win no-fee lawyers and the feeling of fear within the profession created by the regulator means there is very little room for manoeuvre.

'Fear is a word I hear too often. Many practitioners have used the phrase 'defensive dentistry', which aside from the burden on the practitioner themselves does not work in the patient's best interests. You end up treating what you see, rather than listening to the patient and matching their needs. It is a climate that does not encourage behaviour change downstream, but rather one of leaflet dispensing in the hope what you said throughout the appointment sinks in.'

Situation dictates

There's a phrase I use quite a lot, and that's 'right place, right time. It was a bit of luck'. While the application of the message is different, the same can be said about matching the right message to the right patient at the right time in the right way.

For example, those working in paediatrics, special care and hospital-based dental units tell me they simply could not and would not go back to working in general practice. They may have the same pressures, but they have more time with patients. The major drawback is they don't have the patient profile to bring about behaviour change – their job is more of a 'see problem fix problem', with little time for anything else.

The story in general practice is very different. The recurring theme is the contract allows for very little deviation from 'see patient treat patient', yet the demand placed upon general dental practitioners to instil the seeds of behaviour change remains a great one.

'I wonder if the environment of a dental practice means too few practitioners see patients as people rather than a number', Rebecca added. 'Public attitude and perceptions of dentistry have shaped the tone of the interaction, and it can be very transactional. Yet we know that people want to be treated as individuals. They want personal, relatable information in a way they understand and in a form they are prepared to engage with.

'Too often the transactional nature means patients are spoken at rather than a conversation; too often it means loaded questions with an interrogatory nature. Perhaps if we asked patients fewer questions and simply started a discussion, we could form a basis to begin a relationship and deliver changes to behaviour.'

'We treat a number of hard-to-reach patients in a variety of clinics', Ben added. 'The environment dictates the kind of discussions we as a team have. The old model of UDAs leaves no time for us to do some of the things Rebecca mentions above. And for the outreach clinics, they're not interested enough in their oral health to engage.

'Unless a patient wants to change, and until a patient decides to change, we have to keep chipping away and give them a platform and the knowledge to make the change.'

Stubbornness. A word, a state of mind, or the description of the barriers to behaviour change in dentistry? I'll let you decide. ◆

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