



### Moira G Sim

MBBS, FRACGP, FACHAM, is Associate Professor, Centre for Postgraduate Medicine, Deputy Director, Systems & Innovation Research Centre for Health, Edith Cowan University, and a general practitioner, Western Australia. m.sim@ecu.edu.au

### Toni Wain

BA, BSc, is Program Manager, Systems & Innovation Research Centre for Health, Edith Cowan University, Perth, Western Australia.

### Eric Khong

MBBS, FRACGP, is Senior Lecturer, Centre for Postgraduate Medicine, Edith Cowan University and School of Psychiatry and Clinical Neurosciences, University of Western Australia, and a general practitioner, Western Australia.

# Influencing behaviour change in general practice

## Part 1 – brief intervention and motivational interviewing

### Background

Behaviour change toward achieving a healthy lifestyle is important for all Australians, and general practitioners have a key role to play in assisting patients to make these changes.

### Objective

This is the first of a two part series which provides the background to approaches to influencing behaviour change in general practice, from brief interventions to motivational interviewing (MI). The second part of the series will explore motivational interviewing in more detail.

### Discussion

General practitioners have a key role in changing their patients' health behaviours. There are a range of tools GPs can use to help enhance their patients' motivation to achieve their health goals.

**■ Instigating behaviour change in patients to help them achieve a healthy lifestyle is a critical component of general practice to combat rising chronic disease in the community. An individual's health behaviour is determined by a complex interplay between their knowledge and understanding of health and disease, the personal meaning and relevance of that knowledge, their confidence in their ability to make changes, and a range of other factors acting as facilitators and barriers to change.<sup>1</sup>**

### Brief interventions

Brief interventions (provision of information and advice) by general practitioners are successful in promoting healthy behaviour in relation to smoking, alcohol, physical activity and nutrition.<sup>2,3</sup> General practitioners develop therapeutic relationships with patients over time, are respected, and have multiple opportunities to provide brief advice in a range of health behaviours. Furthermore, GPs can tailor information to the individual, which is more effective than generic information.<sup>4,5</sup>

A framework that has been widely promoted for brief intervention is the 5As approach – Ask, Assess, Advise, Assist and Arrange follow up. Initially developed for managing tobacco dependence, it has subsequently been applied to many other health behaviours.<sup>6</sup> With this approach, all patients are screened for unhealthy behaviours (ask). All those identified by screening are assessed for their readiness to change (assess) and advised to alter their behaviour (advise). Those who agree to change are provided with practical help to make the change (assist) and followed up to provide support (arrange). This can include practical strategies such as the use of a decisional balance sheet,<sup>7</sup> which compares the pros and cons of change, setting dates and times for action and support medication.

Brief interventions in general practice usually take a few minutes and are incorporated into routine care. While there is strong evidence

to support brief interventions, they are sometimes insufficient to alter behaviour.<sup>7</sup> When positive outcomes are not apparent, the sense of inability to change behaviour can be associated with frustration, a lack of confidence and negative attitudes toward attempting to change health behaviours.<sup>8,9</sup>

### Transtheoretical model of change

The transtheoretical model (TTM) of change, commonly known as the ‘cycle of change’ or ‘stages of change’, was originally developed by Prochaska and DiClemente in 1982 in relation to tobacco use.<sup>10,11</sup> It has since been applied to many behaviours and helps to explain why attempts to change behaviour may not work.<sup>11</sup> There have been many versions of this model. In its original form, it consisted of five stages:

- precontemplation (not thinking about change)
- contemplation (thinking about change)
- preparation/decision making (actively planning change)
- action (changing or recently changed and new behaviour not established), and
- maintenance (new behaviour established and working on maintenance).

Relapse was not considered to be a stage as it was seen as an event that terminates the action or maintenance phase, prompting a movement back into an earlier phase. Later, the authors proposed a ‘spiral of change’ which suggests that most relapsers do not revolve endlessly in circles regressing back to the beginning, but instead learn from each attempt and progress with each cycle<sup>11</sup> (Figure 1). While the cycle of change is frequently associated with MI, Miller and Rollnick specifically point out that they are not the same thing and that MI was never based upon TTM. The transtheoretical model of change is a model of how and why changes occur, while MI is a specific clinical method to enhance motivation for change. It is not necessary to assign a stage of change in order to apply MI.<sup>12</sup>

Another model that evolved from the original stages of change is the ‘contemplation ladder’,<sup>20,21</sup> in which the clinician asks people to identify where they are on a ladder (Figure 2).

