The Holy Grail: Patient motivation in the treatment of periodontitis

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There is ever-growing evidence that the patient’s individual behaviour is critical for success of periodontal therapy.

- Ramseier JCP 2005, 32 (Suppl 6), 283-290
Treating periodontitis – does it matter to patients?

- Tooth loss is associated with loss of self-esteem, loss of youth, loss of beauty, dislike of intimacy, embarrassment, a feeling of “not being right”.

What causes periodontitis?

Inflammatory condition caused by a lack of balance between the invader (plaque) and the defender (the host response).
Periodontitis

Factors affecting health and disease:
- Genetics
- Hydration
- Interdental cleaning
- Smoking
- Nutrition
- Stress
- Sleep
- General health
- Exercise
- Brushing
- Plaque
Evidence for risk factors in causation of periodontitis

- **Plaque:** Mountains of research!! Eg. Axelsson & Lindhe 1981, JCP 8, 239-248; Glavind 1977, JCP 4, 100-106

- **Smoking:** Eg. Axelsson et al 1998, JCP 25, 297-305; Kocher et al 2005, JCP 32, 59-67

- **Poorly controlled diabetes mellitus:** Eg. Taylor et al 1998b, JCP 69, 76-83; Lalla et al 2007, JCP 34

- **Obesity:** Eg Genco et al 2005 J Perio 76, 2075-2084

- **Stress:** Eg Genco et al 1999 J Perio 70, 711-723; Breivik et al 2006 JCP 33, 469-477
Other evidence

Osteopenia/osteoporosis: Persson et al 2002, JCP 29, 796-802
but conflicting evidence also available; needs on-going research.

Session at Europerio 7 in Vienna: Themed research communications in periodontal medicine: Periodontal condition of patients with auto-immune conditions Mayer et al: “Aggressive periodontitis and arthritis have so much in common they are the same disease”.
RISK IS 2-WAY.

• We are no longer barber surgeons but oral physicians.
(BDJ editorial by Stephen Hancocks April 28 2012 “Sawbones no longer.”)
Therefore it is appropriate in periodontal therapy to:

• Include assessments of patient behaviour

• If necessary, apply effective behaviour change counselling methods
Which health behaviours should we address?

- Plaque control?
- Smoking?
- Adiposity?
- Psychosocial?
- Sleep?
- Hydration?
- Exercise?
Let’s start with plaque!
I see plaque, I produce toothbrush
This knee-jerk response is termed “the righting reflex”…….

the impulse to take over and “solve” the patient’s problems
How do you feel when your patients return with plaque-infected mouths?

- Deflated?
- Angry?
- Sad?
- Irritated?
- Frustrated?
- Accepting?
- Don’t care?
- Challenged?
It’s a challenge!!
Success is empowering

So people want it
Encouraging behaviour change

• “Work is doing what you now enjoy for the sake of a future which you clearly see and desire. Drudgery is doing under strain what you don’t now enjoy and for no end that you can now appreciate.”

Cabot
What are the barriers?

• There are some patients who make your heart sink
• You like the patients but in terms of behaviour change you feel like you’re banging your head against a brick wall
• You’re trying to run a business.....time is paramount and productivity isn’t easily measured in communication compared with drilling and filling
Communication skills

• Very topical in health care in general
• GDC survey of patients: TOP of patient wish list for dentists is communication skills (GDC gazette Dec 2011)
• CQC regulations include requirements for educating patients (Prevention strategies outcome 4)
Sir Lancelot Spratt
The Ineffective Dentist
Motivational Interviewing (MI)

- A person-centred, goal-directed method of communication for eliciting and strengthening intrinsic motivation for positive change.


Rollnick, Butler, Kinnersley, Gregory & Marsh
Motivational Interviewing BMJ 2010, 340: 1900
Motivational Interviewing has been shown to positively affect health behaviour related to:

- Smoking
- Exercise
- Weight reduction
- Diabetes management
- Medication adherence
- Condom use
- Alcohol and drug dependence
- Oral health
The Good News!

- Research shows MI works
- BRIEF interventions work (10 minutes)
- Using MI increases trust and good relations
- Can be used within the dental team as well as with patients and beyond

Success.
William Richard Miller

- The originator of MI
- Developed the method in response to his observations regarding Rx of pts with alcoholism in 1970s.
- Standard approach: confrontational.
- Failure attributed to denial, personality defect or failure of engagement.

