Pre-reading for participants

EVIDENCE BASE FOR MOTIVATIONAL INTERVIEWING IN RESPIRATORY HEALTH CARE: A BRIEF SUMMARY BY KARINA CZYZEWSKI, MARILYN HERIE, STEPHANIE COHEN AND PETER SELBY

What is Motivational Interviewing?

Health care systems are placing increasing emphasis on client-centered care, participatory or shared decision making, and improved clinician-patient relationships—all within the context of evidence-based and brief interventions. One approach that is consistent with these principles is Motivational Interviewing (MI), defined as "a collaborative conversation style for strengthening a person's own motivation and commitment to change."[1] MI was first developed beginning in the 1980s to address addictions, and is now well-researched across a variety of health behaviour domains.[2] It is "an empirically supported, theoretically consistent and rapidly diffusing approach which improves the quality of the clinician-patient interaction."[2] Over the last 30 years, more than 1,000 articles have been published and over 200 randomized clinical trials have been conducted, contributing to a robust evidence base to inform practice.[3]

This document provides a brief overview of the MI counselling approach as well as research support for MI applications in respiratory health care.

Foundation skills of MI

O – Open-ended questions
A – Affirmations
R – Reflective listening
S – Summary statements

Why practise MI?

Evidence for the effectiveness of MI has been shown for a diversity of health behaviours[4] including sexual health, dietary change, physical activity, diabetes, mental health, addictions, chronic pain, self-care, smoking cessation and child health, as well as criminal justice.[5,6] Of course, MI (like other psychosocial interventions) is not a panacea; the effects of MI diminish over time and the meta-analyses reveal an overall small to medium-size effect. Moreover, the outcomes of any intervention are impacted by practitioners' skills and client-related factors.[7] When compared with

other interventions, MI tends to be effective about 75% of the time, a treatment outcome rate consistent with outcomes for other clinical interventions.[3] In addition, studies on MI have found that MI interventions take, on average, *100 fewer minutes* to produce the same results as other talk-therapy interventions (such as cognitive-behaviour therapy or psychoeducation).[4] The evidence base and efficiency of MI interventions make this approach a good fit within the context of busy health-care environments.

What makes MI effective?

"CHANGE TALK"

MI has been shown to enhance treatment engagement and retention, client goal-setting and behaviour change, motivation, and client-practitioner collaboration, leading to more durable treatment outcomes. In one study using Project MATCH data, Moyers et al.[8] analyzed video recordings of MI therapist-client interactions using a validated MI coding instrument (Motivational Interviewing Treatment Integrity code [MITI[9]]). The authors found that therapists' skillful use of MI-*consistent* statements led to significantly increased levels of clients' "change talk"; whereas therapists with a greater proportion of MI-*inconsistent* statements evoked increased counter-change, or "sustain," talk from their clients. Perhaps most important, clients who expressed significantly more change talk demonstrated significantly better treatment outcomes at follow-ups two years later. Specifically, change talk at the end of the session is predictive of change. Moyers' hypothesized causal chain for MI can be expressed as:

> Therapist **MI-consistent** speech → Increased client **change talk** → Improved treatment outcomes[3]
>
> Whereas:
>
> Therapist **MI-inconsistent** speech → Increased client **sustain talk** → Maintaining status quo or client counter-change[3]

What is client "change talk"?

The acronym "DARN CAT" captures two categories of change talk:

- *Preparatory change talk* is reflected in statements expressing a person's **D**esire, **A**bility, **R**easons or **N**eed for change.
- *Commitment language* is reflected in statements expressing **C**ommitment, **A**ction or **T**aking steps toward change.

What are MI-inconsistent statements by practitioners?

The following behaviours tend to evoke sustain talk (and should be avoided if the goal is to enhance motivation):

- directing
- informing (without asking permission)
- warning or threatening
- reassuring or praising
- confronting.

THE "SPIRIT" OF MI

The "spirit" of MI is expressed by the acronym **P-A-C-E**:

- Partnership
- Acceptance
- Compassion
- Evocation.

At the heart of the MI approach is a core philosophy or "spirit." This spirit can be reliably measured and can predict client responsiveness and treatment outcome.[2] Therefore, it is important that practitioners understand and behave in a way that is consistent with partnership, acceptance, compassion and practitioner evocation of a patient's goals, concerns, hopes and priorities for change. Absolute worth, accurate empathy, autonomy support and affirmation are the hallmarks of MI spirit.