### Ambivalence, resistance and defence mechanisms

Ambivalence is a normal aspect of human nature and is a natural transition phase in the process of change.<sup>7</sup> For example, a person who is dependent on a drug can have a ‘love-hate relationship’ with the drug, ie. intensely positive feelings toward the drug together with an intense dislike of the problems associated with use of the drug and the control it has over the person. Change and resistance to change are seen as two sides of a coin.<sup>7</sup>

Giving brief advice, regardless of the stage of change, may be effective; this advice may trigger consideration of, or a decision to, change. On the other hand, advice can increase resistance to change<sup>7</sup> in the same way that someone who feels they are being nagged might become resentful and less willing to change.

Another brief intervention approach that has a stronger emphasis on empathy and therapeutic interaction is the use of the acronym FRAMES – Feedback about risk, emphasis on personal Responsibility, Advice to change, a Menu of options, Empathy and facilitation of Self efficacy.<sup>13</sup> While the ‘brief interventions’ for which FRAMES was developed referred to a few short term counselling sessions and not the brief interventions that occur in general practice, the components can still be relevant to the longitudinal interaction that occurs in general practice over multiple consultations.

Figure 1. The spiral of change

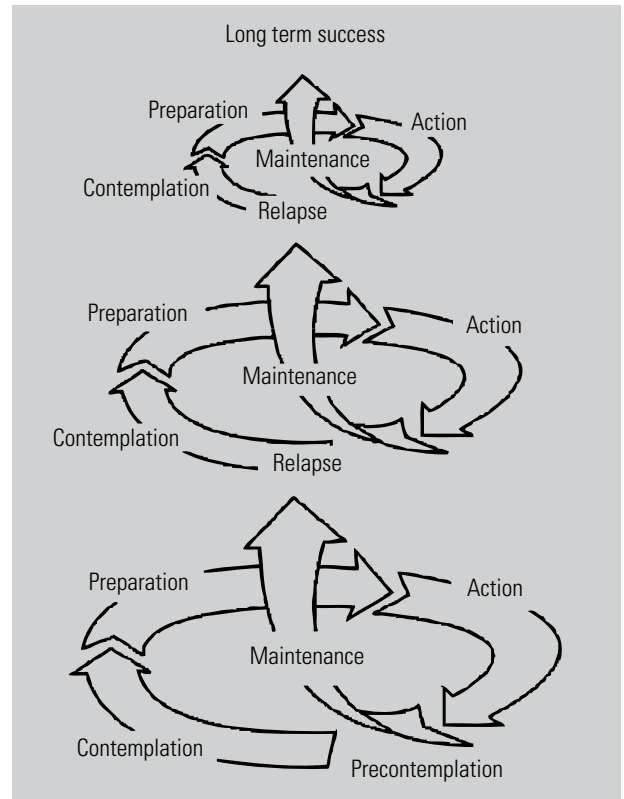
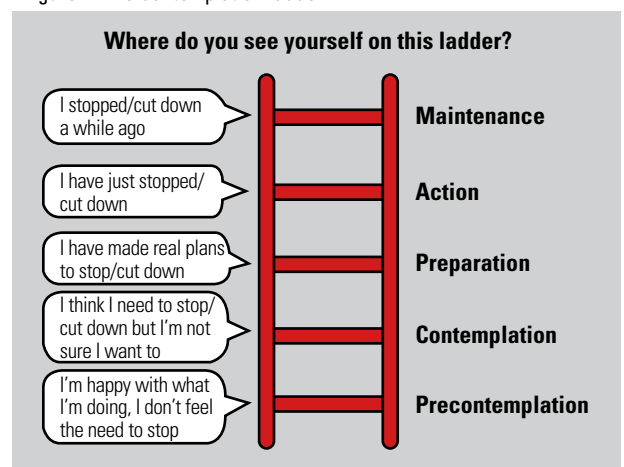


Figure 2. The contemplation ladder<sup>20,21</sup>



## Motivational interviewing

Motivational interviewing is a collaborative, person centred way of guiding the patient to elicit and strengthen motivation to change.<sup>12</sup> The goal is to increase intrinsic motivation rather than to impose it externally. Involving a flexible blend of informing, asking and listening, it works to evoke the patient’s own values, goals, insights, motivation and resources for change.<sup>14</sup> The approach to MI is expressed in the acronym GRACE: Generate a gap, Roll with

resistance, Avoid arguments, Can do, and Express empathy. These are summarised in *Table 1*.<sup>15</sup>

Motivational interviewing has been applied to many aspects of behaviour change ranging from alcohol and drug dependence, smoking cessation, weight loss, physical activity, the treatment of asthma and diabetes, adherence to treatment and follow up, and criminal activity. A systematic review and meta-analysis of randomised controlled trials using MI as the intervention found 74% of trials demonstrated a positive effect of MI. Measures of clinical relevance that improved with MI included body mass index, cholesterol, blood pressure, blood alcohol concentration, blood glucose, and length of hospital stay. The number of encounters and length of follow up was more important than the length of each encounter, with 64% of studies using brief encounters of 15 minutes being effective. Both psychologists and physicians obtained an effect in 80% of the studies.<sup>16</sup>

