A PHYSICIAN LEARNING RESOURCE FROM THE MINTO PREVENTION AND REHABILITATION CENTRE, UNIVERSITY OF OTTAWA HEART INSTITUTE AND THE ADDICTION MEDICINE SERVICE, CENTRE FOR ADDICTION AND MENTAL HEALTH, UNVERSITY OF TORONTO

## **Getting beyond** "Now is not a good time to quit smoking" **Increasing motivation to stop smoking**

BY MARILYN HERIE, PHD, RSW, AND PETER SELBY, MBBS, CCFP, MHSC, FASAM

Motivational interviewing (MI) is an evidence-based approach to working with patients who are ambivalent or reluctant about changing their use of tobacco. Using the "Stages of Change" model as a framework, MI suggests specific therapeutic strategies that are dependant on a patient's readiness to change. The principles of MI include avoiding arguing with patients, expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy. MI has been examined in a host of diverse health behaviours and a number of research studies demonstrate support for its use in brief tobacco cessation interventions. Even without formal training in MI, there are a number of practical tips and strategies that practitioners can use to make brief interventions more motivational. This issue of Smoking Cessation Rounds outlines the basics of this promising approach, which was designed specifically for people who are not yet ready to consider changing their behaviour.

## "I know it's bad for me, but I love smoking"

The above patient statement illustrates a core clinical dilemma: How can we promote change in people who are unwilling, resistant, or unmotivated? Health practitioners often feel frustrated by patients who continue to use tobacco despite serious health and social consequences. Population-based approaches, such as warning labels on cigarette packages, public information, and indoor smoking laws are effective in getting many smokers to quit; however, 20% of Canadians continue to smoke despite these efforts.2 If advice and information are insufficient to induce change, what can busy health practitioners with limited time do?

MI was developed by William Miller in the late 1980s,<sup>3</sup> as a way to employ a nonjudgmental approach to enhance a patient's motivation for change. It was first developed in the addiction field, but has since been evaluated with a diverse range of other health behaviours and issues, including mental health, exercise, medication adherence, 6,7 cardiac rehabilitation, diabetes and obesity, 9,10 and smoking, 11,12 The expansion of MI beyond addictions may be due to its clinical utility, ease of use, and congruence with core values of counselling and therapy: therapist empathy, genuineness, and warmth. 13 In addition, MI has been shown to be effective in both brief and more extended interventions and in a variety of settings and contexts. 14,15

## What is motivational interviewing?

In essence, MI is a directive, patient-centered style of counselling that helps people to explore and resolve their ambivalence about changing. Techniques involve listening reflectively, eliciting self-motivational statements (or "change talk"), examining ambivalence, avoiding confrontation, and not pushing for change prematurely. 16 This approach is congruent with the key principles of tobacco cessation strategies, which assert that there is "no wrong door" to cessation interventions, no one is too old or too young for cessation counselling, and (perhaps most important), there is no such thing as failure. The latter point addresses the chronic and relapsing nature of tobacco use and cessation, and acknowledges that slips and relapses can be reframed as learning opportunities.

MI also provides a useful vehicle for building rapport quickly and efficiently: "With its empathic style, motivational interviewing seems an ideal way to engage new clients in treatment, a psychological handshake that avoids gripping too tightly, yet subtly steers the patient in the intended direction."<sup>17</sup> Therefore, the MI approach assumes that people are



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ambivalent about changing any behaviour, recognizes that there are both good and less-good aspects of problem behaviours, and notes that when people sense a threat to their freedom or choice, they think and act in ways to restore perceptions of their choice and freedom (reactance). This perspective suggests that, motivation should not be thought of as a personality problem or as a trait that the person carries through the clinician's doorway. Rather, motivation is a *state* of readiness or eagerness to change, that may fluctuate from one time or situation to another, and can be influenced by the practitioner. From this standpoint, brief interventions work because they can provide a "motivational boost and head start on behaviour change." 18