MI-consistent practitioner targets

- Two reflective statements for each question asked
- At least 50% complex (vs. simple) reflections
- No more than 50% of therapist talk time

REFLECTIVE LISTENING

Reflective listening on the part of the practitioner helps patients to explore and clarify their ambivalence about changing.[10] Reflective listening is the most central of the

MI microskills, and can be the most challenging to practice fluently and effectively. However, with practice it is learnable and can positively impact therapeutic alliance, trust and rapport.

What does this mean for respiratory care?

Research suggests a number of ways to consider and apply MI microskills in respiratory health settings:

- Clients with chronic illnesses such as asthma or Chronic Obstructive Pulmonary Disease (COPD) often experience a loss of control. Exploring personal change goals and goal-setting can contribute to restoring that sense of control.[11] Promoting clients' autonomy and acknowledging that they have choices makes clients active participants in their health care (as opposed to passive recipients of treatment interventions and practitioner advice).
- Treatment plans need to be tailored to the needs of each client.[12] Individuals have diverse needs and therefore require personalized support and care, including individualized feedback.[13]
- Patients' perceptions about their respiratory illness or treatment plans often impair motivation.[14] However, motivation is malleable and can be influenced by the practitioner—client "denial" or "resistance" is often directly related to how the practitioner interacts with the client[13,15] and can actually serve to reinforce unhealthy behaviour.[14]
- A strong rapport with clients is the foundation of an effective therapeutic relationship.[16] In this context, rapport is developed through practitioners' non-judgmental warmth, empathy and respect, as well as humility, curiosity and *low investment*—that is, a "shift from expert advice and admonition" towards promoting clients' ownership of their health issues and behavioural choices or strategies.[13] The use of an MI-consistent approach can help transform a client's negative beliefs and attitudes about his or her health, leading to goal attainment and maintenance of change.[11]
- Some authors suggest that "compliance" or "adherence" are problematic terms and do not resonate with the collaborative approach so characteristic of MI. Lask suggests the use of the term *concordance*, while Naar-King and Suarez emphasize the importance of *self-management* in supporting and promoting autonomy.[14,17]

Evidence for the effectiveness of MI in respiratory care

As a counselling style, MI seeks to help patients explore and resolve their ambivalence about behaviour change.[18] In respiratory health care, three main themes emerged from an Ontario-based curriculum planning group of respiratory health care practitioners who provided guidance and expertise in developing materials for the Centre for Addiction and Mental Health's *Motivational Interviewing in Respiratory Health Care* trainers' toolkit.[19] The themes from the curriculum planning group included: (1) *asthma and youth*, (2) *medication concordance and self-efficacy*,

and (3) *respiratory health and common concurrent concerns* (smoking, substance use, and mental health concerns). Although further research is needed in MI specific to respiratory care settings and practice, the results of studies relevant to each of these three key themes are summarized below.

(1) ASTHMA AND YOUTH

Asthma management with younger clients is a significant clinical practice concern. Some research supports MI for asthma management and medication concordance through regular school nurse visits,[20] text messaging, [20] and at-home visits by a health care professional.[22] These studies highlight the creative use of MI in various settings toward the goal of increasing self-monitoring and client self-care. They also underscore the complexity of the dimensions surrounding younger clients' health concerns, as well as the need to understand the context in which a respiratory condition like asthma is aggravated or alleviated.

A number of behaviour change areas relevant to youth with asthma derive from the many environmental factors that can exacerbate asthma, such as dust, dander and exposure to environmental tobacco smoke. Asthma triggers may come in the form of:

- smoke from fire
- road dust
- an undusted home
- a poorly ventilated, small space that has accumulated items that collect dust
- the presence of pets
- second-hand tobacco smoke and third-hand smoke.

Younger clients and their families may benefit from brief motivational interventions targeting these environmental triggers. For example, interventions focused on addressing environmental smoke, dust or pets need to involve and engage the whole family, including parents or caregivers.

In addition, some factors are more psychosocial: a youth may avoid taking her medication because she sees stepping out of class or taking meds as potentially jeopardizing her social inclusion and sense of herself as "normal." Moreover, a youth's parents may believe that the prescribed treatment is actually harmful (for example, the belief that steroids will stunt growth). It is important for health care professionals to understand the broader environmental, social and emotional context in which health is affected and health decisions are made, so as to collaborate in the development of the most appropriate treatment plan for that individual and family.