Miller WR 1983 Behavioural psychotherapy 11,147-172.
Miller found

- The likelihood for positive change occurred more readily when the clinician connected the change with what was valued by the patient.

- Confrontational styles and direct persuasion are likely to increase resistance and should be avoided.
MI

• Based on the theory that motivation is necessary for change to occur, that it resides within the individual and is achievable by eliciting PERSONAL values, desire and ability to change

• Based on allowing the patient to interpret and integrate health and behaviour change information if it is perceived as relevant to their own situation
MI acknowledges that the patient is the expert in their own life
Motivational interviewing: the basics

- To respect patient autonomy
- To guide rather than direct
- To activate patient desires and motivations
- To move forward together as a team

Rollnick, Miller & Butler 2008
Motivational Interviewing in Healthcare.
The M I pyramid

- Strategies
- Principles
- Spirit
2 strategies

1. Information exchange: power of 1st minute:
   - keep the focus on the conviction that they can solve the problem
   Elicit-provide-elicit

   Have a genuine curiosity
   Respect freedom of choice, patient autonomy

2. Importance and confidence scaling
The Effective Dentist
It has been recognised for some time that positive outcomes in behaviour change are related to a strong bond between the clinician and the patient. This may be termed “co-therapy” or “therapeutic alliance”. For this to exist, true empathy must be present with real emphasis on understanding and working from the patient’s perspective and their view of what it means to make a behaviour change.
Think about yourself

• What changes have you made in your own life?
• Did you find some of them hard?
• Who helped you?
• Why were they able to help you?
Stages of Change Model

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance

Progres:

Relapse:
Communication styles

DIRECT
Teach
Instruct
Lead

GUIDE
draw out
encourage
motivate

FOLLOW
listen
understand
go along with

Match the style to the problem  (Rollnick 2012)
A directing style

• Dentist: I want to ask you about cleaning between your teeth, ok?
• Patient: Yes, sure
• D: How often do you do that?
• Pt: I brush my teeth every day if that’s what you mean
• D: No, I mean like using floss or little brushes especially for this
• Pt: Oh I see, no well I use my normal toothbrush really
• D: Well. It’s important to also clean between the teeth because that’s where your gum disease is
• Pt: I see, thank you
• D: Cleaning in those bits between the teeth, where the bleeding is coming from, that’s where you can do a lot at home to stop the disease getting worse.
• Pt: I see, thank you.
A guiding style

- Dentist: Can I ask you, how much do you know about gum disease?
- Patient: Not a lot, you mean like because my gums bleed?
- D: Yes, between your teeth, how do you see what’s going on there?
- Pt: I don’t really know, to be honest, its definitely getting worse
- D: that’s right, it can do. There are little pockets of infection between your teeth and it can be a problem if it’s not sorted. Cleaning the teeth in between can slow or even stop the disease. Have you any idea how you might do that at home?
- Pt: Not really. With a toothbrush?
- D: Well, there are things like dental floss, bottle-brushes and other brushes. Some work better than others but any of them would make some difference. What do you think of this for you?
- Pt: You mean, I should try one of these things?
- D: It’s your decision. It would definitely help with the bleeding and infection
- Pt: Which one should I use?
Motivational Interviewing

Expressing empathy: engages the patient through acceptance, affirmation, open-ended questions and reflective listening

Developing discrepancy: identifying where the patient feels he is health-wise versus where he wants to be

Avoiding argument: patients are understandably often initially defensive, argument will be counter-productive

Rolling with resistance: rather than argument, gently challenging inappropriate thought processes

Supporting self-efficacy: encouraging belief that they can take control, change behaviour to positive ones & achieve health.
Developing discrepancy

ELICIT-PROVIDE-ELICIT

Elicit: what the patient knows
Provide: information
Elicit: what the patient might do
Importance and Confidence Scaling

1. **Importance (Why?)**
   
   “Why should I?”
   
   “I want to, but….”
   
   “What will I gain/ lose?”

2. **Confidence (How?)**
   
   “Will I be able to?”
   
   “What skills do I need?”
   
   “Will I cope in situations a, b and c?”

(Rollnick 2012)
Importance and confidence scaling

How important is it for you right now to clean in between your teeth?