## Principles and strategies of motivational interviewing

Research on motivation and change has articulated a number of "active ingredients" in motivational interventions. These ingredients – summarized by the acronym "FRAMES" – include providing personalized Feedback to the patient about his or her health risks and consequences; encouraging patients to take Responsibility for change; offering neutral, nonjudgmental Advice; offering a Menu of treatment options; using Empathic listening and reflection; and believing in the patient's ability to come up with solutions and make changes (Self-efficacy). 16

The general counselling style of MI is complemented by the transtheoretical model of behaviour change developed by Prochaska and DiClemente.<sup>19</sup> Their "stages of change" model outlines 6 well-defined, predictable experiences that all individuals pass through when resolving a problematic behaviour:

- precontemplation (denial/lack of awareness of the problem)
- contemplation (ambivalence toward change, feeling "stuck")
- preparation/determination (concrete resolution to change, but still somewhat ambivalent)
- action (actually initiating behaviour change)
- maintenance (prevention of relapse)
- termination (complete resolution of the problem)<sup>20</sup> or relapse.<sup>21</sup>

Note that individuals do not necessarily pass through the stages of change in a linear fashion; rather, they move back and forth between stages as a function of motivation, readiness, and other factors influencing change. Although the model was developed to explain smoking cessation, it has been applied to recovery from a wide range of appetitive disorders, including eating disorders, panic and anxiety disorders, and patients with brain injury.<sup>20</sup>

Therapeutic tasks vary depending upon the patient's stage in the change process. These tasks, or motivational strategies, are summarized in Table 1. By responding differently to patients at different stages of change, practitioners can tailor their interventions to fit their clients' motivational readiness. Attempting to push a client toward change before he or she is ready can engender resistance and hamper motivation, (eg, by encouraging a precontemplator to consider attending a smoking cessation group). Instead, the clinical goal is to assist patients in moving from one stage to the next: by raising doubt in a precontemplator's mind, the counsellor opens the door to contemplating change. By

Table 1. Stages of change and motivational tasks<sup>16</sup>

Client stage	Motivational tasks
Precontemplation	Raise doubt - increase the patient's perception of risks and problems with current behaviour
Contemplation	Tip the balance - evoke reasons to change, risks of not changing; strengthen the patient's self- efficacy to change current behaviour
Preparation	Help the patient to determine the best course of action to take in seeking change
Action	Help the patient to take steps toward change
Maintenance	Help the patient to identify and use strategies to prevent relapse
Relapse	Help the patient to renew the processes of contemplation, determination, and action, without becoming stuck or demoralized because of relapse

encouraging a contemplator to "tip the balance" in favour of the change, the clinician paves the way to preparation, and on to action.

With respect to counselling "style," practitioners are encouraged to emphasize personal choice and control and to work in partnership with the patient. The 5 key principles of motivational interviewing summarize the essence of this approach.<sup>16</sup>

- 1. Avoid arguing (emphasizing personal choice and control can be helpful in this: "Yes, it may be that you're not ready to quit. What you do is entirely your choice. It's really up to you.").
- 2. Express empathy (let the patient know that he or she has been understood: "So you're feeling angry because your parents made you come here and talk with me today, and you're not even convinced that your smoking is a problem.").
- 3. Develop discrepancy (ie, between the patient's behaviour and personal values: "So, on the one hand, you tell me that you want to be a good parent, but you also mention that you're concerned about the example you are setting for your son by smoking. How does that fit for you?").
- 4. Roll with resistance (ie, meet resistance with reflection: "So you're not so sure that you even need to consider changing your tobacco use right now").
- 5. Support self-efficacy (optimism that the patient is capable of making the change: "I have seen other people succeed before with this exact level of tobacco use.").

The principles of developing discrepancy and rolling with resistance are especially important in brief cessation counselling. Often, clinicians are inclined to implement "action stage" strategies, while the patient is still in the precontemplation or contemplation stages of the change process. The following examples illustrate 2 scenarios in response to a client statement:

# Example 1: A counter-motivational response to a precontemplative patient

Patient: I know you think I should be worried about my smoking, but I'm not.

*Health Practitioner (HP):* Well perhaps you would consider trying the patch. Continuing to smoke will make your asthma even worse than it is now.

Patient: So yes, it's bad for me, but things are really stressful right now.