Family-focused approach

The client's home environment and family dynamics are critical. Family-centered care is essential, as parents or caregivers play a major role in helping to manage this

chronic condition. Channon and Rubak, in *MI with Adolescents and Young Adults*, note that the family is actually key to the process of change.[17] For example, family functioning and parents' beliefs about the seriousness of the illness can create real barriers toward treatment.[16]

Some parents may have strong beliefs with regards to how the respiratory health professional should intervene;[17] the latter may find himself/herself forced into a mediator position between the child or youth and the caregiver. *Neutrality* in this situation will facilitate an open-minded approach to a conversation exploring concerns and outcomes.[17]

Although meeting the expectations of a parent is a strong predictor of the parent's support for the treatment plan, it is essential to empower youth to create their own personal change goals;[13] youth may disengage if treatment focuses solely on their parents' goals. However, if the parent and youth have similar questions, concerns or doubts about recommended treatment, it may be helpful to complete a shared list of the pros and cons of changing versus staying the same.[17]

Caregivers may have to adjust parenting techniques to reflect a child's emerging needs for independence, embracing the child's growing autonomy.[17] The balance of guiding with appropriate directing and following that characterizes MI also represents good parenting.[17] MI reinforces parental motivation and practices that are supportive of the child's chronic condition by increasing monitoring and parent-child communication.[13] Furthermore, research suggests MI resonates well with teens due to the brief duration of MI and its empathic approach.[17] Rarely can youth speak with an adult about drug use, for example, in a manner that is non-combative or non-didactic,[17] especially if their substance use may be exacerbating a respiratory health issue. In summary, family-based approaches are recommended, and briefing parents on the principles of MI may help them to support their child and participate in their treatment.[14] In addition, MI is oriented toward harm reduction approaches to health risk behaviours, which may be more realistic and attainable for youth who are unwilling or unable to grasp the consequences of their behaviours.

(2) MEDICATION CONCORDANCE AND SELF-EFFICACY

As a patient-centred approach, MI is associated with better patient retention and treatment outcomes, with decreased time and cost.[10] Unlike other communication or intervention styles, MI helps assess a patient's intrinsic motivation for change. Addressing patients' ambivalence about behaviour change, and level of readiness to embark on the journey towards change, involves weighing the costs and benefits of change versus staying the same. If the difficulty of adhering to medication or prescribed treatments is perceived to be greater than that of maintaining the behaviour, a patient may be inclined to remain "non-adherent." Regardless of the health care professional's advice, concern or recommendations, clients will ultimately decide what is best and will act accordingly. Therefore, the first step to behaviour change is

affirming the client's feelings and seeking to better understand the barriers to change and perceived costs and benefits of change.[14] MI has been shown to impact patients' beliefs about illness and medication, known determinants for adherence to medication.[23]

> *Dealing with non-adherence requires patient-centred care characterized by concordance, i.e., shared decision-making about therapy by doctors and patients.*[19]

A number of studies support the efficacy of MI in increasing patients' level of readiness toward medication adherence.[10,24,25] In one study,[12] the use of MI with patients with COPD decreased the number of hospital admissions, unscheduled physician visits and emergency room visits, and the average length of hospital stay. Overall, MI helped decrease health care utilization costs for these individuals, and also increased patients' self-efficacy and quality of life in general. For people living with chronic conditions, part of fostering a sense of optimism involves collaborating to establish individualized treatment that is "explicit, time-contingent and adjustable,"[11] and in some cases providing written guidelines.[12] By working together to identify personal goals that are **S**pecific, **M**easurable, **A**ttainable, **R**ealistic and within a known **T**imeline ("SMART" goals), client and practitioner can better track progress and work together to adjust strategies that are less effective. In summary, practitioners adopting an MI style and approach can improve the quality of care without increased time, and can also decrease adverse patient events.[10]

Motivational interviewing practice tips

1. Avoid the trap of "premature focus" (i.e., avoid directing the patient to focus on a behaviour he or she is not ready to change). Premature focus can provoke patient resistance, negatively impact the therapeutic alliance, and lead to feelings of disempowerment for the patient (and the practitioner!)[17]
2. Sample MI-consistent opening statement: "Our meeting today may be different from some of your other medical visits, in that I am not here to tell you what to do or how to do it. Rather, I want to find out what you might be interested in changing and what might help."

(3) RESPIRATORY CARE AND CONCURRENT TOBACCO USE, OTHER DRUG AND MENTAL HEALTH ISSUES

There is a robust evidence base for MI with clients who smoke and who have mental health and/or substance use disorders. Although this literature is not specific to clients with concurrent disorders presenting in respiratory health care contexts, the findings can guide respiratory health practitioners in adopting an MI approach with these client populations.