On a scale from 0-10, if 0 is “not at all important” and 10 was “very important”, what number would you give yourself?

1. Why are you at x and not at 1?
2. What would need to happen for you to get from x to y (higher number)?
3. How can I help you get from x to y?

Understanding answers increases patient motivation to change in active patient
Importance and confidence scaling

• 1. How important for you is it to.....?(I)
• 2. How confident are you that you will succeed?  (C)

Summarize and check understanding.
Body language

**SOLER**

S  Square on to the patient, not turned away
O  Open posture, avoid crossed arms
L  Lean slightly towards them, look interested
E  Eye contact is key to establishing rapport
R  Relaxed environments, with a calm, gentle demeanour to put people at ease.

Egan 1990
Key tips in delivering information effectively:

• Use layman’s terms to ensure understanding
• Remove your mask
• Deliver advice when the patient is erect and relaxed rather than during treatment
• Encourage the patient to reiterate your advice to check understanding
• Repeat what they say to you so they know they are listened to
• Discuss specific goals with which they agree to encourage adherence
The “rule” of MI!

- R Resist the righting reflex
- U Understand/explore patient motivations
- L Listen carefully with empathy
- E Empower the patient
Go alone go faster
Go together go further
South African expression
PERSISTENCE: There’s no giant step that does it. It’s lots of little steps.

We are what we repeatedly do. Excellence, then, is not an act, but a habit (Aristotle).

Practical tips to encourage patients to take control of their dental problem
Types of periodontitis

- Chronic inflammatory periodontitis 80-85% population
  Quite good oral hygiene might suffice

- Aggressive periodontitis 10-15% population
  These must be identified early using BPE screening and managed appropriately. “Quite good” oral hygiene won’t do.
What you do about it.

• **Treat the risk factors**- plaque, smoking, nutrition, sleep, hydration, stress, exercise, underlying health issues

• **Simples!**
Treating plaque

- Overwhelming evidence that bacterial plaque implicated in causation of periodontal disease

- Overwhelming evidence that removal of bacterial plaque arrests or slows down the progression of periodontal disease
Plaque control is a manual dexterity skill

• Like eg playing golf, violin (elicit from patient if there is a hobby/sport etc that interests them)
• There are tools: golf clubs, violin & bow brushes, floss etc.

But it’s HOW you use them
Brushes- Manual vs Electric

• Cochrane report (Heanne et al 2004):
  Oscillating rotating electric brushes only are significantly more effective than manual
  No evidence any design or head motion superior

Able to be more precise with smaller head
The golf analogy
The golf analogy
Techniques: The modified Bass

Hold the toothbrush sideways against your teeth with some of the bristles touching your gums.
Tilt the brush so the bristles are pointing at your gum line.
Move the brush back and forth, using short strokes. The tips of the bristles should stay in one place, but the head of the brush should wiggle back and forth. You also can make tiny circles with the brush. This allows the bristles to slide gently under the gum. Do this for about 20 strokes or 20 circles. In healthy gums, this type of brushing should cause no pain. If it hurts, brush more gently.
Roll or flick the brush so that the bristles move out from under the gum toward the biting edge of the tooth. This helps move the plaque out from under the gum line. Repeat for every tooth, on the insides and outsides.
On the insides of your front teeth, it can be hard to hold the brush sideways. So hold it vertically instead. Use the same gentle back-and-forth or circular brushing action. Finish with a roll or flick of the brush toward the biting edge.
To clean the biting or chewing surfaces of the teeth, hold the brush so the bristles are straight down on those surfaces.
Gently move the brush back and forth or in tiny circles to clean the entire surface. Move to a new tooth or area until all teeth are cleaned.
Rinse with water.
The modified Bass

1. Place the brush at an angle against the tooth, making certain that the bristles are at the gumline. Gently brush the surface of each tooth using a short, gentle vibrating motion.

2. Brush the outer surfaces of each tooth, upper and lower, keeping the bristles angled against the gumline. Repeat the same method on the inner surfaces of the teeth as well.

3. To clean the inside surfaces of the front teeth, tilt the brush vertically and make several gentle up-and-down strokes using the front half of the brush.