In a trial comparing GPs who were randomised to MI training to those who were not, the GPs trained in MI evaluated it to be more effective and no more time consuming than ‘traditional advice giving’.<sup>17</sup>

Table 1. Using GRACE in all stages of change

<p><b>Generate a gap</b></p> <p>The goal is to increase intrinsic motivation by generating a gap (between what the patient wants and what is) rather than to impose it externally</p> <p><b>Roll with resistance</b></p> <p>If resistance is encountered, alter the strategy used. Ambivalence is viewed as normal, not pathological, and is explored openly</p> <p><b>Avoid arguments</b></p> <p>Arguing increases resistance to change. It should be the individual and not the therapist who voices the arguments for change. The goal is to encourage the patient to hear themselves say why they want to change</p> <p><b>Can do</b></p> <p>Encourage self efficacy and hope. A person may perceive a serious problem but still will not move toward change unless there is hope for success</p> <p><b>Express empathy</b></p> <p>Listen, communicate acceptance and support and gently persuade while respecting personal views and choice</p>
--

## Changing behaviour in general practice

General practitioners manage many health issues within a limited period of time in each consultation. It is relatively simple to integrate brief interventions consisting of the provision of information and advice relevant to the health issues being dealt with. This may be triggered by the presenting complaint or from routine screening for risk factors. Patients who are ready to change can be provided with further assistance and follow up. Brief advice from a respected person such as a medical practitioner may be effective regardless of the stage of change.<sup>3</sup> However, by recognising different needs at each stage of change, approaches

Table 2. Stages of change using brief intervention and motivational interviewing approaches

	<b>Precontemplation (Not considering change)</b>	<b>Contemplation (Considering change)</b>	<b>Preparation (Planning change)</b>	<b>Action (Recent change)</b>	<b>Maintenance (Change established)</b>
<b>5As</b>	<ul style="list-style-type: none"> <li>• Ask</li> <li>• Assess</li> <li>• Advise</li> </ul>	<ul style="list-style-type: none"> <li>• Ask</li> <li>• Assess</li> <li>• Advise</li> <li>• Assist</li> </ul>	<ul style="list-style-type: none"> <li>• Ask</li> <li>• Assess</li> <li>• Advise</li> <li>• Assist</li> <li>• Arrange</li> </ul>	<ul style="list-style-type: none"> <li>• Ask</li> <li>• Assist</li> <li>• Arrange</li> </ul>	<ul style="list-style-type: none"> <li>• Ask</li> <li>• Arrange</li> </ul>
<b>FRAMES</b>	<ul style="list-style-type: none"> <li>• Feedback</li> <li>• Responsibility</li> <li>• Advice</li> <li>• Menu (options)</li> <li>• Empathy</li> <li>• Self efficacy</li> </ul>	<ul style="list-style-type: none"> <li>• Feedback</li> <li>• Responsibility</li> <li>• Advice</li> <li>• Menu (options)</li> <li>• Empathy</li> <li>• Self efficacy</li> </ul>	<ul style="list-style-type: none"> <li>• Feedback</li> <li>• Responsibility</li> <li>• Advice</li> <li>• Menu (options)</li> <li>• Empathy</li> <li>• Self efficacy</li> </ul>	<ul style="list-style-type: none"> <li>• Feedback</li> <li>• Responsibility</li> <li>• Advice</li> <li>• Menu (options)</li> <li>• Empathy</li> <li>• Self efficacy</li> </ul>	<ul style="list-style-type: none"> <li>• Feedback</li> <li>• Responsibility</li> <li>• Advice</li> <li>• Menu (options)</li> <li>• Empathy</li> <li>• Self efficacy</li> </ul>
<b>GRACE</b>	<ul style="list-style-type: none"> <li>• Build motivation</li> </ul>	<ul style="list-style-type: none"> <li>• Build motivation and strengthen commitment</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen commitment</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen commitment</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen commitment</li> </ul>

can be tailored to the individual's stage.<sup>18,19</sup> This is illustrated in *Table 2*, which maps the stages of change against some brief intervention and MI approaches.

A simple question that can help the GP to assess readiness to change and the right approach to use is: 'How do you feel about your smoking/drinking/lack of exercise?' The answer to this question will quickly establish if the person is ready to be given brief advice, or needs a gentler explorative approach using MI principles.