HP: Well, quitting smoking is one of the most important things you can do to improve your health. I really encourage you to consider the patch, or even attend a smoking cessation group.

Patient: Thanks, I know it's a problem. I'll think about it.

# Example 2: A motivational response to a precontemplative patient

Patient: I know you think I should be worried about my smoking, but I'm not.

HP: If you believe there might be any cause for concern about your smoking, then it might be something worth exploring. [rolling with resistance]

Patient: Well, my asthma is pretty bad. I just am feeling so stressed right now, I can't even think about quitting.

HP: So, it may be that smoking is something that will always be a part of your life, in spite of your concerns. [developing discrepancy]

Patient: No way! I need to do something – I just can't imagine life without cigarettes.

HP: So, it's not so much whether you want to quit, it's how you could do it that's a barrier. [listening reflectively]

Patient: Exactly – I tried stopping cold turkey, and I only lasted one day. It was awful.

HP: Well, would it be helpful to talk about some medication that can minimize those withdrawal symptoms? [asking permission]

*Patient:* Sure – is that possible?

In the first example, an "action strategy" is presented by the clinician as a response to a resistant (precontemplative) patient statement. The clinician is clearly the "champion" for change, while the client's investment in change is minimal. This example is in line with evidence that smokers report increased resistance to their general practitioner's (GP's) regular inquiries regarding their smoking status.<sup>22</sup> The second example illustrates how *rolling with resistance* and *developing discrepancy* can open up conversational ground and facilitate a discussion of possible cessation treatment. In the second example, the client is more active in articulating reasons for change and exploring options. In addition, the example shows how MI can be incorporated in a very brief (ie, <5 minutes) intervention.

In summary, MI provides practitioners with an alternative approach to confronting patients about their smoking and directing them to suitable treatment. By targeting interventions to the individual's stage in the change process and using key strategies to assist them in resolving their ambivalence, motivation is more likely to be strengthened and change is more likely to occur. Even in very brief interventions, MI can be effective in promoting patient-practitioner collaboration and increasing the salience of smoking and its impact on health.

# The evidence base for using MI in brief tobacco cessation interventions

In their review of motivational interventions in health settings, Britt, et al noted that "the greatest support for the efficacy of MI as applied to health behaviour change is from smoking cessation studies." They cited 3 studies that demonstrated superior outcomes for MI versus comparison groups. Stotts et al used a randomized controlled trial (RCT) to examine MI as a strategy to promote tobacco cessation among resistant late-pregnancy smokers; Valanis et al employed a quasi-experimental design to examine maternal smoking cessation, using self-report data; and Emmons et al used an RCT to evaluate the efficacy of MI in reducing environmental tobacco smoke in households of parents with young children (aged <3 years).

More recently, Colby et al<sup>26</sup> evaluated the efficacy of a brief motivational intervention with adolescent patients in hospital outpatient or emergency settings using an RCT design. Patients received either 1 session of MI or standard brief advice (BA), and were not actively seeking cessation treatment. Although overall changes (measured through bio-chemical markers and self-reports) were small, results of this study favoured the MI approach.

In a study addressing cessation and MI interventions among African American patients, results appeared to be less favourable for MI. A 2 X 2 factorial, RCT was used to evaluate the efficacy of nicotine gum (versus placebo) and counselling (MI versus health education) with 775 African American light smokers.<sup>27</sup> In this study, quit rates for nicotine gum were no better than for placebo at the 6-month follow-up; however, health information performed significantly better than MI. When predictors of quitting in this study were examined, Nollen et al<sup>28</sup> found directive, advice-oriented counselling to be predictive of quitting.