4. Scrub the chewing surfaces of the teeth using a short back and forth movement. Brushing the tongue will remove bacteria and freshen your breath.
Single-tufted brushes

- Isolated teeth, uneven gingival margins, posterior surfaces
- Subgingival cleaning
- Technique difficult but worth persisting!
Single-tufted brush designed for implants
Furcations
Interdental tooth surface cleaning-bottle brushes
Risk of trauma to papilla
TePe Interdental brushes, the easy and
natural way to clean between your teeth

How to use TePe Interdental brushes

**Front of mouth:** Insert the brush into the space between teeth at gum level, turning slightly. This technique aids access and lengthens the life of the brush.

Once inserted, gently move the brush backwards and forwards a few times to remove plaque and debris.

**Back of mouth:** Access may be improved by first shaping the brush head into a slight curve. Do not bend at right angles.

**Brush care:** Always rinse brush in clean water during and after use. Use daily.

How can I reach my back teeth more easily?

Use the white stick as an extension to the brush handle to aid access at the back of the mouth.

Do I stop using the TePe Interdental brushes if my gums bleed?

No. If your gums bleed on brushing then you probably have gum disease (gingivitis). Diseased gums bleed very easily. Regular interdental cleaning will result in healthier gums. If bleeding persists, contact your dental professional.

What brushes are suitable for my mouth?

Use the chart above to record which colour brush fits where. Ask your dental professional for advice.

<table>
<thead>
<tr>
<th>Interdental</th>
<th>Extra Soft</th>
<th>Proximal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink</td>
<td>Pastel Red</td>
<td>Pink</td>
</tr>
<tr>
<td>Orange</td>
<td>Pastel Blue</td>
<td>Orange</td>
</tr>
<tr>
<td>Red</td>
<td>Pastel Yellow</td>
<td>Red</td>
</tr>
<tr>
<td>Blue</td>
<td>Pastel Green</td>
<td>Blue</td>
</tr>
<tr>
<td>Yellow</td>
<td>Pastel Purple</td>
<td>Yellow</td>
</tr>
<tr>
<td>Green</td>
<td>Grey</td>
<td>Grey</td>
</tr>
<tr>
<td>Purple</td>
<td>Black</td>
<td>Purple</td>
</tr>
</tbody>
</table>
Interdental tooth surfaces cleaning-floss
Key points in plaque control advice:

• It is important to establish a contract with the patient with clearly defined objectives. The number of new instructions regarding plaque control should be limited at any one session.
• The clinician should provide the patient with easy signs of progress, such as the colour of the tissues or the reduction in bleeding and give positive reinforcement about the good behaviours performed.
• Encourage dialogue, avoid patronisation and blame.
• Finally and most importantly, do not start professional cleaning before the patient has achieved a good gingival response. To do so is likely to work against a successful long term outcome. In addition, visibility is decreased when tissues bleed, hampering effective instrumentation, there is more post-operative discomfort and there is a risk of losing attachment when instrumenting inflamed tissues.
Key points in smoking cessation.

• The accepted method is the 5 “A”s: Ask, Advise, Assess, Assist, Arrange.
• Affirm belief, keep dialogue open, accept it may take time.
• Reflect back any comments which can be used to motivate such as concerns about the cost of smoking, smelling of nicotine and in finding places to smoke in public, for example. Use positive language.
Key points in dietary advice:

• Give appropriate advice regarding sugar and carbohydrates and provide healthy delicious alternatives.
• The motivation for change depends upon pointing out incentives and removing disincentives to change. Attractiveness to others is perhaps the most powerful incentive so the use of photographs of attractive people with attractive smiles can be positive.
• Invite patients to keep a diet chart for at least 3 days and discuss it in a non-judgemental, supportive manner, providing constructive alternatives.
Dietary advice for the modern age

• Include discussion on pro-inflammatory and anti-inflammatory foods

Chapple Int. J. Dent. Hyg 2006

• Rather than directing away from junk food, use MI language to elicit what they know about healthy foods and how they could incorporate more
Chocolate.....oh yes!
Patients need realistic goals and need to understand that periodontal therapy is not a “quick fix” so they do not lose motivation over time. Patients should feel positive that their efforts will be rewarded and as the name suggests, they will be supported in those efforts (as opposed to the previous term of “being maintained” which was rather passive).
Motivation is much easier when the task is shared. In the same way that the golfer achieves his aims with the help and support of his caddy, so we can help our patients achieve their dental aims. It requires effort, caring and persistence. We can then celebrate their successes.
Thank you for listening!