Tobacco use

Tobacco addiction is a chronic condition and a significant respiratory health concern. Tobacco smoke can also interact with medications through pharmacodynamic and pharmacokinetic mechanisms (for example, people who smoke may have less response to inhaled corticosteroids).[26] This makes tobacco interventions a critical element of respiratory health care practice.

A meta-analysis of clinical trials has shown Motivational Interviewing to be effective in significantly increasing smoking quit rates.[27] MI has also proven effective in decreasing household or passive smoke exposure by guiding caregivers to resolve their ambivalence toward changing behaviours that can affect their dependents' health. Emmons et al.[28] demonstrated that health care professionals can help parents work toward reducing environmental and second-hand smoke even if they are not ready to quit. Borrelli et al.[29] explored motivating parents to quit in homes where a child lives with asthma. The authors found the use of MI to be effective at reducing passive smoke exposure in the home. Their approach compared MI-consistent goal-setting and skill-building to strictly increased risk perception and biomarker feedback.[29] Health care professionals should always inquire about the smoking status of a client, as outlined in the CAN-ADAPTT[30] guidelines, and especially with caregivers whose child has asthma (and, more broadly, with every client with dependents).[31]

Other drug use

People who misuse other drugs, including alcohol, are more likely to smoke and to experience tobacco-related diseases than the general population.[32] Managing withdrawal among hospital inpatients can be framed as a precursor to engagement in a longitudinal process of disease management.[32] When a client is empowered to set her own agenda or vocalize realistic and specific goals, research shows that the strength of this commitment language can predict subsequent health behaviour change.[2,33,34] Amrhein et al.[35] found that an MI approach to working with clients who used illicit drugs was associated with increased client commitment language and significantly better treatment outcomes. Clients with addictions often experience stigma, and the non-judgmental and non-confrontational style of MI make this approach particularly well-suited to this population.

> *With gentle yet tailored discussions about use, discrepancy can be explored between actual use and current values or future aspirations. Common topic areas for developing discrepancy include money spent on [the substance], social support, and future goals.*[17]

The eliciting style of MI, centered on the person's perspectives, serves to build rapport and trust, and in the process allows and reinforces the client's feelings that he or she is a worthwhile individual.[17]

Mental health

There is a strong relationship between mental illness and tobacco use, and numerous barriers impede clients with psychiatric conditions from receiving tobacco interventions despite high prevalence, increased morbidity, cost and desire to quit.[32] Identifying smoking status and assessing motivation to quit (such as the use of a Likert scale to determine readiness, importance and confidence in quitting) at each clinical visit is recommended.[32] In addition to cessation medications, clients may benefit from refusal and coping-skills training to address cravings, boredom, anxiety, symptoms and side effects.[32]

For individuals with cognitive impairments—such as the impairments that often accompany severe psychiatric illness—a number of adaptations have been proposed.[36] These include:

- simplifying reflective statements and open-ended questions
- using metaphors to anchor abstract material in reality (for example, using the metaphor of a three-legged stool to illustrate the importance of three key areas of focus in recovery from concurrent mental health and substance use problems: (1) maintaining abstinence, (2) taking prescribed medications, and (3) participating in a concurrent disorders treatment program)
- integrating strategies of repetition, simple verbal and visual illustrations, and breaks within sessions
- reducing reflective statements that focus explicitly on disturbing life experiences
- using a decisional balance addressing the positives and negatives of being abstinent from problematic substances, and the positives and negatives of attending concurrent disorders treatment
- assessing the need for other interventions to promote psychiatric stability, logical reasoning or safety.

Motivational interviewing may also be a useful approach with people with acquired brain injury (ABI).[37] In particular, the spirit and techniques of MI can help promote clients' self-awareness, goal-setting and engagement in treatment and rehabilitation.

Conclusion

There is a still a lack of comprehensive research within the field of MI and respiratory health, and of studies that examine the use of MI interventions focused on behaviour change issues specific to respiratory care. Furthermore, there is no single approach that is best for all clients. However, MI strategies have been shown to be effective with clients facing various chronic health concerns, and MI interventions may take less time than other psychosocial approaches. Respiratory health care professionals can utilize MI as an effective channel for developing strong therapeutic alliance, trust and rapport with clients, and to help guide clients in the direction of positive change.

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