One of the issues in comparison studies of MI relates to the clinician's adherence to the overall philosophy and approach – that is, is MI actually being delivered and evaluated? Miller et al<sup>29</sup> noted that "protocol drift" is an issue in some clinicians' deliveries of motivational (and other evidence-based) interventions and that treatment trials often fail to specify which strategies and measures were used to ensure adherence. In addition, there may be cultural and other individual factors that determine whether MI versus a more directive approach is preferred by patients.<sup>30</sup>

Francis et al<sup>31</sup> explored a less well-considered issue: How does a patient's resistance to changing his/her smoking behaviour affect a practitioner? Using an experimental manipulation of patient resistance in role-playing, the authors randomly had participants in an MI workshop interview a standardized patient (SP) who had been briefed to portray either high or low levels of resistance to quitting smoking. Taped interviews were then scored for each practitioner's confrontation and empathy. Significant quantitative and qualitative differences were found between the two conditions, with higher levels of confrontation exhibited by practitioners who interviewed the resistant SP. The authors noted that patient resistance may have a "pervasive negative effect" on a practitioner's style of questioning, information, and advice-giving, and expressions of empathy and encouragement.

The difficulty of maintaining a motivational approach in the face of patient resistance is consistent with the suggestion that "learning MI involves at least 2 processes, one being adding preferred behaviours, and another being suppression of non-preferred behaviours.<sup>32</sup>" Non-preferred behaviours include confrontations, giving advice or raising concern without permission, directing, and threatening negative consequences.

In spite of the above-mentioned challenges and pitfalls in applying MI, it is important to note that the approach can be readily learned and practiced, particularly when training is followed-up with clinical supervision or coaching.29 For example, in a study of the impact of a 3-hour MI training session on smoking cessation counselling, medical residents reported significantly increased confidence in counselling ability, greater frequency of counselling, and increased use of MI to assess the importance of quitting smoking.<sup>33</sup> Similarly, 1st-year medical students trained in patientcentered tobacco interventions (that incorporated MI skills and strategies) exhibited increased therapeutic attitudes, knowledge, and skills at 2-months posttraining.34 In addition, over half the students in this study had applied the intervention with patients, often for non-tobacco-related behaviours. These studies demonstrate the benefits that even brief MI training can have for practitioners who are unfamiliar with the approach.

Finally, it is important to emphasize the robust and growing evidence-base for motivational interventions across diverse health behaviours. <sup>14,35</sup> Even when there is limited evidence that MI produces treatment outcomes that are superior to other interventions, data suggest that MI may work faster than traditional counselling approaches. <sup>36</sup> This underlines the relevance and applicability of MI to brief cessation counselling.

# **But I only have 10 minutes (or less)!**Some practical strategies

The final section below suggests tools and strategies that can be readily incorporated into brief tobacco cessation interventions. These have been somewhat adapted from Miller and Rollnick, <sup>16</sup> but stay true to the essential philosophy and principles of MI.

### **Providing information**

Information and advice are central to brief interventions. However well-intentioned, advice can often backfire, resulting in increased client resistance and practitioner confrontation. Two simple modifications to traditional ways of providing information can make a major difference in how patients hear and respond to it. First, always "ask permission." Practitioners frequently offer advice without including this first step; however, asking permission invites patients' conversational consent. Some examples:

- Is this a good time to talk about your smoking?
- Would it be helpful to explore some ways to assist you in cutting down or quitting?
- Can we spend a couple of minutes going over how your smoking is affecting your other health concerns?

If the patient agrees to the request (ie, gives permission), he or she may be more likely to hear and absorb

the information. At the very least, asking permission signals respect for the patient's autonomy and choice around their behaviours and the content of the consultation. If the patient refuses the request for permission, it is unlikely that the advice or information provided would have been heeded in any case. If a patient declines (refuses permission), it is useful to respond by asking to raise the topic again in the future: I'm hearing that this isn't something that you're prepared to talk about right now [reflective statement] but, as your doctor, I think it's important to re-visit this down the road – Is that OK with you? [request for permission]

Patients are likely to agree to the above request, paving the way for a potentially useful intervention during a subsequent visit. Asking permission before opening a conversation about tobacco use can help to determine how our limited time can be best spent: could we more productively address other patient concerns?

Our second suggestion for providing advice or information relates to assessing whether the information has been understood by the patient. After giving information or advice, a typical question asked by practitioners is, "Do you have any questions?" Quite often, the patient's response is "No." A more fruitful question to ask is some variant of the following:

- What do you make of what I've just shared with you?
- How does this information fit for you?