Medical practitioners are usually confident in helping people who have made a decision and commitment to change. Motivational interviewing fills the gap in providing strategies to explore ambivalence, build motivation and strengthen commitment in those who are uncertain or not yet considering change.

## Conclusion

General practitioners are respected, see the majority of the population and have continuity of care, which means they play an important role in enhancing health outcomes through changing behaviour. Each GP develops a personal communication style; while this personal style might be effective in changing behaviour in a proportion of patients, having a range of tools increases the GP's repertoire, allowing them to facilitate more change.

Conflict of interest: none declared.

## References

- Nutbeam D, Harris H. Theory in a nutshell: A practical guide to health promotion theories. 2nd edn. Sydney: McGraw-Hill, 2004.
- SNAP: A population health guide to behavioural risk factors in general practice. The RACGP, 2004. Available at [www.racgp.org.au/guidelines/snap](http://www.racgp.org.au/guidelines/snap).
- Nutrition and Health Foundation. Motivational aspects of behaviour change 2007. Dublin: NHF, 2007. Available at [www.nutritionandhealth.ie](http://www.nutritionandhealth.ie) [Accessed 12 April 2009].
- Oenema A, Brug J. Feedback strategies to raise awareness of personal dietary intake: Results of a randomized controlled trial. *Prev Med* 2003;36:429–39.
- Resnicow K, Davis RE, Zhang G, et al. Tailoring a fruit and vegetable intervention on novel motivational constructs: Results of a randomized study. *Ann Behav Med* 2008;35:159–69.
- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. United States Department of Health and Human Services, 2000. Available at [www.surgeongeneral.gov/tobacco/treating\\_tobacco\\_use.pdf](http://www.surgeongeneral.gov/tobacco/treating_tobacco_use.pdf) [Accessed 8 April 2009].
- Miller WR, Rollnick S. Motivational interviewing: Preparing people for change. 2nd edn. New York: The Guilford Press, 2002.
- Wens J, Vermeire E, Royen PV, Sabbe B, Denekens J. GPs' perspectives of type 2 diabetes patients' adherence to treatment: A qualitative analysis of barriers and solutions. *BMC Fam Pract* 2005;6:20.
- Vogt F, Hall S, Marteau TM. General practitioners' and family physicians' negative beliefs and attitudes towards discussing smoking cessation with patients: A systematic review. *Addiction* 2005;100:1423–31.
- DiClemente CC, Prochaska JO. Self change and therapy change of smoking behaviour: A comparison of processes of cessation and maintenance. *Addict Behav* 1982;7:133–42.
- Prochaska JO, DiClemente CC, Norcross JC. In search of how people change: Applications to addictive behaviours. *Am Psychol* 1992;47:1102–14.
- Miller WR, Rollnick S. Ten things that motivational interviewing is not. *Behav Cogn Psychother* 2009;37:129–40.
- Miller WR, Sanchez VC. Motivating young adults for treatment and lifestyle change. In: Howard G, editor. *Issues in alcohol use and misuse by young adults*. Notre Dame: University of Notre Dame Press, 1994.
- Rollnick S, Miller WR, Butler CC. Motivational interviewing in health care: Helping patients change behaviour. New York: Guilford Press, 2008.
- Winarski J, Silver S, Kraybill A. Motivational interviewing: Applications for PATH service providers – an edited transcript of the PATH national teleconference call. Available at [http://pathprogramarchive.samhsa.gov/text\\_only/tech\\_assist/Transcripts/MotivationalInterviewing\\_2\\_2003.asp](http://pathprogramarchive.samhsa.gov/text_only/tech_assist/Transcripts/MotivationalInterviewing_2_2003.asp).
- Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: A systematic review and meta-analysis. *Br J Gen Pract* 2005;55:305–12.
- Rubak S, Sandbaek A, Lauritzen T, Borch-Johnsen K, Christensen B. An education and training course in motivational interviewing influence: GPs' professional behaviour – ADDITION Denmark. *Br J Gen Pract* 2006;56:429–36.
- Evers KE, Prochaska JM, Prochaska JO, Driskell MM, Cummins CO, Velicer WF. Strengths and weaknesses of health behaviour change programs on the internet. *J Health Psychol* 2003;8:63–70.
- Evers KE, Cummins CO, Prochaska JO, Prochaska JM. Online health behavior and disease management programs: Are we ready for them? Are they ready for us? *J Med Internet Res* 2005;7:e27.
- Baker A, Kay-Lambkin F, Lee NK, Clare M, Jenner L. A brief cognitive behavioural intervention for regular amphetamine users. Canberra: Australian Government Department of Health and Ageing, 2003.
- Biener L, Abrams DA. The contemplation ladder: Validation of a measure of readiness to consider smoking cessation. *Health Psychol* 1991;10:360–5.