Either (or both) of these questions invites the patient to rephrase the information in his or her own words and, thus, increases the salience of the information for his or her unique situation and circumstances.

Incorporating these 2 simple strategies into how information or advice is given can increase patients' readiness to engage in a discussion about tobacco use, and can enhance retention and perceived relevance of the information provided.

# Evoking doubts or concerns: the decisional balance

The use of the "decisional balance" can be a powerful way to juxtapose a patient's values with his or her behaviour. Although MI has been conceptualized as an explicitly non-confrontational approach, it may be more accurate to say that MI invites the patient to confront him – or herself. Essentially, a decisional balance invites a person to "weigh" the pros and cons of a given behaviour. This strategy acknowledges that people act in certain ways because there are benefits to doing so, as well as negative consequences or harms.

Another goal of the decisional balance is to elicit "change talk" (expressed concerns about smoking). Thus, an MI approach for using this tool encourages patients to explore the *negative* side of their smoking in greater detail and depth than the *positive* side. This can be accomplished by first asking the patient to list the benefits of smoking, eg, "What's good about smoking?", or "What do you like about smoking?" Then, some specific, targeted questions can be asked in response to patients' identification of the "less-good" things. These are outlined in the following steps:

1. What's good about your smoking? or, What do you like about your smoking? What else is good about



- it? (Encourage the patient to list all of the good things that he or she can think of.)
- 2. What about the other side? What's not so good about it? (The patient identifies things that are less-good.)
- 3. Instead of proceeding to the next less-good thing, the practitioner asks, "Is that a concern for you?" (If "no," go on to the next less-good thing, if "yes," practitioners asks... see #4)
- 4. Can you give me an example? or, How does that affect you?

Questions 3 and 4 (above) encourage patients to explore and uncover discrepancies between their smoking behaviour and their underlying values. This can often lead to very powerful reflections and "aha!" moments on the patients' part. The following case example demonstrates the use of reflective listening and targeted MI questioning – within the overall framework of the decisional balance – as a way to quickly and effectively develop discrepancy.

HP: What's good about your smoking?

Patient: It's a great way to relieve stress in my job. And my partner smokes too.

(The HP continues asking about the good things until patient lists all she can think of.)

HP: What about the other side? What's not so good about it?

*Patient:* Well, my daughter is turning 11 this year, and she's been on my case to quit. I'd hate for her to start smoking when she's a teen.

(HP stays with this statement, instead of moving on to ask about other less-good things.)

HP: How your daughter sees you... is that a concern for you?

Patient: Yes! I want to be a good parent to her, and I feel really guilty when I think about all the years she's watched me smoke.

HP: Can you give me an example of a time when you felt guilty?

Patient: This morning. She was getting ready for school, and I was smoking in our backyard. I looked up, and I saw her watching me through her bedroom window...just watching me.

HP: You didn't realize she had been watching you from her window. How did that affect you?

Patient: I just felt so bad. I wished I could have hidden, and it really made me think.

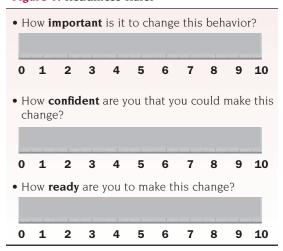
HP: So, on the one hand, you say that quitting is not an option, because it will be so difficult. But, on the other hand, being a good parent is a big priority, and smoking is standing in the way of that. How do those two things fit together?

This example invites the patient to confront herself about her desire to be a good parent, and her simultaneous resistance to quitting. The decisional balance, used in this way, can be a powerful tool for generating discrepancies and inviting patients to explore their ambivalence more deeply.

## The Readiness Ruler

The Readiness Ruler provides another way to address a patient's ambivalence towards change. It can

Figure 1. Readiness Ruler16



be used as a paper-and-pencil tool (Figure 1) or verbally in conversation. When using this tool, it is important to note that people usually have several things they would like to change in their lives, and tobacco use may be only one of those things. Thus, *importance*, *confidence*, and *readiness to change* smoking behaviour can vary, depending on other priorities. The patient is then asked to circle the number (from 0 to 10) on each of the rulers that best fits with his or her assessment of the importance of changing, confidence that change is possible or feasible, and overall motivation to change.

A few key follow-up questions to the Readiness Ruler can elicit a richer exploration of ambivalence towards cessation or change:

- Why are you at (current score) and not "0"?
- What would it take for you to get from (current score) to (higher score)?
- What has made the thought of quitting smoking this important to you so far, as opposed to it being unimportant (zero)?
- What would it take to make quitting smoking even more important to you?

The Readiness Ruler is a quick and simple tool to administer in the context of a brief intervention, and can be used multiple times to re-assess patients' motivation and ambivalence.

#### Personalized feedback

The last motivational strategy is encouraging patients to access one of the many online personalized feedback web resources focused on tobacco use, or more generally on health. Patients are not always willing to disclose unhealthy or risky behaviours to health practitioners, yet, it is crucial that they understand the risks and consequences of engaging in smoking and other harmful behaviours. Providing a short handout with a list of useful online self-assessment sites can enhance motivation if patients follow through. The web resources at the end of this issue contain a number of excellent online self-assessment tools. Remember to ask permission before providing patients with this information!



#### Conclusion

This issue has explored these questions: "What makes people change?" "What is motivation?" and, most importantly, "How can we influence change in the context of brief cessation interventions?" The strong evidence base for MI points to this approach as a practical and effective adjunct to cessation efforts. Given the enormous risks to morbidity and mortality, integrating strategies that may enhance motivation - and cessation - is key. Even without formal training in MI, there are a number of practical tips and strategies that can make brief interventions more motivational. Getting to "yes," even with patients who are reluctant to make changes to their tobacco use, is possible.

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A great many books and research articles have been published on Motivational Interviewing. A comprehensive bibliography from 1983-present can be found at:

http://motivationalinterview.org/library/biblio.html

#### Other Websites Related to Motivational Interviewing

Motivational Interviewing Homepage

http://www.motivationalinterview.org/

MI Training for New Trainers (TNT) Workbook

http://www.motivationalinterview.org/training/tnt2004.pdf

Manual for the Motivational Interviewing Skills Code (MISC)

http://casaa.unm.edu/download/misc.pdf

Brief coding form to assess motivational interviewing practice

http://www1.od.nih.gov/behaviorchange/measures/mi.htm

Behaviour Change Counselling Index (BECCI) - A tool for assessing MI

Practice in Clinicians (Scale and coding)

http://www.cardiff.ac.uk/medicine/general\_practice/csu

Enhancing Motivation for Change in Substance Abuse Treatment (1999), online book by Dr. Bill Miller

http://www.motivationalinterview.org/library/TIP35/TIP35.htm

Online Personalized Feedback and Self-help

Smokers' Helpline Online

http://www.smokershelpline.ca/

Online Support for Pregnant Women who Smoke http://www.pregnets.org/support/

Cost of Smoking Calculator

http://www.cancer.ca/files/cw/calculator/cw\_popup.html

Harvard Center for Cancer Prevention: Your Disease Risk

http://www.vourdiseaserisk.harvard.edu/

Heart Disease Risk Calculator

http://www.mayoclinic.com/health/heart-disease-risk/HB00047

Living to 100 - Online Questionnaire and Feedback

http://www.livingto100.com

Nutrition and Fitness Goals

http://www.sparkpeople.com

Dieticians of Canada eating and activity tracker

http://www.eatracker.ca

Panic Centre - Anxiety Test

http://www.paniccenter.net/wb%2Ddat/

#### **Further Information on Brief Tobacco Interventions:**

Information and training on brief tobacco interventions and training for Physicians, Pharmacists and Dentists (Clinical Tobacco Intervention, CTI): http://www.omacti.org/

Information and training on brief tobacco interventions for other health professionals (Program Training and Consultation Centre, PTCC):

http://www.ptcc-cfc.on.ca/learn/learn.cfm

Best Practice Guidelines for Nurses - Brief Tobacco Interventions: http://www.rnao.org/bestpractices/PDF/BPG\_smoking\_cessation.pdf

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